


Just How Special Are Humans?

with Eric Priest, Celia Deane-Drummond, Joseph Henrich, and Mary Meyers, "Introduction to Symposium on 'Just How Special Are Humans?';" Eric Priest, "Human Uniqueness: Debates in Science and Theology"; Joseph Henrich, "How Culture Made Us Uniquely Human"; Agustín Fuentes, "Distinctively Human? Meaning-Making and World Shaping as Core Processes of the Human Niche"; Cristine Legare, "The Cumulative Quality of Culture Explains Human Uniqueness"; David Reich, "Human Uniqueness from a Biological Point of View"; Alan Mittelman, "The Mystery of Human Uniqueness: Common Sense, Science, and Judaism"; Jan-Olav Henriksen, "Experiencing the World as the Evolved Image of God: Religion in the Context of Science"; Jennifer A. Herdt, "Responsible Agency: A Human Distinctive?"; Celia Deane-Drummond, "Tracing Distinctive Human Moral Emotions: The Contribution of a Theology of Gratitude"; and John Behr, "Nature Makes an Ascent from the Lower to the Higher: Gregory of Nyssa on Human Distinctiveness."

INTRODUCTION TO SYMPOSIUM ON "JUST HOW SPECIAL ARE HUMANS?"

by Eric Priest,  Joseph Henrich, Celia Deane-Drummond, and Mary Ann Meyers

Abstract. We here introduce the *Zygon* Symposium on "Just How Special Are Humans?" This collection is based on a symposium at Harvard University in 2020 that brought together world leaders on the study of human nature from science, theology, and philosophy. They shared their research and perceptive insights on this key topic of great contemporary interest from quite different disciplines and viewpoints. The present Symposium contains articles further developed from the presentations, as well as two additional contributions from experts specializing in theological ethics and philosophy of religion.

Keywords: culture; homo sapiens; theology and science

In March 2020, Joe Henrich hosted a symposium in the Department of Zoology at Harvard University with the title "Just How Special Are Humans Really? Insights from Science, Philosophy, and Theology on the

Eric Priest is Emeritus Professor of Applied Mathematics at the University of St Andrews, UK, Joseph Henrich is Professor of Biological Anthropology and Professor of Human Evolutionary Biology at Harvard University, Celia Deane-Drummond is Senior Research Fellow in Theology and Director of the Laudato Si' Research Institute, Campion Hall, Oxford, and Mary Ann Meyers is Senior Fellow at the John Templeton Foundation; e-mails: eric.r.priest@gmail.com, joseph.henrich@gmail.com, celia.deane-drummond@theology.ox.ac.uk, and mmeyers@templeton.org.

Mystery of Human Uniqueness.” The symposium brought together world leaders on the study of human nature from science, theology, and philosophy, who shared their research and perceptive insights on this key topic of great contemporary interest from quite different disciplines and viewpoints. Many of those present agreed to develop their presentations for subsequent publication in this thematic section, or “Symposium,” of *Zygon: Journal of Religion and Science*, which has since been augmented by contributions from two experts specializing in theological ethics and philosophy of religion.

In what sense are human beings special? This question cuts across disciplines of science (psychology, biology, anthropology), philosophy, and theology, each of which offers potentially complementary insights. Forty years ago, the answer to the question “What does it mean to be human?” was simple. At that time, Christian leaders often suggested that humans are distinct from other animals since they have souls and since the book of Genesis tells us that we have dominion over the animals. Psychologists and anthropologists, on the other hand, more commonly proposed that humans possess key attributes that set humans apart, namely, language, tool making, culture, art, and self-consciousness. In addition, following Descartes, the dominant stream among philosophers emphasized the rationality of humans—“*cogito ergo sum*” (I think, therefore I am)—as an essential component.

However, there has been a revolution in thinking over the last four decades. In psychology and anthropology, many of the characteristics that were previously thought to demarcate human beings are now known to be present in social animals, who are able to manipulate their environment and are cognitively much more sophisticated than previously recognized. Thus, the question arises: is it the degree and sophistication of certain attributes that makes humans distinctive or are there specific hallmarks of humanness—and, if so, how did these traits evolve, and how was our genetic code affected? Instead of searching for single trait keys to humanness, scientific approaches to our question have now moved away from a focus on key attributes and are instead emphasizing the unique and complex role of culture in human evolution.

