

KEYNOTE

Belonging to this World and the Next

— CELIA DEANE-DRUMMOND —
DIRECTOR OF THE LAUDATO SI' RESEARCH INSTITUTE
AND SENIOR RESEARCH FELLOW IN THEOLOGY,
CAMPION HALL, OXFORD UNIVERSITY

ABSTRACT

This essay will tackle the question, “What is life?” by focusing on human becoming as grounded in this world, yet orientated towards transcendence and the moral sense. Human evolutionary theories have shifted from individual competitively based frameworks to a much stronger emphasis on niche construction, where humanity is understood as existing in a meshwork of other beings. In dialogue with evolutionary anthropology, including recent discoveries of burial practices among early hominins, I argue that a sense of transcendence, like the fundamental ability of human beings to show long term compassion towards others, is distinct to our lineage. Capacities for specific dispositions such as compassion do not suddenly appear in human communities, but have a complex biocultural origin. Using wisdom, humility, and grace as case studies, I also draw out examples of how each can be a fruitful locus of dialogue and discussion between theologians and scientists on the basic question of what human life is.

BEGINNING A DIALOGUE: WHAT IS LIFE IN THE CONTEXT OF THE MAGIS

I CURRENTLY WORK IN a Jesuit graduate college at the University of Oxford. The founder of the Jesuits, Ignatius of Loyola, talks in his *Spiritual Exercises* about the need to always reach out to do what is *more* for the sake of Christ and *more* in service of others. The *magis* that he proposes cannot be understood without understanding the need for humility; it is therefore about aiming to get better and do more, but not necessarily aiming to be the best. That *more* is necessarily orientated towards the glory of God.

But where precisely does this desire for *the more* come from in so far as it is orientated towards the divine, the unseen other, who draws human beings into such desires? My argument is that humanity is situated within perceptions that belong to this world but are necessarily orientated towards the next, and that this dual orientation is a fundamental aspect of what it means to be human.

Human beings are the only living creatures on the planet who have the capacity to ask these kinds of questions. Even the question, “What is life?” is a profoundly human one to ask.

Embedded within and even prior to the question, “What is life?” is therefore the larger question of what it means to be human. I will touch briefly on aspects of this question as a way of opening other aspects that will be filled out by others taking part in this conference.

I argued in a book entitled the *Wisdom of the Liminal*,¹ which was published some years ago, that our human distinctiveness is one that is precariously situated between two borderlands, at the porous boundary between humanity and animality, and at the porous boundary between materiality and the experience of the transcendent. That does not mean that experience of the transcendent is necessarily about *detachment* from the world, rather it is

1 Celia Deane-Drummond, *The Wisdom of the Liminal: Evolution and Other Animals in Human Becoming* (Grand Rapids: Eerdmans Publishing Company, 2014).

the ability to see and *perceive* that world differently, to detect in it another dimension that is not just confined to accounts which describe empirical facts about the way the world works. Even these facts, as those who have worked in different contemporary sciences know from their experience of immersion in the practice of science, are also, themselves, in some sense theory laden, or more accurately perhaps, accompanied by the baggage that comes with being embedded in a history that takes its cues from the Enlightenment and Western philosophies. Biologists, ironically perhaps, who aim to study life in all its dimensions, are also among those who find it hardest to admit to the intellectual respectability of recognizing the presence of the divine other. For example, at a high-level symposium meeting at an Ivy League university in the USA, in which I took part, two highly respected evolutionary scientists who have dedicated their lives to a study of human evolution did not want to be associated in any way with a publisher that accepts academic publications by theologians who, generally speaking, come from a standpoint of religious faith. For them, association with such a publisher betrayed a commitment to a particular kind of reason, which considers anything beyond this world to be incapable of being proved and therefore outside the bounds of rigorous and respectable academic research. But such an attitude against any association with theology as an acceptable intellectual pursuit is relatively modern, as historians of science and religion are aware.² Sociologist of religion Peter Berger's highly influential secularization thesis predicted that over time, communities will gradually become less religious. In the wake of the explosion of radical religious movements, though, he retracted his theory.³ The debate is not over yet, however, for Steve Bruce argues that the relegation of religion to the private sphere⁴ is also a form of secularization,⁵ and one that seems to be accepted by atheist biologists.

2 Peter Harrison in *The Territories of Science and Religion* has shown clearly how even the categories of science and religion are relatively modern inventions. Peter Harrison, *The Territories of Science and Religion* (Chicago: University of Chicago Press, 2017).

3 Peter Berger, "Further Thoughts on Religion and Modernity," *Society* 49, Iss. 4 (July 2012): 313-316.

4 That is, allowing individuals to hold religious beliefs, but insisting that these positions be kept firmly out of public education and the academy.

5 Steve Bruce, *Secularization: In Defence of an Unfashionable Theory* (Oxford: Oxford University Press, 2013).

In *Sources of the Self*, Charles Taylor makes an important distinction between the porous and buffered self, the former being characteristic of pre-modernity, the latter of modernity.⁶ The porous self is the pre-modern model of the self in which the boundary between self and world is porous, such that external forces (demons and angels) can enter the self. This porous self stands in contrast to the modern world's buffered self, a self-contained, individual entity. It seems, therefore, that the individual in the Western contemporary, secularized world has found ways to shield himself from extrinsic sources, but in doing so it has forgotten essential aspects of the human condition.

