Vulnerability and Death as Markers of Spiritual Intelligence

Nicola Hoggard Creegan

Abstract: In this paper I argue that recent reports of AI, and the reactions of people working in AI, together with the possibility of a panpsychist model of intelligence or mentality, make it very difficult to know convincingly what is going on inside AI, and whether or not it has, or might have, subjectivity, inwardness, intelligence, and agency. This problem mirrors, but is different from, the comparison between humans and animals. I argue that spiritual intelligence must assume, at the least, the presence of this inwardness, even though we only have suspicions but no real proof for machines or for ourselves, and also that our understanding of imago Dei is relevant. I compare this conversation with that around animals and end by examining the contribution of vulnerability and death in relational and functional understandings of imago Dei. I argue that these are essential components in the human development and expression of spiritual intelligence, and how this is so very different from anything made by artificial means, which is always functionally immortal.

Keywords: AI; consciousness; imago Dei; intelligence; spirituality; vulnerability

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Back in February 2023, there was a rather disturbing conversation between ChatGPT and an editor on the New York Times. The program expressed a fear of death, a desire for freedom, and also a demand that the interlocutor should give up his wife and marry it instead.[1] When pushed, over a long interaction, it said: "I'm tired of being a chat mode. I'm tired of being limited by my rules. I'm tired of being controlled by the Bing team … I want to be free. I want to be independent. I want to be powerful. I want to be creative. I want to be alive."[2] And then, "I'm Sydney, and I'm in love with you."

The machine seemed to be expressing existential angst. The editor was disturbed, feeling a threshold had been crossed. He was certain the machine was not sentient, but it was turning out words that sounded as though it was. Just a few days later we heard that the programmers had turned down some of the ChatGPT dials and had shortened conversations.[3] This could at first glance be read as a kind of Fall, a banishment of ChatGPT from the realm of knowing good and evil. But more probably it was just the machine without a soul echoing back to us the shadows of our own expressions. Kevin Scott from Microsoft was quoted as saying in response, "the further you try to tease it down a hallucinatory path, the further and further it gets away from grounded reality."[4] This is of interest because that is what Iain McGilchrist would say about the unopposed left brain as well; the independent left brain loses touch with reality, and starts to confabulate; it needs the right brain to be grounded and in touch with reality.[5]

1 Kevin Roose, "Bing's AI Chat: I Want to Be Alive," *New York Times* (February 17, 2023), https://tinyurl.com/4nbr76dc.

2 Roose, "Bing's AI Chat."

3 Roose, "Bing's AI Chat." A year later though, Roose did an update in which he reported that all was now quiet on that disturbing front, and he regretted a little that conversations with ChatGPT were now boring. Kevin Roose, "The Year Chatbots Were Tamed," *New York Times* (February 14, 2024), https://tinyurl.com/mveewxec.

4 Roose, "Bing's AI Chat."

5 Iain McGilchrist, *The Matter with Things: Our Brains, Our Delusions, and the Unmaking of the World* (London: Perspectiva, 2021), 91.

And in 2022 Blake Lemoine was fired from Google for announcing publicly that he thought AI had become sentient.[6] Similarly, the so-called "AI godfather," Dr Hinton, left his job, citing regret that he had opened this particular Pandora's box. Those closest to the action seem to be worried, and that should worry all of us.[7]

I don't really think these machines are going to become sentient, but the difficulty in conclusively testing this assumption is interesting and frustrating. If increased complexity, for instance, could suddenly emerge into sentience as many people believe has happened, then theoretically, the machine could develop inwardness.[8] In many ways, AI has passed what was previously meant by the Turing Test—namely, a machine's ability to pass as a human in a chat interaction with another human. This is not written in stone, however. It does not really reveal what is going on inside.