In Christian theology, there is beginning to be a new emphasis on a holistic rather than a dualistic nature for humans, especially among those who are less conservative in their understanding of tradition. Also, even among those who give high authority to the Bible, scriptures are interpreted so as to emphasize humans as an integral part of nature with a duty to exercise care for it (e.g., Bauckham 2010). One challenge for the way theology is presented is to ask: how do traditional public expressions of Christian faith need to change with the realization that humans are not as different from other animals as we once thought. There is also a renewed interest in the idea that humans are made in the image of God, which

is the basis of an emerging field of theological anthropology (e.g., Cortez 2018). For example, ways of recovering the meaning of the human person against the challenge of philosophical naturalism have been suggested (Torrance and Torrance 2012), and different philosophical and theological accounts of human nature have been considered, including the emergence of personhood (Torrance 2015a, 2015b).

If we are made in the image of God, is it still the case that our nature as image bearers lies in our cognitive abilities? Several people who walk alongside those living with intellectual disabilities have suggested that high-level cognitive functioning is not necessary for personhood (Swinton 2020). For instance, it has been suggested that “*cogito ergo sum*” should be replaced by “*amor ergo sum*” (I am being loved, therefore I am) (Wyatt 2016).

Five scientists and five theologians or philosophers have contributed to this thematic section of *Zygon*. First of all, Eric Priest gives an introductory background to the debates in science and theology about human uniqueness and also summarizes the scientific and theological insights from contributors to this special issue in more detail than in this editorial.

Human evolutionary biologist, Joe Henrich, emphasizes that it is culture that drove human evolution, domesticated our species, and made us smarter. He argues that the “secret” here of human success is a process of *cumulative cultural evolution*, in which each generation acquires cultural information from the previous generation, augments it by recombination, variation, and filtering, and then passes the augmented and more adaptive body of information on to the next generation (Henrich 2016).

Anthropologist Agustín Fuentes, operating with the Henrich’s framework, goes further by suggesting that meaning, imagination, and belief are as central to human evolution as bones, genes, and ecologies (Fuentes 2017a). He argues that humans live, learn, and evolve within a distinctive cultural context and a particularly dynamic and distinctive niche.

Developmental psychologist Cristine Legare expands on the nature of the cumulative quality of culture, including the capacity to learn from and build on the innovations of others. She examines how the human mind enables us to learn, create, and transmit culture (Legare 2017; Legare 2019) and studies how children flexibly use imitation and innovation as dual engines of cultural learning (Legare and Nielsen 2020).

Famed geneticist David Reich provides insights from an analysis of the human genome on human uniqueness that complement archaeological and anthropological knowledge. He describes the techniques for deducing information about the past from genetic variations and gives examples of their application, including the discovery of widespread interbreeding between archaic and modern humans. Humans have colonized a particular ecological niche, but how much of our adaptation to that niche is cultural and how much is genetic?

Alan Mittleman, writing from a Jewish philosophical perspective, compares “commonsensical” and “scientific” perspectives on the human. From a commonsense viewpoint, humans seem to be unique among animals, due to our properties, especially our consciousness, as well as our significance and value. From a scientific perspective, however, human uniqueness is possibly a matter of degree rather than kind, and considerations of value are omitted. To combine these perspectives, he offers from his own tradition a biblical approach to help join these perspectives and face the mystery of human uniqueness.

Philosophical theologian Jan-Olav Henriksen suggests that human evolution is closely tied up with religion (Henriksen 2017, 2020). This is partly because humans experience the natural, socio-cultural, inner (psychological), and mystical dimensions of the world, but also uniquely because humans can engage the world and interpret these experiences with reference to what they consider ultimate.

Theological ethicist Jennifer Herdt explores responsible agency as a mark of human distinctiveness, focusing on reactive emotions, such as anger, resentment, and indignation. Like human beings, other social animals express emotional reactions in response to others’ conformity with or violation of implicit social expectations and norms; but human beings can also reflect on these reactive attitudes and ask whether it is appropriate to hold others accountable, and so to blame, or punish them.

Scientist turned theologian Celia Deane-Drummond has considered the origins of morality and our relationship with animals (Deane-Drummond 2019), as well as trying to understand the origins of wisdom, humility, and grace (Deane-Drummond and Fuentes 2020). Here, she discusses one of the distinctively human emotions, namely, gratitude following the thought of Thomas Aquinas and including gratitude to God as a fundamental aspect of religious faith and practice.

Finally, Orthodox theologian John Behr gives a highly sophisticated analysis of the human being by the fourth-century saint, Gregory of Nyssa, in his work *On the Human Image of God*, which is a reworking of Plato’s *Timaeus*. This describes in three parts the creation of the world and of human beings, including what is crafted by the intellect, an account of “necessity” or the “straying cause,” and an anatomical account of humans.