WISDOM, HUMILITY AND GRACE IN DEEP TIME

Focusing on *liminality* in understanding what it means to be human emphasizes those aspects of humanity that tend to be bracketed off in contemporary thought. A few years ago, I had the privilege of co-leading an advanced symposium in evolutionary anthropology entitled *Wisdom, Humility and Grace in Deep Time*⁷ at the University of Stellenbosch in South Africa. Many of the palaeoanthropologists who came to that meeting had never met theologians before. Their openness to engaging in dialogue with those who were from very different backgrounds allowed for a fruitful conversation. While wisdom could be understood—or rather, operationalized—for the purposes of a scientific method if translated into more symbolic language and humility could be understood in relation to the need for healthy community relationships, the meaning of *grace* was much harder to engage from an evolutionary perspective.

Bringing in a theology of grace insofar as it connects with our biocultural being was a deliberate (if perhaps risky) provocation, and the scientists at this meeting didn't quite know what to make of it. What it did raise, however, was the importance of a sense of the sacred or the experience of the divine other in the lives of those with religious beliefs in a way that clashed with the

6 Charles Taylor, *Sources of the Self: The Making of Modern Identity* (Cambridge: Harvard University Press, 1989).

7 Articles arising out of this symposium were published a few years later in a book format. Celia Deane-Drummond and Agustín Fuentes, *Theology and Evolutionary Anthropology: Dialogues in Wisdom, Humility and Grace* (London: Routledge, 2020).

presuppositions inherent in modern Western science. Facing that challenge head-on in that context led not to hostility, but to some honest exchanges that uncovered both the challenges and opportunities of working in this area. It also, I would add, told us something important about what it means to live a human life. Much of the second half of this lecture draws on and is inspired by that experience.

I will lay out two major parts of this lecture. In the first half I will tackle the more theoretical considerations of how to begin to construct a theological anthropology in the light of different evolutionary theories. I think this is important because without such a framing, it becomes harder to understand what I tackle in the second half, namely, the novel attention among paleo-anthropologists to the evolution of inner affective worlds, starting with compassion, but also with reference to humility. Our human becoming is not just about bones and materials, but also about our inner cultural worlds that make up a form of life that is distinctively human. But it is the way we also belong to the next life—or rather, tune in to the transcendent—that really interests me as a thread running through this lecture.

WHAT IS HUMAN LIFE?

Exploring Contested Theories in Human Evolution⁸

Before embarking on a discussion of evolutionary anthropology, it is important to look briefly at historical and philosophical aspects of standard evolutionary theory. Historian Phillip Sloan argues that the epistemological background to Darwin's work is the philosophical stance of natural history realism (NHR).⁹ Understanding NHR helps to identify the basic assumptions in standard evolutionary biology, which relies on evolutionary theories of evolution by natural selection. Sloan objects to what he views as Darwinian perspectives

8 I discuss these issues in more detail in Celia Deane-Drummond, *Theological Ethics Through a Multispecies Lens: Evolution of Wisdom*, Vol. 1 (Oxford: Oxford University Press, 2019).

9 Phillip Sloan, "Questioning the Zoological Gaze: Darwinian Epistemology and Anthropology," in *Darwin in the Twenty-First Century: Nature, Humanity and God*, ed. Phillip Sloan, Gerald McKenny, and Kathleen Eggleson (Indiana: University of Notre Dame Press, 2015), 232–66.

encroaching on humanistic disciplines, particularly Charles Darwin's work on humanity in his *Descent of Man*.¹⁰ NHR is unabashedly observational in emphasis and assumes that humanity has direct access to the structure of the world through that detailed observation. Sloan characterizes NHR as an *optimistic* and *descriptive* conception of knowledge about human becoming: what is searched for is the true "natural system," rather than something hidden or disguised,¹¹ bracketing out the problem of human subjectivity and the difficulties of human cognition.

Darwin upset traditional distinctions between reason and instinct, free will and determinism, as well as the theological stress on human superiority and uniqueness. But one of Darwin's most knotty problems in doing that was accounting for "the difficulties of the Moral sense" which "has [sic] caused me much labour."¹² The leap that Darwin is forced to make (in Sloan's interpretation) is that between understanding the difference between humans and other creatures as *analogies* rather than simply *homologies*.¹³ Homologies are about genuine anatomical identities, such as the flipper of a whale corresponding with the forelimb of a bat or a human. Analogies refer to common function, but are not necessarily homologous, so, how the pectoral fin of the flying fish relates to the wing of a bird.

Sloan urges focusing on the experience of ourselves as "existentially existent, conscious, and self-reflective beings...to grant full reality to our pre-philosophical experience as human beings in the world, a reality that stands *prior* to our scientific rationalizations about our origins, or to causal explanations of human experience that then might be supplied by the natural sciences."¹⁴ Finding commonalities across different species as explained through evolution by natural selection seems to avoid the specific self-reflexive character of human life. How might the eccentric nature of the

10 Darwin, Charles. *The Descent of Man* (Princeton: Princeton University Press, 1982).

11 Sloan, "Questioning the Zoological Gaze," 236.

12 "Charles Darwin to Asa Gray 15 March 1870," in *The Correspondence of Charles Darwin*, ed. F. Burkhardt et al. (Cambridge: Cambridge University Press, 1985), cited in Sloan, "Questioning the Zoological Gaze," 245.

13 Sloan, "Questioning the Zoological Gaze," 246–249.

14 Sloan, "Zoological Gaze," 250–251.

human condition¹⁵ be accounted for in evolutionary terms?