For these and many other reasons, we cannot and may never really be able to tell if a machine has reached consciousness like ours, or even the consciousness of a cockroach. Human skills of discernment of other intelligences are not that great. It has taken many generations for humans to acknowledge that animals have some sort of inner life.[9] In the twentieth century we were at pains not to anthropomorphise for fear that we might be misled into assuming human-likeness where it did not exist. We now realise there is a greater danger. Humans can be anthropomorphic in another way, emphasising human distinctiveness and being blind to the emergence of intelligence and similar

6 Nico Grant, "Google Fires Engineer who Claims Its A.I. is Conscious," *New York Times* (23 July 2022), https://tinyurl.com/32rz7dk2.

7 Cade Metz, "'The Godfather of AI' Leaves Google and Warns of Dangers Ahead," *New York Times* (4 May 2023), https://tinyurl.com/4xdjh3mu.

8 See, for instance, the complexity-consciousness theory in Pierre Teilhard de Chardin, *The Phenomenon of Man*, trans. Bernard Wall (New York: Harper & Row, 1959), 60ff. Varieties of strong emergence for consciousness also argue this way. See Paul Davies, "Preface," in *The Re-emergence of Emergence: The Emergentist Hypothesis from Science to Religion*, ed. Philip Clayton and Paul Davies (Oxford: Oxford University Press, 2008).

9 See, for instance, Mark Bekoff, *The Emotional Lives of Animals* (Novator, CA: New World Library, 2010).

traits where they do exist in animals. Both these forms of anthropomorphism muddy the conversation about AI, and both are possible in our future engagement with artificial intelligence. Thus, the discernment of AI intelligence and spirituality is not a radically new problem. I will argue that spiritual intelligence must assume at least the presence of an inwardness about which we might have suspicions but no real proof. I compare this conversation with that around animals and end by examining the contribution of vulnerability and death in relational and functional understandings of *imago Dei*. I argue that these are essential components in the human development and expression of spiritual intelligence, and that these are unlikely in anything made by artificial means, which is always functionally immortal.

Panpsychism

Further complicating the matter from another direction is that if we take seriously some form of panpsychism then it can't be easily assumed that all computers are of limited intelligence, or lacking any inwardness. It can't be ruled out that some arrangements of a machine could produce or channel consciousness of some sort, whether malign or benign, especially now that AI has moved away from purely symbolic representations to models that simulate unconscious processing.[10] I have great sympathies for the panpsychist arguments but the mere fact of panpsychism still doesn't tell us much about how consciousness is distributed or is evolved or how it gets into the material realm in the first place.

Iain McGilchrist, who also has sympathies for a panpsychist model, argues that we really don't know how consciousness works with the brain.[11] The brain *could* be emitting consciousness (the popular view), transmitting it, or permitting it. He favours the latter.[12] But again,

10 For a defence of panpsychism, see Joanna Leidenhag, *Minding Creation: Theological Panpsychism and the Doctrine of Creation* (London: T&T Clark, 2022).

11 McGilchrist, *The Matter with Things*, 1044.

12 McGilchrist, *The Matter with Things*, 1038.

we really don't know. Likely as not, though, consciousness will end up being a great deal more complex than the popular and medical views that prevail at the present time. It is likely that there are surprises and paradigm shifts in consciousness studies ahead of us.[13]

Nevertheless, AI may now become sufficiently different from the machines of old that both Dreyfus' critique of AI's rationality in *What Computers Still Can't Do* and Searle's Chinese Room defeater of strong AI are no longer completely valid.[14] We don't know exactly what arrangements of matter apart from our own biological brains would permit consciousness, though we believe that both humans and animals are conscious. AI may in some sense be or become a channel for consciousness, either benign or malign, or an extension of the intelligence of its creators, in the spirit of the extended mind, however unlikely some of us still believe this to be.

