

EVOLUTION, EXTINCTION OR EXTENSION:
WHAT IS THE RISK OF ADOPTING
THE WRONG ANTHROPIC
PRINCIPLE?

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Abstract

The paper explores two main themes in science, philosophy and theology/worldview discourse: anthropic principles and transhumanism. After providing a brief history of the first theme, it cautions about potential dehumanisation from adopting the wrong anthropic principle as a kind of 'disanthropic' reasoning. Part of the solution is to reclaim a proper meaning of 'anthropic' for the social sciences and humanities beyond the natural sciences of physics and cosmology or statistical probabilities.

The second theme is investigated both in theistic and non-theistic variants as they influence what is meant by 'human' in the context of evolution and development. Transhumanism is portrayed in terms of both risk and reward with the rise of neo-eugenics and biotechnological human enhancements. The paper closes by briefly acknowledging Human Extension (Sandstrom 2011, 2014) as a reflexive anthropic principle that can be applied in social sciences and humanities to help overcome the ideologies of naturalism and scientism. The Human Extension approach focuses on choices and actions that bring into relief the eschatological claims of some transhumanists and posthumanists who speak disanthropically about human extinction due to technocratic artificial intelligence or who deny human exceptionalism and instead promote species egalitarianism among earthly creatures.

Keywords: anthropic principle, anthropic reasoning, evolution, naturalism, transhumanism, dehumanisation, human extension.

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Introduction

“Rapidly, we approach the final phase of the extensions of man – the technological simulation of consciousness”.

*M. McLuhan*²

This article is framed as a part of a discussion on the theme of human identity. It draws on debates about human nature and its social implications in light of bio- and information technologies, cybernetics, robotics, AI, etc. By reminding people that the specific mechanisms of ‘change over time’ in human evolution are still a source of controversy, the paper indicates a problematic about what it means to be a human that speaks to the heart of the social sciences and humanities (SSH).

The paper warns of the risk of dehumanisation as a result of adopting the ‘wrong’ anthropic principle within the broader thematic of science, philosophy and theology/worldview discourse. In this way, ‘anthropic principle’ and likewise ‘anthropic reasoning’ are considered not merely as approaches in physics and cosmology that can be determined by probabilistic thinking, but rather on a reflexive anthropological level that is currently facing the challenge of transhumanist ideology. Does transhumanism imply or even require eugenics in light of the biotechnological revolution? Is transhumanism only possible within a non-theistic worldview? The contrast between theistic and non-theistic ‘transhumanism’ is presented in Steve Fuller’s recent work³ that is friendly to theism and in Nick Bostrom’s non-theistic “transhumanist dream”⁴.

The paper concludes by briefly highlighting a reflexive anthropic principle, which the author calls Human Extension⁵. Anthropic, thus, for me means relating reflexively to human beings and the period of our existence on Earth, not just exploring the necessary conditions for the existence of mankind. This serves as an example of ‘proper’ anthropic reasoning suitable for SSH. Thus, Human Extension presents an alternative to accepting only disanthropic cosmologies and probabilistic ways of measuring human happiness and well-being.

Anthropic Principles & Anthropic Reasoning

As it was originally conceived, the ‘anthropic principle’ (AP) states that: “what we can expect to observe must be restricted by the condi-

² M. McLuhan: *Understanding Media: The Extensions of Man*, New York: Signet Books, 1964, 19.

³ S. Fuller: Why Superintelligence May Not Help Us Think about Existential Risks – or Transhumanism, *Social Epistemology Review and Reply Collective* 2014, 3, 10: 47–49.

⁴ N. Bostrom: The Transhumanist Dream, *Foreign Policy*, 2005 Jan/Feb, Issue 146.