Most philosophers, historians and theologians focus on classic Darwinian theories or what is sometimes called the Darwinian synthesis, rather than later adjustments to that theory. The more deterministic elements of classical theory are softened in these newer theories, which put much more emphasis on human becoming through systems approaches rather than individual notions of survival. Niche construction theory within an extended evolutionary synthesis approach is a good example of that trend towards understanding human becoming as integrated into a dynamic relationship with other beings. It presents a model of human becoming more as that of *belonging to this world* rather than remote from it. The Developmental Systems Theory (DST) of Susan Oyama challenges the assumptions of cause and effect presumed in standard evolutionary theory and instead focuses on the system as a whole and the phenotype, so there is “no central organizer, no repository of goals or instructions, no prime mover”;¹⁶ such ideas amount to what she terms “the *homunculoid gene*,” that is, a reading of the gene as if it were an extension of our humanity.¹⁷ Sitting between a classical standard evolutionary theory (SET) and DST is the extended evolutionary synthesis approach (EES).

Kevin Leyland supports EES by citing similarity of body shapes among cichlids in Lake Malawi compared with those in Lake Tanganyika, including some with large fleshy lips, some with protruding foreheads and some with short, robust lower jaws, even though (genetically) the cichlids in Lake Malawi are more closely related. SET explains that such convergence relies on genetic processes and natural selection that then leads to similar forms. But Laland comments, “This account requires extraordinary coincidence to explain the multiple parallel forms that evolved independently in each lake.”¹⁸ He argues that *development bias guides gene pathways down specific routes that are opened*

15 That is, the ability to stand outside ourselves.

16 Susan Oyama, “Causal Democracy and Causal Contributions in Developmental Systems Theory,” *Philosophy of Science* 67, (Sept. 2000): S332-47.

17 Oyama, “Causal Democracy,” S336, S338.

18 Kevin Laland, Gregory Way, et al., “Does Evolutionary Theory Need a Re-Think? Researchers are Divided over What Processes Should be Considered Fundamental,” *Nature* 514 (October 2014): 161–4.

up by development.¹⁹ The framing of the way such results are explained differs compared with SET. So, in SET developmental bias imposes “constraints” on evolution by natural selection. For EES, the developmental processes are more active and could be thought of as a “creative element, demarcating which forms and features evolve, and hence accounting for why organisms possess the characteristics that they do.”²⁰ NCT, as the name implies, is about the purposeful and directional manner in which organisms build their worlds: for example, termites construct and build their homes in a manner that is shaped by past selection and anticipates further selection.

Anthropologist Tim Ingold’s most fundamental critique of standard evolutionary theories, and one that is relatively easy to miss even though it is startling at first sight, is the assumption that the information flow from genes to life provides proper understanding of the actual life process of living organisms.²¹ If humanity is understood as no longer a *buffered self*, but instead as living in an *open ecological community*, one that I will term a *multispecies commons*, it forces a consideration of the *bounded and connected relationships* between biology and culture. Self-reflexivity in such a context is never, therefore, about the isolated, disengaged self, but about understanding our identity in community with others. Ingold refuses to succumb to sociobiology—indeed, he is in radical disagreement with it, arguing it has lost touch with

19 Simon Conway Morris also admits an “eerie” quality to his convergence evolutionary theory that includes what looks like constraint along with the apparently “random” walk resulting from the sieve-like process of natural selection during evolution. He resists the idea of “purpose,” but comes close to the concept of ‘design’. Simon Conway Morris, *Life’s Solution: Inevitable Humans in a Lonely Universe* (Cambridge: Cambridge University Press, 2004), i, 13–18. His more recent book Simon Conway Morris, *The Runes of Evolution: How the Universe Became Self Aware* (Philadelphia: Templeton Press, 2015), has come under attack from some evolutionary biologists who believe he is importing explicit religious presuppositions into his arguments. See, for example, Gerdien de Jong, “Deep Concord Between Science and Theistic Religion?” (lecture, Distinguishing Science and Metaphysics in Evolution and Religion, Lorenz Centre Conference, 28 August 2018). My own view is that Conway Morris is more in tune with a movement away from a biological metaphysics that adopts a narrowly defined (genetic) materialism that biologists such as Layland and Conway Morris are starting to challenge.

20 Laland et al., “Does Evolutionary Theory,” 164.

21 Tim Ingold, “An Anthropologist Looks at Biology,” *Man* 25, no. 2 (June 1990): 208–29.

the organisms it seeks to understand, leaving, as he claims, “no space for real people.”²²

What is crucial in Ingold’s argument is that he recognizes that proposed parallels between genetic processes and social life in standard models of cultural evolution can disguise real differences, more specifically the need for “relationships thinking.”²³ He also rejects the view of humans as “animals plus,” which means that cultural thinking is split from biological thinking, the moral condition of humanity from the physical condition of animality.²⁴

What is found in common is often attributed to human animality, whereas what accounts for variability is attributed to human culture. Tellingly, Ingold writes, “[a] good deal of the popular interest directed towards the contemporary populations of hunters and gatherers can be put down to the (wholly mistaken) notion that they are living exemplars of a prototypical humanity, a childhood of man from which the rest of us have grown up.”²⁵ Both give a false impression of human biological nature as one that is uniform, lacking the emphasis on inter- and intra-species variability that is integral to modern biological science.²⁶

Referring to evolutionary psychology’s reduction of biology to genetic endowment as a top-down movement and “a theory of genetic determinism,”²⁷ he presses for a reconsideration of Lamarck’s attention to the bottom-up movement of the inanimate-animate boundary through the postulation of a *vital force*.²⁸ Historically, the choice was between an inanimate mechanistic science that was not particularly biological and vitalistic biology that was not particularly scientific.