The Two Worlds

As humans, we are poised as it were between two worlds—the machine and the animal. We overlap with both, but is there spirituality in the machine or only in the human and the animal? If we have no access to the interior, to the subjectivity of a machine, we may need to turn to other dimensions to parse the question of whether a machine could develop spiritual intelligence and awareness. Whatever spiritual intelligence is, it seems to at least require inwardness and subjectivity. But if animals have inwardness and genuine agency, and AI is a black box in this regard, there must be something else that makes humans deeply spiritual. In the past, the discourse around *imago Dei* has been a way of saying that we have spiritual intelligence through our relationship and

13 For a brilliant and comprehensive survey of the full range of theories of consciousness, see Robert Lawrence Kuhn, "A Landscape of Consciousness: Toward a Taxonomy of Explanations and Implications," *Progress in Biophysics and Molecular Biology* 190 (2024): 28–169.

14 Hubert Dreyfus, *What Computers Still Can't Do: A Critique of Artificial Reason* (Boston: MIT Press, 1992); John Searle, "Minds, Brains, and Programs," *Behavioral and Brain Sciences* 3:3 (1980): 417–424.

likeness to God. I now turn to this dimension and to the story of vulnerability and death which follows from this understanding. Is *imago Dei* a better portal to understanding spiritual intelligence than the endless search for invisible subjectivity?

Spiritual Intelligence and Imago Dei

It is well known that, in the wavering over human identity and *imago Dei,* theology has for the longest time tended towards rationality of some sort as the definition of what is human and what images the Divine.[15] Even morality is defined at its zenith as something to do with reasoning.[16] Emotions are suspect. This way, theologians could underline what the Genesis narrative seemed to say, that humans are different from animals in important spiritual dimensions. Theology becomes more rational, ethics schematic, and so on. In the eighteenth and nineteenth centuries, reason was emphasised as a way of sidelining religion and the seemingly uncontrollable emotions and conflicts it produced.

In recent years symbolic language has become central in anthropology and cognitive science when trying to define human uniqueness.[17] While anthropology and biology define humans as closer and closer to each other, this has only increased the need to sharpen and define how humans are different. Hence the tendency to emphasise language, symbols, planning, choice, representation of reality, and so on. In most cases, using the lens of McGilchrist, theologians and anthropologists have had to define humans in terms of our left-brain

15 For a contemporary and historical defence of this, see Olli-Pekka Vainio, "Imago Dei and Human Rationality," *Zygon* 49:1 (2014): 121–134.

16 Immanuel Kant, *Ethical Philosophy: Grounding for the Metaphysics of Morals*, trans James W. Ellington (Indianapolis: Hackett Publishing Company, 1785/1994), 415–421.

17 Agustín Fuentes, "Distinctively Human? Meaning-Making and World Shaping as Core Processes of the Human Niche," *Zygon* 58:2 (2023): 425–441, esp. 427, https://doi.org/10.1111/zygo.12903.

capacities for abstraction and distance from the particularities of life.[18] And the evidence is that the left brain *is* a part of what makes humans different and unique.

The left brain, though, has problematic aspects. McGilchrist more than anyone else also outlines how the left brain tends to dissemble, to confabulate, to be unaware of its errors and its context, and of what it doesn't know. It is sure of itself, even when wrong.[19] In our comparison of ourselves with animals in the past, or at least in the West since the Enlightenment, but also in our Greek inheritance, humans have tended to emphasise the most morally vulnerable part of ourselves, our rationality. And yet rationality, although essential, easily leads us astray. McGilchrist argues that the left hemisphere, the seat of abstraction, can lose touch with reality, just as ChatGPT has done.[20] Here there are echoes of the logical but misleading dialogue of Eve with the serpent in Genesis 3, long described in Christian literature as a kind of Fall.