⁵ G. Sandstrom: McLuhan, Burawoy, McLuhan: Extending Anthropic Communications – On the Human Equation, the Extended Case Method and Human Extension, *Revista da Associação Nacional dos Programas de Pós-Graduação em Comunicação, E-compós*, 2011 Sep/Dec, 14, 3: 1–20.

tions necessary for our presence as observers”⁶. While it has been called “[o]ne of the most profound fundamental issues in cosmology”⁷, others think of it as a dangerous mental virus,⁸ or “an unconventional hypothesis” (S. Weinberg), or say it is one of the most controversial terms in modern physical science⁹. Bostrom suggests that over 30 APs have been formulated¹⁰, including weak, strong, participatory and final APs¹¹. The view preferred in this paper is that proper ‘anthropic reasoning’ helps us to consider both the limits and possibilities of (natural and social) scientific explanation, and as such necessarily involves the additional major realms of philosophy and theology/worldview in a collaborative discourse.

Bostrom has stated, regarding its etymology traced to the physicist Brandon Carter in 1973, that “[t]he term ‘anthropic’ is a misnomer. Reasoning about observation selection effects has nothing in particular to do with *homo sapiens*, but rather with observers in general”¹². Carter himself¹³ agrees that the AP is not particularly about human beings. But I would add that is the case unless one treats it as an irreducible topic of science, philosophy and theology/worldview discourse. This position traditionally holds that “the world we experience is special and somehow conditioned by the presence of humans to observe it”¹⁴. The key question involving what makes the world ‘special’ then is whether one holds the cosmogony that they live in an intentional, teleological universe or in an unintended, unplanned one where the progress of natural science can

⁶ B. Carter: Large Number Coincidences and the Anthropic Principle in Cosmology, in: V.S. Longair (ed.): *Confrontation of Cosmological Theories with Observational Data*, Proceedings of the 63rd Symposium of the International Astronomical Union (Copernicus Symposium II), held in Cracow, Poland, 1973, 10–12 Sept, 291–298, Dordrecht: Reidel, 1974, 291.

⁷ G.F.R. Ellis: *The Multiverse Proposal and the Anthropic Principle*, The Centre for Process Studies, 2006. Accessed: 10.10.2014: <http://www.ctr4process.org/programs/LSI/2006-Cosmology/Ellis%20-%20The%20multiverse%20proposal%20and%20the%20anthropic%20principle.pdf>.

⁸ D. Gross: Quoted, in D. Falk: *Cosmology Meeting Explores Outer Limits*, 2003, 16 Oct. Accessed: 14.10.2014: <http://www.skyandtelescope.com/astronomy-news/cosmology-meeting-explores-the-outer-limits/>

⁹ H. Kragh: *The Road to the Anthropic Principle*. RePoSS: Research Publications on Science Studies 7. Aarhus: Centre for Science Studies, University of Aarhus, 2010, 1. Accessed: 21.10.2014: www.css.au.dk/reposs.

¹⁰ N. Bostrom: *Anthropic Bias: Observation Selection Effects in Science and Philosophy*, London: Routledge, 2002, 6.

¹¹ Carter has also used other terms connected to ‘anthropic’, such as ‘anthropic weighting’ and ‘anthropic reasoning’ (op. cit., 2004) and ‘anthropic quotient’, ‘anthropic measure’ and ‘anthropic biograph’ (B. Carter: Classical Anthropic Everett model: indeterminacy in a preordained multiverse, in: *Journal of Cosmology* 14, 2011).

¹² Bostrom, *Anthropic Bias*, op. cit, 6.

¹³ B. Carter: Anthropic Principle in Cosmology, Contribution to Colloquium: *Cosmology: Facts and Problems*, College de France, June 2004, 3. Accessed: 15.10.2014: <http://arxiv.org/pdf/gr-qc/0606117.pdf>.

¹⁴ H. Kragh: The Road to the Anthropic Principle, in: *RePoSS: Research Publications on Science Studies* 7. Aarhus: Centre for Science Studies, University of Aarhus, 2010, 2.

only assign probabilities regarding what Stephen Hawking and Leonard Mlodinow call the ‘Grand Design’¹⁵.