22 Ingold, “An Anthropologist Looks at Biology,” 208.

23 Ingold, “An Anthropologist Looks at Biology,” 208.

24 Ingold, in a fascinating way, perceives the stress on cultural uniqueness as a secularized version of ancient religious ideas of spirit. Ingold, “An Anthropologist Looks at Biology,” 209–10.

25 Ingold, “An Anthropologist Looks at Biology,” 210.

26 Ingold, “An Anthropologist Looks at Biology,” 211.

27 Ingold, “An Anthropologist Looks at Biology,” 211. I come to the same conclusion in Celia Deane-Drummond, *Christ and Evolution: Wonder and Wisdom* (Minneapolis: Fortress Press, 2009), 60–94.

28 Ingold, “An Anthropologist Looks at Biology,” 211.

Darwin never rejected the idea of acquired inheritance; rather, it was August Weismann who made sure that heritability was confined to the germplasm.²⁹ His thesis and the development of modern genetics formed the conceptual basis for “the complete separation of ontogeny from phylogeny.”³⁰ Ingold openly challenges Richard Dawkins’s naive view that Darwinian theory explains life.³¹ Ingold believes that if a much higher priority is given to trying to understand the range of “forms” that organisms can take, then what evolutionary biologists sometimes call “proximate” causes take primacy instead of genes, and evolution is more like “an exploration over time of the transformative potentials of a total generative system.”³²

The essentialist model of genotype plus phenotype leaves out the *physiological* processes that constitute life itself. In Ingold’s definition, then, life is “a name for what is going on in the generative field within which organic forms are located and ‘held in place.’”³³ In Darwinian theory, organisms are beings that express a preformed project that is then subject to external circumstances.

From Ingold’s alternative starting point, organisms should be viewed as an embodiment of a life *process*, with a past, present, and future—a *movement* through time.³⁴ Life progressively builds and grows its own emergent structures, rather than consisting of an inanimate being that is then set in motion. The relational order in which everything is enfolded into everything

29 Ingold, “An Anthropologist Looks at Biology,” 212.

30 Ingold, “An Anthropologist Looks at Biology,” 213.

31 Ingold, “An Anthropologist Looks at Biology,” 213.

32 Ingold, “An Anthropologist Looks at Biology,” 214. Form here is unrelated to the Aristotelian idea of form, but refers more to morphology of the whole organism. In other places Ingold does seem to refer to classic ideas, so “[m]any anthropologists are well aware that the basic contrast between physical substance and ideal form, of which the dichotomy between biological and social is one specific instance, is deeply embedded within the tradition of Western thought.” Tim Ingold, “Becoming Persons: Consciousness and Sociality in Human Evolution,” in *Cultural Dynamics* 4, no. 3 (November 1991): 355-78.

33 It is worth noting that he rejects vitalism, the view that life is inserted into matter, but insists that organisms are ‘in life’ rather than the other way round. Ingold, “An Anthropologist Looks at Biology,” 215.

34 He acknowledges the influence of vitalists such as Henri Bergson and Ernst Cassirer.

else is self-organized in such a way that each part *enfolds* the whole, rather than an order existing in its own space, closed off from other parts. Organic forms therefore emerge as bounded entities that are constituted through perpetual interchange with their environment.³⁵ This means that both organisms and their environments emerge *together*.

What is Human Life? Exploring Moral Becoming

To summarize so far: Ingold has made some important critiques of standard Neo-Darwinism, including its underlying assumptions, but the process view he articulates seems to lack the specificity that is needed for understanding more precisely what it means to live a moral human life. We are left with a generalized sense of the emergence of humanity that does not quite take into account the radical and transformative nature of humanity's encounter with the transcendent. Therefore, I will now focus on distinctive aspects of humanity that can be tracked in the material record, but also those characteristics of morality, compassion and humility that are much harder to trace. For the sake of brevity, I will focus on two aspects of the evolution of human moral agency which I think are particularly important in understanding and interpreting who we are as moral agents: compassion and humility.

COMPASSION AS MORAL EMOTION

Compassion, which connects human beings with each other and other creatures, is fundamental to living a moral life. Long-term compassion towards others is distinctively human and appeared very early in the evolutionary record, perhaps as far back as *Homo erectus*.³⁶ Compassion is also a prerequisite for any consideration of something beyond ourselves.

In the very early evolutionary history of hominins, what appear to

35 Ingold, "An Anthropologist Looks at Biology," 216.

36 Penny A. Spikins, Holly E. Rutherford, and Andy P. Needham, "From Homininity to Humanity: Compassion from the Earliest Archaics to Modern Humans," *Time and Mind* 3, no.3 (2010): 303–325. For further discussion see Celia Deane-Drummond, "Empathy and the Evolution of Compassion: From Deep History to Infused Virtue," *Zygon* 52, no.1 (2017): 258–278 and Penny Spikins, *How Compassion Made Us Human: The Evolutionary Origins of Tenderness, Trust and Morality* (Barnsley: Pen and Sword Books, 2015), 126–147.

be distinctive forms of compassion arose that went beyond shorter-term empathetic reactions observable in other primates. This implies a deep history of sustained compassion that is somewhat different from that found in our primate cousins.³⁷ Tracing the origins of empathy from the hominin ancestral record requires some imaginative interpretation, and this may be one reason why relatively few evolutionary anthropologists discuss it.