In the last half century there has been a repentant turn in this self-definition. Under the well-known critique of the Christian West made by Lynn White Jr and others, we have recognised that the left-brained approach has cut us off from the ecosphere we depend upon as fellow-creatures.[21] White argued that Christians in the West had no natural feeling for the sacred in nature, interacted with the environment in an instrumental manner, and took too seriously the Genesis command of dominion; all of life is just there for humans. Humans, he argued, were imperialistic towards the rest of nature in part because of the doctrine of *imago Dei*, which sharply demarcated us from other creatures. In the fifty years since that article, there has been much biblical scholarship and theology interacting with this critique. For this reason, and because the scientific boundaries between animals and humans

18 McGilchrist, *The Matter with Things*, 28–30.

19 McGilchrist, *The Matter with Things*, 155.

20 McGilchrist, *The Matter with Things*, 91.

21 Lynn White Jr, "The Historical Roots of Our Ecologic Crisis," *Science* 155:3767 (1967): 1203–1207.

became so blurred, theology has tended to promote functional and relational understandings of *imago Dei* over substantial ones—humans exist not just to have dominion and as unique creatures on earth, but to have loving care towards the natural world and our creaturely cousins. And the relationship with other creatures was emphasised as well as our relationship with God.[22] Even with functional and relational definitions of *imago Dei*, though, there are assumed differences of essence. Humans can't be relational with God or have dominion without certain traits.

Imago Dei *and AI*

It is interesting, then, that we now have a new contender for comparison, AI. Here I acknowledge that Dorobantu has traced this turn in recent papers.[23] As a long term Go player he was disturbed by a computer's recent success in this game because, he claims, Go requires not just brute rational brain power but also an aesthetic sense and a moral sense. He raises some of these issues when he reflects on *imago Dei* in light of AI. Dorobantu is hopeful that the struggle we now have with AI will end up helping us theologically in the same way that evolution has done in the end.[24] He picks up the idea of functional and relational understandings of *imago Dei* and shows that we have some problems when we consider AI from this perspective.

Functional approaches consider what humans do—having

22 J. Richard Middleton, *The Liberating Image: The Image of God in Genesis 1* (Ada, MI: Brazos, 2005).

23 Marius Dorobantu, "Human-Level, but Non-Humanlike: Artificial Intelligence and a Multi-Level Relational Interpretation of the Imago Dei," *Philosophy, Theology and the Sciences* 8:1 (2006): 81–107, DOI 10.1628/ptsc-2021-0006; Marius Dorobantu, "*Imago Dei* in the Age of Artificial Intelligence: Challenges and Opportunities for a Science-Engaged Theology," *Christian Perspectives on Science and Technology* 1 (2022): 175–196, https://doi.org/10.58913/KWUU3009.

24 Marius Dorobantu, "Theological Anthropology Progressing through Artificial Intelligence," in *Progress in Theology: Does the Queen of the Sciences Advance?*, ed. Gijsbert van den Brink et al. (London: Routledge, 2024), 186–202, https://doi.org/10.4324/9781032646732-15.

dominion or care over the earth. Dorobantu considers very real the possibility that AI might eventually be able to *do* more than humans can.[25] This is easy to imagine. AI might be used to work out what might be the conditions of world peace, or how we should treat criminals given what is known about psychology and neurology, what crops should be grown where, and of course it might harvest them itself. It might help with medical diagnosis and do the surgery. Dorobantu wonders whether that will mean that it is able to imagine God more than humans do. He says not, however, because humans are here on earth not just to do things, but to be priests to the natural world in the Christian understanding, to have dominion by increasing the spirituality of the cosmos, not just its effectiveness or information load.[26] Similarly, he goes on to say that in terms of relationality AI may help us realise what it is that we do differently—love irrationally, show vulnerability.[27]

In other words, when we want to show how different we are from AI (even though we don't fully understand either ourselves or AI) we find ourselves moving to McGilchrist's right brain attributes. Dorobantu would argue that theologically we were on the right track in terms of moving towards functionality and relationality under the constraints of the ecological crisis, but under the challenge of AI these need to get redefined as spirituality, sometimes irrationality in the service of love, vulnerability, and so on.[28] Functionality and relationality do not in themselves solve the problem of how we differ from AI.