In Bostrom’s mathematical approach to humanity, a person “should reason as if one were a random sample from the set of all observers in one’s reference class”¹⁶. Thus, for Bostrom, ‘anthropic bias’ is a type of statistical self-sampling bias, “in which the sample of observed events is not representative of the universe of all events, but only representative of the set of events compatible with the existence of suitably positioned observers”¹⁷. As part of his framework, Bostrom posits a multiverse (many worlds) hypothesis that effectively de-privileges humanity, just as Carter was responding to the so-called Copernican principle of ‘mediocrity’ that supposedly destroyed the traditional Abrahamic creation myth and human uniqueness.¹⁸

The focus and dependence on probabilistic reasoning cannot be overlooked in Bostrom’s work. Indeed, he speaks of “the need for a probabilistic anthropic principle”¹⁹ because Carter’s AP was not primarily probabilistic in orientation. This can be analysed in one of Bostrom’s works on probability called “Pascal’s Mugging”. The character of the Mugger states to a fictional Blaise Pascal: “you’re a committed expected-Utility maximizer, and [that] your Utility function is aggregative in terms of happy days of life”²⁰. The Pascal character according to Bostrom strangely consents to this description of him. Bostrom’s argument is thus to trick Pascal from his pocket money using the multiverse hypothesis in a reversal of Pascal’s famous wager for belief in a Creator of the Universe. Why Bostrom capitalises ‘Utility’ to characterise Pascal’s faith, however, is nowhere made clear.

The real human Pascal nevertheless rejected the ideology of probabilism (not just as an ethical position); a feature that showed his commitment to a more traditionally ‘anthropic’, indeed Abrahamic religious meaning of happiness than what is available via utility maximizing calculations. Bostrom thus mischaracterises Pascal as a doubter of the Platonic faith in mathematics as a higher Ideal, having him say that he is “having doubts about the mathematics of infinity”²¹. Yet it was instead the theology/worldview of infinity that most concerned Pascal, viewing mathematics only as a divinely-gifted tool for human use.

¹⁵ S. Hawking, L. Mlodinow: *The Grand Design*, New York: Bantam Books, 2010.

¹⁶ Bostrom, *Anthropic Bias*, op. cit., 57.

¹⁷ M.M. Cirkovic, A. Sandberg, N. Bostrom: Anthropic Shadow: Observation Selection Effects and Human Extinction Risks, *Risk Analysis*, 2010, 30, 10: 1496.

¹⁸ For a more accurate assessment that busts the ‘mediocrity’ myth of the Copernican principle, see D. Danielson: Copernicus and the Tale of the Pale Blue Dot, in: *American Scientific Affiliation*, Colorado, 2003: <http://faculty.arts.ubc.ca/ddaniels/docs/bluedot.RTF>.

¹⁹ N. Bostrom: Observer Selection Theory and Cosmological Fine-Tuning, in B. Carr (ed.): *Universe or Multiverse?*, Cambridge University Press, 2007, 431.

²⁰ N. Bostrom: Pascal’s Mugging, *Analysis*, 2009, 69, 3: 443.

²¹ *Ibid.*, 445.

Bostrom is therefore suggesting that people can be ‘mugged’ by probabilistic thinking to believe in a multiverse. Pascal, on the other hand, believed it was folly not to bet one’s life on the possibility of divinity and an afterlife, even in the face of scientific scepticism and cultural atheism or agnosticism. As one of the founders of probability theory, Pascal saw the power in numbers as part of an intentionally ordered Universe.

Benjamin Wiker and Jonathan Witt in *A Meaningful World*, write that “it was a surprise in the late twentieth century to find that the universe was anthropic only because during the previous four centuries [i. e. since the Copernican revolution] the universe came to be seen as *disanthropic*”²². Here by ‘anthropic’ they intend a ‘meaningful’ world as found in the ‘fine-tuning’ argument for ‘Design,’ that human existence constitutes a special position on Earth and that “the genius of the universe”²³ reflects the Mind of a Designer. This goes right to the heart of the controversial “Intelligent Design”²⁴ movement and also explains why there has been a growth of interest in non-theistic multiverse theories and string theories in recent years that oppose it²⁵.