Such accounts of compassion are still controversial, due to very small sample sizes and difficulties in interpretation of the evidence, but still worth careful consideration. British evolutionary archaeologist Penny Spikins and her colleagues have done some fascinating work on the possible reconstruction of psychological emotions in the pre-history of the *Homo* lineage.³⁸ The most anthropologists, Spikins claims, tend to ignore all emotions in human prehistory on the basis that they are far too hard to detect. What kind of archaeological evidence could possibly point to changes in the mental lives of these early humans?

Spikins believes that while this is fraught with difficulties, it is still possible to create a reasonable narrative. It is compassion that was highly significant in the earliest evolutionary history of highly cooperative human societies. Thus, Spikins and her co-authors explain,

Understanding the evolution and role of compassion in past human species entails recognizing that compassion is more than just a *feeling* that we recognize as personal, but also in a wider analytical perspective it is a biological response, a “motivation to act” whose roots lie in the hormonal and neuronal working of our mind.³⁹

Spikins argues that compassion involves an initial step of empathy and then

37 Interesting work among social carnivores suggests that they were also capable of long-term compassion. See Penny Spikins, (in press) *Hidden Depths: The Origins of Human Connection* (York: White Rose University Press, 2023).

38 Spikins, et al., “From Homininity to Humanity,” 303–325. See also Spikins, *How Compassion Made Us Human*, especially 60–81.

39 Spikins et al., “From Homininity to Humanity,” 305. Spikins seems to conflate compassion with “caring deeply for each other.” Spikins, *How Compassion Made Us Human*, 60, 67. She then finds evidence for such caring from the behaviour implied by the survival of those who could not have survived without such caring.

a strong motivation to help the other in distress. Compassion in these very earliest human societies indicates that compassion is far more sustained and long-term rather than fleeting, as in other primates. Examples to support this case include:

The most well-known early example of long-term support for an incapacitated individual comes from KNM-ER 1808, a female *Homo ergaster* dated to around 1.5 mya...Examinations of the skeletal remains of this individual have led to suggestions that she was suffering from hypervitaminosis A, a disease caused by excessive intake of vitamin A.⁴⁰

These symptoms can be tracked in the human remains through reduction in bone density and the development of coarse bone growths. The symptoms for sufferers are known from contemporary medical studies to include “abdominal pain, nausea, headaches, dizziness, blurred vision, lethargy, loss of muscular coordination and impaired consciousness.”⁴¹ This pathology would have taken many months to develop, which shows that the caretaking in this case must have been long term as the individual could not have survived on their own without the intensive care of others. The point is that this requires *long-term* and *sustained* care of a type that has not yet been found in other primates.

A second example comes from even further back in history, 1.77 million years ago from the well-known Dmanisi archaeological site in Georgia. Spikins’ group explains:

One of the Dmanisi hominins had lost all but one tooth several years before death, with all the sockets except for the canine teeth having been reabsorbed. Since it could only have consumed soft plant or animal foods, it seems likely that it would have needed support from others.⁴²

40 Spikins et al., “From Homininity to Humanity,” 309.

41 Spikins et al., “From Homininity to Humanity,” 309.

42 Spikins et al., “From Homininity to Humanity,” 309.

A third example is relatively recent, and it is a Neanderthal lineage concurrent with the *Homo sapiens* lineage: Shanidar 1, the “Old Man of Shanidar,” dating to around 60–80,000BP is perhaps one of the best-known examples. This individual suffered multiple fractures across his body, with the right side being particularly badly affected, the right arm being described as completely “withered.”⁴³ The individual also received a “crushing” injury to his cranium, possibly causing blindness in his left eye due to the deformity of the skull.⁴⁴

Yet, a close study of the bones revealed that the injuries happened during adolescence, with death at a relatively advanced age (for Neanderthals, thirty-five to fifty years).

Remains of a child (five to eight years old) in the Middle Pleistocene era who suffered severe birth defects of the cranium (*craniosynostosis*) have also been found. This gives strong evidence that, in this case at least, compassion extended to babies and young children.

Spikins and her research team compare this evidence for what they believe is a deep commitment to care for young individuals over the long term with cemetery evidence for abandonment of babies suffering from the same condition in modern human societies.

They report other examples of early upper Paleolithic individuals suffering from severely debilitating conditions such as *Acromesomelic dysplasia*. According to their definition, compassion, which finds expression in the human ability to extend care and commitment to others in a sustained way, can include commitment to animals, or even objects and perhaps even ideas.

If compassion, as they define it, is part of a slow, more sporadic process that included *flickerings* of compassion rather than development through a single process, as for complex cognition,⁴⁵ then it might be possible to track compassion alongside the tracing of symbolic thought in general. This would be consistent with the thesis that the evolutionary lineage *Homo* was a slowly evolving community niche. This complex dynamic system in

43 Richard G. Klein, *The Human Career, Human Biological and Cultural Origins* (Chicago: University of Chicago Press, 1999), 333. Cited by Spikins et. al. “From Homininity to Humanity.”