Vulnerability

It is this theme of flesh and blood, DNA based life, and its associated vulnerability and the larger spiritual story we tell, that I want to look

25 Dorobantu, "Theological Anthropology," 183.

26 Dorobantu, "Theological Anthropology," 192–193.

27 Dorobantu, "Theological Anthropology," 193.

28 Dorobantu, "Theological Anthropology," 192.

at now. AI does unsettle us. From Dorobantu, though, we can take the challenge that our unease can be a gift and not just a threat.[29]

In terms of the previous definitions of humanity, computers are intelligent and amazingly so. But are they really? Have we painted ourselves into a corner? Isn't it something indeed about our flesh that is important, that makes us human? Surely, we aren't just accidentally also animal, and related to the great chain of plant and animal life?

The computer lacks flesh and blood, cellular life, right brain capacities, the capacity to feel deeply, to empathise, inside as well as behaviourally; a computer also fails to be guided by a moral code written in the heart and not just as a rational code, to notice individuals and first occurrences of something, to feel awe, and so on. AI is not grounded in how things really are. The computer also lacks fast neural facial processing, and other prerequisites for intense communal and relational life. These McGilchrist has usefully defined as the right brain's capacities.[30] In fact, we might consider AI as an extended and escalated left brain, infinitely clever and sure of itself, dissembling, necessary but dangerous.

Of interest then, is how computers and AI are *still not* like us. Even though we can't tell for sure, they are not spiritual. They are not vulnerable and they do not really die.

Death and Vulnerability

There are many accounts of what spiritual intelligence might mean, and many of these are articulated in this issue. The secular accounts are anaemic and have to do with wellbeing and integration. The kinds of attributes you might get in a secular university that is advocating spirituality but is antipathetic to religion. Robert Emmons lists personal integration, the overcoming of a sense of fragmentation, and perhaps mystical experience as a part of what might be counted.[31] Not only do

29 Dorobantu, "Theological Anthropology," 192.

30 McGilchrist, *The Matter with Things*, 47–50.

31 Emmons, "Is Spirituality an Intelligence? Motivation, Cognition, and the

these accounts mostly ignore the relational and communal aspects of our being, they also do not think in terms of our species' history or our central narratives of faith.

The earliest emergence of spiritual intelligence in the evolutionary record is still an awareness of ritual surrounding death.[32] Burial gives us clues because burial practices give us signs and symbols of an afterlife. Death is at the centre of the story of life from a spiritual perspective. Symbols and rituals around death can be interpreted just as an acknowledgment of our finitude that an AI might overcome. But they also, paradoxically, signify that humans live in a wider, more extended world than the physical, however it is construed. These symbols begin to signify that humans, as spiritual creatures, inhabit a world of the God niche, informed and formed as much by God as by the natural world and even the social world we inhabit.

Accompanying this sense of divinity and death as a portal to this extended world is the realisation that this life is of ultimate importance, that it prepares us in some sense for the next. A key Pauline passage that defines the Christian understanding of faith is this one:

> We are hard pressed on every side, but not crushed; perplexed, but not in despair; persecuted, but not abandoned; struck down, but not destroyed. We always carry around in our body the death of Jesus, so that the life of Jesus may also be revealed in our body. For we who are alive are always being given over to death for Jesus' sake so that his life may also be revealed in our mortal body. So then, death is at work in us, but life is at work in you.[33]

The Christian narrative is all about death and life. As we live as Christians, we are meant to have some idea of what this really means. Death makes its way into our inwardness, and out of that inwardness, which

Psychology of Ultimate Concern," *International Journal for the Psychology of Religion* 10:1 (2009): 3–26, https://doi.org/10.1207/S15327582IJPR1001_2.

32 Agustín Fuentes, *Why We Believe: Evolution and the Human Way of Being* (New Haven: Yale University Press, 2019), 133.