Bostrom, for his part, generally avoids addressing the theistic ‘Design argument’ in speaking of ‘anthropic bias’ as an example of observer selection effects. He says simply that “[a]nthropic reasoning is about taking observation selection effects into account”²⁶. Following on Charles Darwin’s ideologically naturalistic explanation of human existence, Bostrom probabilistic framework envisions human evolution²⁷ as a continuum that will eventually lead to what he calls ‘superintelligence’²⁸, an enhanced humanity unconnected to divinity.

This is why he claims “there is a lot more to anthropic reasoning than the anthropic principle”²⁹. I agree with that, but also think there is a lot more in anthropic reasoning than is possible only within a probabilistic mathematical framework. Bostrom’s so-called ‘anthropic reasoning’

²² B. Wiker, J. Witt: *A Meaningful World: How the Arts and Sciences Reveal the Genius of Nature*, Inter-Varsity Press, 2006, 149.

²³ *Ibid.*, 148.

²⁴ Cf. G. Sandstrom: *Human Extension: An Alternative to Evolutionism, Creationism and Intelligent Design*, Basinstoke: Palgrave Macmillan, 2014.

²⁵ It should be noted, however, that some people disagree multiverse hypotheses are necessarily opposed to a theistic Design argument. “Nonetheless”, writes Heller, “the idea of the multiverse does not really have to be considered as competitive with the idea of creation of the Universe by God. From the theological point of view, God could have created both a single Universe and an infinite number of universes” (op. cit., 2013, 195).

²⁶ Bostrom, *Anthropic Bias*, op. cit., 57.

²⁷ “The point of the Anthropic Principle is that it was not proposed to establish our uniqueness, but rather to note that, as a particular type of evolutionary, Anthropic entity, we must take into account the selection effects being human has on research.” – Tim Clark (Carter’s Cartesian Paraphrase and “Operational Autonomy”: The Carter-Bostrom Anthropic Principle, the Principle of Mediocrity, and “Being No One”, in: *Journal of Evolution and Technology*, Vol. 17, Issue 1, March 2008: pp. 59–70).

²⁸ N. Bostrom: *Superintelligence: Paths, Dangers, Strategies*, Oxford University Press, 2014.

²⁹ Bostrom, *Anthropic Bias*, op. cit., 46.

is thus actually no more 'anthropic' than was/is Carter's; perhaps it is better called 'disanthropic'. Anthropoc reasoning, in the original sense of 'anthropic', is rather a staple of SSH, necessarily including philosophy and theology/worldview. To claim otherwise is to needlessly embrace naturalism and/or scientism³⁰, which carry ideological costs.

A brief excursion here is required to provide context. Naturalism, says social epistemologist Steve Fuller, "gives us no such grounds ... for privileging the human condition". "[C]ontemporary 'humanism,'" he explains, "is typically a naturalistic position that militantly saws off the theological limb on which it rests"³¹. In *The New Sociological Imagination* (London: Sage 2006), he shows how this problem of equating humanism with naturalism can be seen as an outgrowth of the 'species egalitarianism' that is found in (neo-)Darwinian evolutionary thinking, i.e. no uniqueness from animals or spirituality in humankind. Indeed, the ideology of naturalism, and not simply the value-neutral methods used in natural sciences, greatly challenges the humanistic understanding of our existence, past, present and future. It poses a different kind of 'existential risk' from what Bostrom intends.

In contrast, the term 'human exceptionalism' has been used to describe the view that human beings are unique or special among earthly creatures. Wesley J. Smith recently claimed that "human exceptionalism [is] the philosophical backbone of Western civilization"³². One must be careful to note, however, that human exceptionalism does not necessarily imply spiritual superiority among creatures or the notion that human beings are in some ways 'unnatural'. Likewise, 'unique' does not necessarily imply 'exclusive' of nature, unequal to or apart from nature. Unfortunately, Smith's expression is tainted by his political association with the Discovery Institute and its neo-conservative right-wing ideological agenda, which would spread a vision of USAmerican exceptionalism³³ that most people around the world do not accept.