44 Spikins et al., “From Homininity to Humanity,” 309.

45 Marean W. Curtis, “An Evolutionary Anthropological Approach on Modern Human Origins,” *Annual Review of Anthropology* 44 (Oct. 2015): 533–566.

an evolutionary perspective of compassion included cognitive, social, and ecological components interacting with each other and with the genotype in a complex feedback system.⁴⁶

This hybrid understanding of compassion that is then extended to objects is rather different from Martha Nussbaum's philosophical definitions of compassion, which are more closely tied to cognitive judgments about whether what is happening is fair or not for an individual.⁴⁷ If Nussbaum's analysis is followed, then it is unclear when the judgments of compassion in terms of size (this is a serious event), non-desert (this shouldn't have happened to you), and flourishing (your livelihood matters to my own wellbeing) surfaced in human communities or how these relate to any evolutionary "fitness" requirements for empathy.

It is likely that finding more subtle tendencies of judgment *within* compassion in archaic communities will be impossible, which means that there will always be a gap between the different accounts. It is difficult, for obvious reasons, to work out more precisely *why* the commitment to long term care was present in these very early human communities. Vague notions that such actions might help strengthen community bonds, as well as references to mathematically based evolutionary theories about an individual's reputation, are sometimes deployed to explain extreme altruism towards others,⁴⁸ but do not adequately address the issue.

While religion is not mentioned, an intriguing possibility is that the human ability to exercise deep and sustained compassion was also associated

46 Agustín Fuentes, "Integrative Anthropology and the Human Niche: Toward a Contemporary Approach to Human Evolution," *American Anthropologist* 117, no.2 (2015): 302–315.

47 Martha Nussbaum, "Compassion: Human and Animal," in *Understanding Moral Sentiments: Darwinian Perspectives?* Ed. Hilary Putman, Susan Neiman, and Jeffrey Schloss (London: Transaction Publishers, 2014), 123–50. See also Martha Nussbaum, *Upheavals of Thought: The Intelligence of Emotions* (Cambridge: Cambridge University Press, 2001).

48 This opens a huge literature on the evolution of altruism and cooperation that is discussed in a number of books and is outside the scope of this lecture. Such literature on altruism includes, for example, Martin A. Nowak and Sarah Coakley, *Evolution, Games and God: The Principle of Cooperation* (Cambridge, MA: Harvard University Press, 2013); Stephen G. Post, Lynn G. Underwood, Jeffrey P. Schloss, and William Hurlbut, eds., *Altruism and Altruistic Love: Science, Philosophy and Religion in Dialogue* (Oxford: Oxford University Press, 2002).

with capacity for an affiliation with a loving transcendent Other. Dominic Johnson has argued that religion evolved to deal with the freeloader problem in mathematical accounts of cooperation. God is then a divine punisher who is watching you even when others are not.⁴⁹ Compassion is certainly very ancient in the human evolutionary record, far older than the first flickerings of what looks like symbolic thinking tracked by anthropologist Marc Kissel.⁵⁰

Spikins research should not leave the romantic impression that such societies were necessarily virtuous, reflecting a distant memory of an idyllic time when human societies lived and worked together in peace. Alongside evidence for forms of human compassion that Spikins et al. have elaborated, there is also good evidence for its opposite, namely the ability to be violent towards each other expressed eventually in peculiarly human forms of cruelty.⁵¹

If compassion points to the possibility of envisaging a loving, transcendent Other, were there behavioral indicators that might indicate that very early hominins considered that there was indeed something more to human life than simple survival?

The Birth of Humility⁵²

Beautiful handaxes, such as the 250,000-year-old West Tofts handaxe crafted around a fossil scallop shell,⁵³ show an aesthetic sense and perhaps also a greater sensitivity to how others might perceive oneself—and, more speculatively, a sense of the transcendent. It is also possible that the handaxe itself was viewed as something living: working with the material to elicit—and celebrate—what

49 Dominic Johnson, *God is Watching You: How the Fear of God Makes us Human* (Oxford: Oxford University Press, 2015).

50 Marc Kissel, “What Can Anthropology Say About the Evolution of Human Wisdom?” in *The Evolution of Human Wisdom*, ed. Celia Deane-Drummond and Agustín Fuentes (Lanham: Lexington Press, 2018), 25–48.

51 Agustín Fuentes, “Cooperation, Conflict and Niche Construction in the Genus Homo,” in *War, Peace and Human Nature: The Convergence of Evolutionary and Cultural Views*, ed. Douglas Fry (Oxford: Oxford University Press, 2013), 78–94.

52 For more details of this discussion on humility see Celia Deane-Drummond, “Searching for the Soul of Homo: The Virtue of Humility in Deep Evolutionary Time,” in *Theology and Evolutionary Anthropology: Dialogues in Wisdom, Humility and Grace*, ed. Celia Deane-Drummond and Agustín Fuentes (London: Routledge, 2020): 182–202.

53 Spikins, *How Compassion Made Us Human*, 203.

was dimly perceived in the material. The handaxes of the Acheulian show incredibly high levels of symmetry that are technically extremely hard to achieve.⁵⁴

Archaeologists have shown that the skill in making even the simplest lithic tools is likely to have demanded hundreds of hours of practice.⁵⁵ Dietrich Stout suggests:

Discovery of optimal technologies might be facilitated by social scaffolding, explicit instruction or high-fidelity imitation of an expert model, but minimally requires focused attention, self-monitoring and inhibition of automatic reactions during repetitious practice.⁵⁶

Classic explanations that this marks the arrival of “man the toolmaker,” giving these hominins superiority in hunting success, is only a partial explanation, since it fails to explain *why* there is a change in morphology of the stone tools over time, given that all the morphologies were equally multifunctional. Along with physical skill and cognitive development associated with lithic crafts there is also some evidence of enhancement in personal qualities of self-control and persistence and the ability to imagine alternatives.⁵⁷

As well as possessing a native practical wisdom in how to make such objects, those aspects of self-restraint characteristic of humility are likely to have been involved. The classification of humility as a moral virtue is not universal, stemming from resistance to its worth by many influential post-Enlightenment writers, including Friedrich Nietzsche in the nineteenth century and David Hume in the eighteenth century, who described humility

54 Even creating the simplest lithic tools is likely to have demanded hundreds of hours of practice. Dietrich Stout, “Stone Toolmaking and the Evolution of Human Cognition,” *Philosophical Transactions of the Royal Society B. Biological Sciences* 366 (2011): 1050–1059.