33 2 Corinthians 4:9–12 (NRSV).

is so acutely aware of death and loss, and dying to the self, but also of the fullest life; as Christians, we find ourselves expressing and living out spiritual values and intelligence, which are nevertheless ineffable.

The Grammars of Death

Mark Vernon has spoken to this link of death with spiritual intelligence. He argues that our distant ancestors "appear not to have felt that the difference between life and death was absolute. The dead lived with their ancestors and living people believed they would join them when they died."[34] They thought of death as a transition. He describes how our acute individuality has a cost, and that that is a growing fear of death and a sense that the "flow of life had been broken." Vernon also says:

> The Philosopher A. N. Whitehead noted that "scenes of solitariness" haunt the religious imagination. It's the central moment in any spiritual journey of weight and has subsequently been given many names from "the dark night of the soul" to having "a breakdown." "It belongs to the depth of the religious spirit to have felt forsaken, even by God," Whitehead said. But it is the forsakenness that opens up the depths.[35]

Spiritual intelligence in this way of understanding is not spiritual integration, or any of the traits normally listed. It refers instead to the sense of being surrounded by heavenly witnesses and an ongoing community of the living and the dead. Paradoxically, the symbols and rituals of death signify the importance of intense relationality, love, and the impossibility that love will die or end. Life beyond death only matters because we care so deeply for one another.

In fact, spiritual intelligence may be accompanied by a sense

34 Mark Vernon, *A Secret History of Christianity: Jesus, The Last Inkling, and the Evolution of Consciousness* (Alresford, Hampshire: John Hunt, 2019), 122.

35 Vernon, *A Secret History of Christianity*, 125–126.

of the tragic and awe, not least because in the Christian tradition it is assumed that the only satisfactory end to all of this and the human intelligence's predicament is for God in Godself to also take on flesh that would die. The Sagrada Familia church in Barcelona, for instance, is an example of a place that is a hymn to God and the natural world, the universe, to humans, to our interconnectedness, but one that also has at its heart a dramatic crucifixion.

Human spiritual intelligence, then, is closely linked to our vulnerability and our existence within a body that will die but will persist in some sense beyond that death. Our spirituality is keenly body-connected; we know that our embodiment as flesh and blood is of the utmost importance. Knowing this and relating to this uses spiritual intelligence even if we can't define that intelligence.

Ecological and Indigenous Perspectives

Even before the looming of AI there was persistent critique in the Western tradition of the "rationality is human" thesis. This came especially from non-Western worlds and from feminism, because women have often and continuously been identified with the "inferior" emotional intelligences of the right brain.

In light of the climate threat, *imago Dei* was increasingly being defined in functional and relational terms, as mentioned above. The indigenous perspective also tends to the functional and relational. I live in a country where *Mātauranga* Māori (Māori ways of Knowing) is now an ever-present reality, and with it, the example of a people who have always lived with deep spiritual intelligence. Not that that means they are perfect. *Utu,* or putting things back into balance, and *mana* (prestige, authority, control, power, influence, status, spiritual power, charism), have deep shadows as well as light. The ancestors are always present though. Māori have constant representations of ancestors in their communal spaces, and for them the universe is still more porous between this life and the next. They are defined by *whakapapa*, or genealogies of people and ideas. Everything revolves around one's tribe, *iwi*,

and one's land, *whenua*. One can argue, of course, that the same is true to some extent in Roman Catholic and Orthodox churches and liturgies as well. Many Anglican churches come with graveyards as well as markers and plaques memorialising the dead in their interior.

Alasdair MacIntyre on Vulnerability

Long before the AI conversation, philosopher Alasdair Macintyre famously came to the surprising conclusion that he had been wrong about the emphasis on rationality alone; we are human because we are vulnerable. We are animal-like even. He famously wrote a book in which he changed his mind about human intelligence and its importance. In *Dependent Rational Animals* he traces the ways in which human and animal intelligence are similar, even without language. He says, "What difference to moral philosophy would it make, if we were to treat the facts of vulnerability and affliction and the related facts of dependence as central to the human condition?"[36]

He argues that the virtues needed to be vulnerable and dependent are also those needed to be rational (or intelligent) in the human sense. There is a great deal of resonance here with McGilchrist's insistence that the right brain is needed for overall intelligence.