Yet 'human exceptionalism' nevertheless has a broad base of acceptance in science, philosophy and theology/worldview discourse. Fuller notes that Julian Huxley, who coined the term 'transhumanism' in the 1950s to describe human beings taking control of evolution, "wanted

³⁰ Cf. T. Sorell: *Scientism: Philosophy and the Infatuation with Science*, New York: Routledge, 1991, or R. Scruton: *Scientism in the Arts and Humanities*, *The New Atlantis*, 2013, 40, Fall: 33–46.

³¹ S. Fuller: What's the Difference between the Second Coming and Humanity 2.0? Response to Winyard, *Social Epistemology Review and Reply Collective*, 2013, 2, 3: 10.

³² W.J. Smith: The Paper of the Apes: The *New York Times's* animal-rights crusade, *The Weekly Standard*, 2014, May 26, 19, 35, [Electronic resource] Mode of access: http://www.weeklystandard.com/articles/paper-apes_792872.html.

³³ An example can be found on the Discovery Institute's blog: http://www.evolutionnews.org/2013/09/on_constitution076721.html Likewise, here by Discovery Institute Senior Fellow Michael Medved, "Respecting – And Recognizing – American D.N.A." http://townhall.com/columnists/michaelmedved/2008/05/14/respecting_-_and_recognizing_-_american_dna/page/full.

to reassert humanity's uniqueness in the face of Darwin's own default species egalitarianism"³⁴. Thus, at the core of the original transhumanist ideology is a particular view of humanity adhering to that found in standard Abrahamic theism. The notion of a 'wrong' anthropic (i.e. disanthropic) principle thus emerges from the species egalitarian view that humans are not unique among creatures.

Even within a general evolutionary framework, however, the task of a properly 'anthropic' principle is seen as seeking to elevate humanity (creatively enhance ourselves) rather than trying to overcome humanity (creatively obsolesce ourselves). Pierre Teilhard de Chardin's work addresses this most directly, which will be highlighted below. Unfortunately, Bostrom's definition of 'anthropic' lacks meaningful recognition of what Fuller calls humanity's "theologically-based ontological privilege"³⁵. To explore this further, we now turn to the topic of 'transhumanism' in its various guises.

Transhumanism and Anthropic Reasoning

One of the first transhumanists was, perhaps surprisingly, a Jesuit priest. Fr. Teilhard's writings on the goals and limits of humankind speak to the possibility of a transhuman completion in the Omega point, a type of *theosis*, elevating the human 'noosphere'. He writes that "from the threshold of reflection onwards, we [human beings] are at what is nothing less than a new form of biological existence"³⁶. Here Teilhard applies an evolutionary framework theologically in recognising the 'ontological' privilege of human beings in the Created universe. Both then and now, Teilhard's work has raised much controversy as it combines evolutionary thought with Christianity as a Big History³⁷ perspective.

Similarly, the contemporary work of Fuller on 'humanity 2.0' distinguishes people from animals. "[T]he God of Abraham distinguished humans from the rest of nature as a creature *in imago Dei*," says Fuller. "This provides a strong reason for believing that reality constitutes an intelligible universe"³⁸. As Fuller wrote in 2006 of deep ecology literature, there is, however, a danger of what he calls "zoocentric misanthropy", for example in the work of philosopher and animal rights campaigner Peter Singer³⁹, based on the dehumanising irreligious aspects of Darwin's ideas. Yet perhaps the risk of a new technocentric misanthropy (or

³⁴ S. Fuller: Personhood Beyond the Human: Reflections on an Important Conference, *Social Epistemology Review and Reply Collective*, 2014, 3, 2: 11.

³⁵ S. Fuller: *Humanity 2.0: What it means to be Human Past, Present and Future*, Basingstoke: Palgrave Macmillan, 2011, 182.

³⁶ P. Teilhard de Chardin: *The Phenomenon of Man*, London: Harper, 1955, 303.

³⁷ D. Christian: *Maps of Time: An Introduction to Big History*, California Press, 2005.