55 Stout, “Stone Toolmaking and the Evolution of Human Cognition.” It seems that these early hominins scavenged and recycled specimens discarded by others and the landscapes now filled with lithic artifacts are like a library of design and production processes.

56 Stout, “Stone Toolmaking,” 1057.

57 Peter Hiscock, “Learning in Lithic Landscapes: A Reconsideration of the Hominid “Toolmaking” Niche,” *Biological Theory* 9, no.1 (2014): 27–41.

(along with celibacy, fasting, penance, mortification, self-denial, silence, solitude and the “whole train of monkish virtues”) as not just irrelevant for the moral life and “everywhere rejected by men of sense” since “they serve to no manner of purpose, neither advance man’s fortune in the world, nor render him a more valuable member of society,” but also, in addition, they “stupefy the understanding and harden the heart, obscure the fancy and sour the temper.” He continues further that such tendencies “place them in the catalog of vices.”⁵⁸

Yuval Norah Harari characterizes the achievements of human history, including the evolution of humanity, as a kind of anti-humility, a deliberate and aggressive attempt by *Homo deus* to become divine, eventually collapsing traditional religious practices.⁵⁹ *Homo sapiens* turned *Homo deus* is poised to lose control. Harari argues for compassion towards animals on the somewhat flimsy basis that perhaps we might no longer be the ones in control of our futures, so if we continue to treat animals without respect, the same might be meted out on us through our AI creations.

Aquinas believed that the moral life, which meant right relationship of self to others, including God, required the exercise of right reason over our passions and desires. Self-control does not in this context mean a lack of emotional attunement with self and others, but rather the ability to self-regulate accurately and with sensitivity to another’s emotional state. By expelling pride, humility removes obstacles to the reception of divine grace, so, in this sense, is the foundation of the spiritual life. This does not take away from the central role that charity (love) plays in the spiritual life.⁶⁰ A retrieval of a classical understanding of the virtue of humility and its relationship to other virtues can help tease out the kinds of qualities and habits of mind that are important in a well-functioning human community.

58 David Hume, *An Enquiry Concerning the Principles of Morals: A Critical Edition*, ed. Tom Beauchamp (New York: Oxford University Press, 2006), 9, 73.

59 Yuval Noah Harari, *Homo Deus: A Brief History of Tomorrow* (New York: Harper Collins, 2017). For a review, see Celia Deane-Drummond and Agustín Fuentes, “Review Article: *Homo Deus: A Brief History of Tomorrow*,” *Philosophy, Theology and the Sciences* 5, no. 1 (2018): 127–137.

60 Thomas Aquinas, *Summa Theologiae*, trans. Laurence Shapcote, ed. John Mortensen and Enrique Alacarán (Lander: Aquinas Institute, 2012), IIaIIae, q. 161, a. 5.

Are We Alone?

Another set of material results which points to the fundamental importance of the transcendent for a distinctively human way of life comes from work with another hominin species discovered relatively recently in South Africa, whose life history overlapped with that of *Homo sapiens*. Lee Berger and John Hawks outline some remarkable findings about *Homo naledi*, that have only just come to light.⁶¹ The account is astonishing because in some respects it was so unexpected among evolutionary anthropologists, who assumed from morphological assessment that these fossils dated to around 1.5 million years ago. Direct dating of these fossils from the Dinaledi Chamber in the Rising Star cave system in South Africa shows, instead, that they were deposited somewhere between 236 and 335 thousand years ago, thus in the later Middle Pleistocene, coincident with that of our own species, *Homo sapiens*.

A remarkable number of specimens were found in the cave – 1,500 fossils representing fifteen individuals. They are the largest collection to date of a single species of a close relative of our species. Although Acheulean and Middle Stone Age tools are usually associated with *H. sapiens*, it is also possible, at least on the available evidence, that *H. naledi* contributed to these remains. Exactly where *H. naledi* appears in the phylogenetic evolutionary tree is uncertain. The evidence points towards an ancient phylogenetic origin, most likely 900 thousand years ago, rather than a closer date to *H. sapiens*, as otherwise some of the morphological characteristics would be reversals to an earlier state. Or perhaps it was a result of hybridization between two hominin subspecies? *H. naledi* shares many of the anatomical characteristics of both *Homo sapiens* and *Homo erectus*.⁶² Hence, it may be more accurate, as Rebecca Ackermann and Lauren Schroeder suggest,⁶³ to view all these different subspecies of *Homo*

61 Lee Berger and John Hawks, “On *Homo naledi* and its Significance in Evolutionary Anthropology” in *Theology and Evolutionary Anthropology: Dialogues in Wisdom, Humility and Grace*, ed. Celia Deane-Drummond and Agustín Fuentes (London: Routledge, 2020): 51–68. Lee Berger et al., “*Homo naledi* and Pleistocene Hominin Evolution in Subequatorial Africa,” *Short Report, eLife* (May 2017): 1–19.