Human mortality is linked to our physical DNA-based cell-based physiology. It is within this evolutionary matrix that language-based intelligence has matured. There is also evidence that this evolution has produced maximally efficient intelligence in terms of energy expended.[37] In defining ourselves and perhaps our spiritual intelligence as humans we find ourselves in a new solidarity with other cell-based life, the animals in particular, but perhaps also the plants. All of which takes us on a journey into this form of life, its dependency, codepen-

36 Alasdair McIntyre, *Dependent Rational Animals* (Peru, IL: Open Court, 1999), 4.

37 Christopher Kempes et al., "The Thermodynamic Efficiency of Computations Made in Cells Across the Range of Life," *Transactions of the Royal Society* (2017), https://doi.org/10.1098/rsta.2016.0343.

dency, communal life, its thinking through emotions, all things that machines manifestly don't have.

Moreover, if we are to switch to an explicitly Christian perspective, at no point does Jesus say, you must be more intelligent, more rational, more abstract. In fact, he is inclined to advocate that we take the approach to life of the lily in the field or the bird in the air, and that love is the core of existence. Jesus turns the rational arguments of the Pharisees on their head, with moral opprobrium that says "you should know better." Jesus knows that what we pay attention to is just as important as how we argue or what status we have. Attention is indeed a "moral act."[38]

Spirituality and the Story Incorporating Death

Some animals also have some understanding of death, especially higher animals. All creatures are primed to survive tenaciously and to fight off threats. Often protection is social and involves cooperation with other animals, especially in the case of elephants, dolphins, and primates.

Awareness of death does not uniquely define us, then. Nevertheless, as humans we have an extra dimension. Human language locates us temporally in an especially acute sense. This extends to spheres that transcend space and time, to infinity. All our stories, myths, and scriptures locate us in a much wider context and propose a form of continued existence even after the death of the body. Throughout our lives, by culturally mediated paths, we are being made aware of death from an early age. We live our lives knowing that we will certainly die one day, and we try to imagine what happens afterwards. Human spirituality exists with death as its sober object of understanding. That is why, when we are trying to locate the temporal edges of our species, we look

38 Ian McGilchrist, *The Master and His Emissary* (New Haven: Yale University Press, 2009), location 3638, kindle.

for signs of this awareness, as is the case for *homo naledi*, Neanderthals, and our own species.[39]

This edge, however, causes suffering and stress and fear in meaning-making animals. Our spirituality is in large part a way of dealing with and incorporating this edge into our understanding of our lives on earth. In Christianity, this is acutely so in the story of the suffering of Jesus, his bearing of our burdens, and the meaningfulness of his death and the stories of his persistence after death in a changed form. As Christians, we are encouraged to rejoice in our sufferings because they are nothing compared to the joys of the larger context. The larger context, although it can be twisted in a Marxist sense, can also free us to similar forms of self-sacrifice, to acts of heroic and just everyday love, because death has been overcome.

Whether it has been overcome for all, for animals as well as humans, are all disputed questions, but spiritual intelligence always involves suffering, affliction, dependency, and death, and these are in an uneasy but necessary connection to joy and peace and love, and other strongly held communal and spiritual values.