³⁸ S. Fuller: *Dissent over Descent: Intelligent Design's Challenge to Darwinism*, Toronto: Penguin Books, 2008, 232.

³⁹ P. Singer: *A Darwinian Left: Politics, Evolution, and Cooperation*, New Haven: Yale University Press, 2000.

disanthropy⁴⁰) is now also possible, part of the libertarian techno-elite's push for a new eugenics.

Teilhard also spoke positively of a certain type of divinely-oriented eugenics using his theistic evolutionary viewpoint:

“In the course of the coming centuries it is indispensable that a nobly human form of eugenics, on a standard worthy of our personalities, should be discovered and developed”⁴¹.

And in his most recent work with Veronkia Lipinska, Fuller openly speaks of ‘eugenics 2.0’, a new kind of democratised eugenics (which he calls ‘hedgenetics’) in which people would proactively attempt to improve the human condition as a type of quasi-Christian *theosis*, with a goal of “embodying our full humanity”⁴².

Transhumanism for Fuller is thus basically the willingness to wager, to take risks for human betterment and progress in a kind of divinely sanctioned politics of development. Whether he is arguing for so-called ‘candidate humans’ through the ‘uplift’ of machines or animals, the point is that risks will need to be taken experimentally using new biotechnologies in order to achieve higher individual and societal goals. But to have these higher goals in mind at all necessarily means to admit a teleological⁴³ dimension to the search, which was disallowed by modern naturalistic science.

With respect to the social and political aspects, Hava Tirosh-Samuelson notes that “as a child of Enlightenment rationalism, transhumanism seems to privilege secular rationalism over religious belief, thereby disenchanting the world, but by assigning salvific meaning to man-made technology, transhumanism ‘re-enchants’ the secular”⁴⁴. Similarly, Bostrom speaks of the transhumanist agenda as “a great humanitarian opportunity to genuinely improve the human condition” that eventually “might extend human life and improve memory, concentration, and other human capacities”⁴⁵. On the one hand, transhumanism is framed as a kind of new religious salvation story for humankind. Yet on the other hand, what happens if human beings experimentally gamble

⁴⁰ In this paper, misanthropy and disanthropy are treated as synonyms.

⁴¹ Teilhard de Chardin, op. cit., 282.

⁴² S. Fuller, V. Lipinska: *The Proactionary Imperative*, Basingstoke: Palgrave Macmillan, 2014, 98.

⁴³ In a critical review of J. Barrow and F. Tipler's *The Anthropic Cosmological Principle*, Oxford University Press, 1986, William Press speaks of a “resurgence of teleological belief in science” that he believes is “threatening to the modern scientific enterprise” (1986). Helge Kragh similarly asks if there is “any essential difference between the anthropic principle and the teleological argument for a divine creator of the universe?” (op. cit., 36) These two quotations indicate reverse perspectives to what counts as ‘anthropic’ because one openly obstructs teleological thinking, while the other openly embraces it within its proper higher realm of science, philosophy, theology/worldview discourse.

⁴⁴ H. Tirosh-Samuelson: Transhumanism as a Secularist Faith, *Zygon*, 2012 Dec, 47: 731.

⁴⁵ Bostrom, op. cit. 2004.

with our physical bodies becoming over-extended, thus damaging our consciousness, memory or even souls?

The danger of this position is expressed in Ray Kurzweil's materialistic-spiritual vision of a Singularity⁴⁶ caused by converging technologies that will ultimately lead to the destruction of humanity. This feature is also present in Carter's and Bostrom's versions of the 'doomsday argument'⁴⁷. Fuller, however, contends that Kurzweil's position is a minority view. There is nevertheless a major difference between those who endorse transhumanism via proactive human enhancements and those who imagine an inevitable 'post-human' future by invoking an eschatological 'doomsday argument'. In the language of 'peak oil' arguments, one might consider Fuller as a 'cornucopian' thinker, with Carter, Kurzweil and Bostrom in contrast as 'doomers'.