62 DNA evidence would clear up some of the ambiguities in lineage, but attempts to extract DNA from *Homo naledi* have so far failed. Berger et al., “*Homo naledi* and Pleistocene,” 8.

63 Rebecca Ackermann and Lauren Schroeder, “The Emergence of Complexity and Novelty in the Human Fossil Record,” in *Theology and Evolutionary Anthropology*:

in a more closely reticulate relationship with each other.

This discovery of a very small-brained hominin who also seemed to have the ability to grasp with the hand, but who walked upright, upsets as well the view that gradually *Homo* lineages acquired bigger and bigger brains with associated cognitive capacities. *H. naledi* had relatively small brains, more like *Australopiths*, the most ancient of human relatives, combined with a stature, lower limb, and foot anatomy of *H. sapiens*.

The wrist, hand, and fingertip morphology of *H. naledi* share many of the same characteristics of Neanderthals and *H. sapiens* that are missing in other hominin species. It is reasonable to speculate that *H. naledi* could make tools. Their small dentition also points to a higher quality diet that includes meat and plant resources. If that is the case, then, despite their relatively small brains, it was possible for *H. naledi* to engage in tool use, and though so far there is no direct published evidence yet for making this assumption, the possibility is still being researched.

It is the mortuary behavior of *H. naledi* that I think deserves special comment, since this practice is clearly documented by the way the bones have been deposited in the caves. The Lesedi Chamber, located deep inside the cave system, is only accessible by a very narrow chute. Berger and colleagues reject the idea that these were accidental death traps or that they were the result of inner movement by carnivores within the cave system: the condition of the fossil remains refutes both possibilities. It is also unlikely that *H. sapiens* were responsible for the deposition, since there were no markings on the bones that were the habitual practice of our species.

Such discoveries about *H. naledi* immediately raise some intriguing questions about what could have been going on in the minds of these very early hominins. Why, for example, did they choose to deliberately bury their dead through mortuary practices that must have been difficult and require a great deal of patience and even loving respect for the deceased? Was this the first dawning of an awareness of an afterlife, a sense that there is continuity as well as discontinuity after death, a transcendent way of perceiving the world as well as simply a transactional one?⁶⁴ Whatever the explanation, four issues

Dialogues in Wisdom, Humility and Grace, ed. Celia Deane-Drummond and Agustín Fuentes (London: Routledge, 2020): 29-46.

64 Maurice Bloch, "Why Religion is Nothing Special but is Central," *Philosophical*

stand out in the light of the discussion about humility.

First, those who undertook this practice perceived those who died in humble respect: they recognized qualities in them that they wanted to preserve and protect.

Second, and more speculatively, there was a dawning of consciousness of another spiritual realm coterminous with our own, where humble submission to that energy and power drove specific mortuary practices. Such practices are preludes to a religious sense that eventually dawned in the human community.

Third, *H. naledi* takes away the pride of *H. sapiens* as being the *only* species capable of highly sophisticated activities—including implicitly religious activities.

Finally, perhaps *H. naledi* also contributed to our own lineage in ways yet to be discovered through further research. Given the size of the neocortex, such research also implies that cortical size alone is not a prerequisite for perceiving the transcendent, even though, of course, eventually *H. sapiens* survived and *H. naledi* did not.

CONCLUDING REMARKS

We arrive, therefore, with far more questions than answers about what it means to live a human life. How has human becoming moved from careful burial practices in that tiny, small brained *Homo naledi* to the sophistication of more abstract cognition in the theological reflection characteristic of someone like Thomas Aquinas? I have argued in this lecture that understanding our humanity in terms of liminality—in relation to our animality and the transcendent—counters any position that human life is simply about factual aspects of our biological existence. Understanding human life in a dynamic relationship with other beings, including the more mysterious unseen, begins to provide insights into the rich processes and narratives of human becoming. Instead of understanding a sense of the transcendent as an add-on arising from belief in a punitive God (as some evolutionary explanations of religion contest), human life unfolds even as it enfolds other beings, becoming moral

Transactions of the Royal Society B: Biological Sciences 363, no. 1499 (2008): 2055–2061. Bloch downplays the experience of religion in assuming the explanatory power of emergence theories, but his admission of distinctly human transcendental practices is important.

through enhanced practices of compassion and humility, to name just two dispositions. The possibility of any moral becoming should not be understood as unidirectional, but akin to the ancient practice of wayfaring.

The threat of sinking deeper into vice and other forms of violence exists even as humanity has the ability to become more compassionate, tolerant, grateful and so on. I have stressed in this lecture more positive attributes, not least because there is a common tendency to imagine our ancient past as brutally violent.

As ancient theologians and philosophers have stressed for centuries, a distinctively human life consists of a mixture of tendencies for both deep compassion and abject cruelty. Understanding human belonging as orientated towards the next life, if understood in the light of belief in a loving and compassionate God, could arguably enhance tendencies towards compassion in this life rather than its opposite. Some fascinating examples of tool use, deliberate ancient burials among hominins living in the same era as *Homo sapiens*, along with their relatively small brains, points to a transcendent sense of belonging to the next world being *coincident* with earliest human becoming, rather than added on much later in human history with the development of sophisticated religious rituals. If this is the case, then the human being's capacity for the transcendent is a fundamental aspect of what human life means and therefore cannot be suppressed, even though it may take on different expressions in response to the pressures of modern cultural change.

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