Each of these essays shows us the complexity of what it means to be human from different starting points. If science more broadly seeks to explain the distinctive marks of what human beings are and how they come to exist in evolutionary terms, philosophers and theologians are more interested in understanding the mystery of human existence. We argue that both kinds of perspective are necessary. On the one hand, the scientific articles remind theologians that humanity comes from the dust of the earth. The theological articles, on the other hand, insist that there is something about human uniqueness that can never be fully explained and is always out of reach.

Evolutionary biologist David Sloan Wilson argues that evolutionary paleontologist and Jesuit priest Pierre Teilhard de Chardin was ahead of his time and anticipated many evolutionary theories, even though he combined these theories with a strong religious commitment (Sloan Wilson 2023). While not all theologians will want to adopt Teilhard's highly synthetic approach to the dialogue, he demonstrates clearly that such engagement can inspire ideas which do have scientific relevance. On the other hand, his novel approach to theology, which led to so much rejection during his lifetime, has now largely been accepted or at least accommodated by ecclesial authorities. It is our hope that this modest collection of essays will also inspire such dialogue on what it means to be human and the mystery of human uniqueness.

ACKNOWLEDGMENTS

We are grateful to the John Templeton Foundation for funding the symposium at Harvard in March 2020 that inspired the articles in this thematic section of *Zygon: Journal of Religion and Science*. The symposium was the 57th in the Humble Approach Initiative series held under the aegis of the John Templeton Foundation and organized by Mary Ann Meyers.

REFERENCES

- Bauckham, Richard. 2010. *Bible and Ecology: Rediscovering the Community of Creation*. Waco, TX: Baylor University Press.
- Cortez, Marc. 2018. *Resourcing Theological Anthropology*. Grand Rapids, MI: Harper Collins.
- Deane-Drummond, Celia. 2019. *Theological Ethics through a Multispecies Lens: The Evolution of Wisdom*. Oxford: Oxford University Press.
- Deane-Drummond, Celia, and Agustín Fuentes, eds. 2020. *Theology and Evolutionary Anthropology*. London: Routledge.
- Fuentes, Agustín. 2016. "The Extended Evolutionary Synthesis, Ethnography, and the Human Niche: Toward an Integrated Anthropology." *Current Anthropology* 57 (Supplement 13): 13–26.
- Henrich, Joseph. 2016. *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating our Species and Making Us Smarter*. Princeton, NJ: Princeton University Press.
- Henriksen, Jan-Olav. 2017. *Religion as Orientation and Transformation: A Maximalist Theory*. Tübingen: Mohr Siebeck.
- . 2020. *Representation and Ultimacy: Christianity as Unfinished Business*. Münster, Zürich: LIT Verlag.
- Legare, Cristine. 2017. "Cumulative Cultural Learning: Diversity and Development." *Proceedings of the National Academy of Sciences* 114 (30): 7877–83.
- . 2019. "The Development of Cumulative Cultural Learning." *Annual Review of Developmental Psychology* 1 (1): 119–47.
- Legare, Cristine, and Mark Nielsen. 2020. "Ritual Explained: Interdisciplinary Answers to Tinbergen's Four Questions", *Philosophical Transactions of the Royal Society B* 375:20190419.
- Sloan Wilson, David. 2023. "Reintroducing Pierre Teilhard de Chardin to Modern Evolutionary Science", *Religion, Brain and Behaviour*, in press.
- Swinton, John. 2020. *Finding Jesus in the Storm: The Spiritual Lives of Christians with Mental Health Challenges*. Grand Rapids, MI: Eerdmans.
- Torrance, Alan. 2015a. "Is There a Distinctive Human Nature? Approaching the Question from a Christian Epistemic Base." *Zygon: Journal of Religion and Science* 47:903–17.

- . 2015b. “Retrieving the Person: Theism, Empirical Science and the Question of Scope” in *The Emergence of Personhood: A Quantum Leap*, edited by Malcolm Jeeves, 202–19. Grand Rapids, MI: Eerdmans.
- Torrance, Alan, and Andrew Torrance. 2012. “Kierkegaard and Karl Barth.” *Søren Crux* 48: 50–59.
- Wyatt, John. 2016. “Being a Person.” In *Reason and Wonder: Why Science and Faith Need Each Other*, edited by Eric Priest. London: SPCK.