Transhumanism in some of its guises thus appears as a quasi-religious cult on a quest for the Holy Grail of immortality at whatever cost. Transhumanist proponent Zoltan Istvan writes that "all humans desire to reach a state of perfect personal power – to be omnipotent in the universe. I call this a *Will to Evolution*"⁴⁸. Others, however, call that incessant drive for power a 'god complex', where human beings strive to be like gods. Evolutionary theory has been used as a convenient vehicle for such utopian thinking.

Already in 1883, Friedrich Engels stated that "it is the nature of matter to advance to the evolution of thinking beings"⁴⁹, as if mind and consciousness were 'naturally' cosmically inevitable. Steven Jay Gould's naturalistic contingency arguments more recently epitomise this challenge.⁵⁰ The relevant question in the electronic-information era is if we likewise expect the same 'self-organisation' of 'intelligence' by technology, as an inevitable consequence of natural evolution. This would seem to fulfil McLuhan's prophecy above, even within an ultimately theistic framework.

Simon Conway Morris similarly suggests that, "given time, evolution will inevitably lead not only to the emergence of such properties as intelligence, but also to other complexities, such as, say, agriculture and culture"⁵¹. Therefore we may wonder: is the emergence of a new

⁴⁶ Cf. R. Kurzweil's: *The Singularity Is Near: When Humans Transcend Biology*, Viking Press, 2005 and *The Age of Spiritual Machines*, Viking Press, 1999.

⁴⁷ N. Bostrom: The Doomsday argument, Adam & Eve, UN++, and Quantum Joe, *Synthese*, 2001, 127(3): 359–387.

⁴⁸ Z. Istvan: The Three Laws of Transhumanism and Artificial Intelligence, *Psychology Today*, 2014, 29 Sep. <http://www.psychologytoday.com/blog/the-transhumanist-philosopher/201409/the-three-laws-transhumanism-and-artificial-intelligence>.

⁴⁹ F. Engels: *Dialectics of Nature*, New York: International Publishers, [1883] 1963, 228.

⁵⁰ S.J. Gould: *Wonderful Life: The Burgess Shale and the Nature of History*, W.W. Norton & Co, 1989.

⁵¹ S.C. Morris: *Life's Solution: Inevitable Humans in a Lonely Universe*, Cambridge Press, 2003, 196.

threshold of artificial intelligence also inevitable that will lead to trans-humanism or even to the extinction notion of post-humanity?

Of key concern for this paper is the potential link between trans-humanism and de-humanisation. Fuller says that transhumanism “may refer to anything ranging from an indefinite extension of our current powers via advanced gene therapy to a complete transfer of identity into a more durable digitised medium”⁵². Do we thus need to protect from or prepare people for the deviant technocratic notion of post-human utopias, even while promoting theologically-inspired human enhancement? The challenge of Bostrom’s brand of actuarial transhumanism is that it is dehumanising, i. e. disanthropic from the perspective of SSH. Does Fuller’s sociologically ‘humane’ transhumanism offer a more hopeful anthropic pathway?

Conclusion

“[M]ight not our current translation of our entire lives into the spiritual form of information seem to make of the entire globe, and of the human family, a single consciousness?”

*M. McLuhan*⁵³

The distinction between theistic transhumanism and non-theistic transhumanism offers a significant contrast to how the term ‘anthropic’ is understood. In Fuller’s transhuman approach, “the human imagination,” is considered as “a micro-version of the divine *logos*”⁵⁴. This means that human beings have a “creative responsibility for life” and as such should strive for “realizing our godlike potential”⁵⁵. We are thus not merely trying to stave off disaster as in Bostrom’s notion of ‘existential risk’. Rather, we are working to complete the Creation as meaningful creatures in an intentional, teleological universe.

McLuhan’s message is that developing technology creates new environments, not new human beings. The biggest risk of adopting the wrong AP is therefore simply that it will lead to dehumanisation and potentially to human destruction, stagnation or civilisation collapse. For some people in response to this prospect, proactionary neo-eugenics (or eugenics 2.0) is a risk worth taking in the divine politics of society. This is what makes the social implications of transhumanism as technocentric disanthropy dangerous and the pressures to act eugenically so tempting. For others, more conservative thinkers like Francis Fukuyama, transhumanism nevertheless constitutes one of “the world’s most dangerous ideas”⁵⁶.