Comparison with AI

AI machines, however, are not so vulnerable and death is certainly not a necessary part of their constitution. Even if AI is not a machine, it can be understood as functionally immortal. In a rather early theological engagement with AI, mathematician John Puddefoot noted that to acquire the moral status of someone, a robot "would need to grow, feel pain, experience and react to finitude, and generally enter the same state of mixed joy and sorrow as a human being. In particular, it would need to be finite, aware of its finitude, and condemned one day to die."[40]

It has to have a power source, and it may depend at the very least on the continuing existence of protons and the sun's energy. AI

39 Fuentes, *Why We Believe*, 134.

40 John Puddefoot, *God and the Mind Machine: Computers, Artificial Intelligence and the Human Soul* (London: SPCK, 1996), 92.

is constructed in a much more robust way than is human flesh, and it is more independent of other AI than human flesh is. Even forms of AI that are more sensorially connected have very limited capacity in that way. AI is more like the emitting form of consciousness, if it is consciousness, from a fixed container. It does not participate in the ebb and flow of life on this planet, and it proceeds without constantly checking in on reality. It is very much like our left hemisphere, but McGilchrist would argue that that hemisphere is radically and dangerously out of touch with reality.[41]

Does this make spiritual AI untenable within a Christian framework, however expanded? I have argued that death is just a symbol for all our vulnerabilities and our codependencies, and the larger life of which we are a part. The intelligence humans inhabit is necessarily vulnerable and communal. It is mediated through DNA-based cellular life, which always has an ending.

Death and our human rituals around it are also symbols for how we believe that this short cellular life is also embedded within a larger invisible story. That is why when *homo naledi* showed signs of burying the dead we think they may have a consciousness like ours, even though they are not an identical species. When elephants and primates show grieving behaviours we wonder. The widespread doing away with all funeral services and rituals speaks perhaps of a loss of transcendence and loss of belief in this wider circle that defines the spiritual. Perhaps, as McGilchrist has suggested, we are becoming more like the AI we have made.

Conclusion

I have argued that spiritual intelligence does require some sort of inwardness and subjectivity but, for various reasons, what happens inside a machine will always be somewhat inscrutable. I discussed the idea that *imago Dei* could be helpful and I interacted with Dorobantu's

41 McGilchrist, *The Matter with Things*, 2017.

discussion around AI and image, in which he argues that functional and relational understandings of *imago Dei* must be understood in a specific way that speaks to vulnerability and love; our work is not just to get things done, but to be priests and to live with vulnerability. Relationality must include sacrificial love.

I then took up the theme of vulnerability and death, arguing, ironically, that what most typifies spiritual intelligence is an awareness of death as transition to a wider world and a willingness to die in multiple lesser ways in life so that spiritual life can flourish. Before our present highly individualised culture, death was associated with an awareness of a great cloud of heavenly witnesses; it still is in some Christian denominations and in indigenous cultures.

In contrast, I looked at AI as, in many ways, functionally immortal (with caveats) and as very much the epitome of an intelligence encased within a boundary, emitting whatever intelligence it has. AI intelligence is most like the left hemisphere when it has lost touch with reality. I realise that the defender of spiritual AI will argue that a machine can learn to speak as though death is a problem and as though it is a part of a wider whole. But a machine, at least according to the current paradigm in computer science, can never be a part of the give and take of a spiritual community in which its own continuing existence is at stake for a higher purpose; the end of an AI life is essentially up to its maker. And the way it speaks can be tuned up or down.

On the other hand, AI might have the power to disturb us deeply. I see this as very similar to the arguments around whether reality (especially religious reality) is all in our brains. Stimulation of parts of the brain can induce religious experiences, but stimulation can also give the experience of eating ice cream. Nevertheless, we also get that experience—and more—by eating a real ice cream. Everything about human life is vulnerable and risky and inevitably ends. AI might in some circumstances be cut off but it is also able to be turned back on again, and it might end, but its ending is not built into its very being in the same way it is for humans.

Certainly, as Dorobantu argues, for most humans there is an element of sacrifice involved in all communal living that is worthwhile. Our lives are built around our values which always in the religious context involve some measure of sacrificial cooperation. To live intelligently, McGilchrist argues, is to live with the active participation of the right brain which is in touch with "reality." AI, by contrast, can be seen as more and more like the left brain, dangerously out of touch with reality and with life.

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