⁵² Fuller, *What’s the Difference*, op. cit., 11.

⁵³ McLuhan, op. cit., 67.

⁵⁴ Fuller, *Humanity 2.0*, op. cit., 92.

⁵⁵ Fuller, *What’s the Difference*, op. cit., 8, 10.

⁵⁶ F. Fukuyama: Transhumanism, *Foreign Policy*, 2004 Sep. Cf. N. Bostrom: Transhumanism: The World’s Most Dangerous Idea?, *Foreign Policy*, 2004

The basic conclusion of this paper is that the ‘wrong’ APs are dis-anthropocentric and carry great risk for humanity. They focus on ‘observers’ rather than on human beings, in both our complexity and simplicity. Wiker and Witt, on a more positive note, suggest that “disanthropism assiduously applied has ended in reviving an anthropism that stretches back to the origin of modern science and, further still, to the origin of the universe”⁵⁷. We would have gained little in this return to ‘anthropism’ if it is empty of spirit, automated by thinking of human choices strictly in terms of probabilities. If human life is not just a ‘game of chance’, then a higher sociological and anthropological imagination than simple naturalism is needed.

At this point, then, let me propose a viewpoint that places the focus reflexively on human choices and actions. As a reflexive AP, Human Extension⁵⁸ highlights intentional choice and action instead of statistically ‘objective’ observer ‘selection’ as with Bostrom’s AP described above. It thus wrests the AP away from dehumanising natural science to its proper home in SSH. Human Extension represents individual and collective human choices that transform into real actions, relations, events and phenomena in societies and cultures, i.e. into causal effects. This view promotes the ‘philosophy in science’ approach of the Copernicus Centre for Interdisciplinary Studies⁵⁹ in Kraków, exploring the limits and possibilities of scientific explanation. The leader of this Centre, Michael Heller, claims that “free will does not violate the mathematical structure of the world, but is ‘superimposed’ on it”⁶⁰. We can build on this understanding by studying what McLuhan called the ‘extensions of man’, in a collaborative science, philosophy and theology/worldview discourse.

McLuhan’s vision regarding the technological simulation of consciousness in the merging of human and machine, which drew liberally on Teilhard’s notion of a noösphere (as well as A.N. Whitehead’s notion of ‘extension theory’), carries with it both great risks and opportunities for humanity. Perhaps Teilhard’s elevation from biosphere and noösphere to theosphere⁶¹, however, is an even greater ‘existential risk’ than anything Bostrom has yet imagined (or simulated). Consistent with the Abrahamic faiths, Teilhard and McLuhan seek a destination or fulfilment of Creation, rather than its nihilistic, creative destruction.

Sep., [Electronic resource] Mode of access: <http://transhumanism.org/index.php/WTA/more/bostrom-responds-to-fukuyama/>

⁵⁷ Wiker and Witt, op. cit., 243.

⁵⁸ Sandstrom, *Human Extension*, op. cit.

⁵⁹ For information: <http://www.copernicuscenter.edu.pl/en/about-us/>

⁶⁰ M. Heller: *Philosophy of Chance*, Trans. R. Smietana, Kraków: Copernicus Centre Press, 2013, 226.

⁶¹ “Cannot a further and final metamorphosis have been in progress since the birth of love in Christianity: the coming to consciousness of an ‘Omega’ in the heart of the Noosphere – the circles’ motion towards their common centre: the appearance of the ‘Theosphere’? / A dream and a fantasy, it will be said. But it fits singularly well with the march of things.” – Teilhard de Chardin, in: *Human Energy*, Trans. J.M. Cohen, New York: Harcourt Brace Jovanovich, 1972, 160.

Fuller contends that an ‘anthropic worldview’⁶² is consistent with Abrahamic theology. Along with religious studies scholar Calvin Mercer, Fuller writes that, “the *transhumanist* version of Humanity 2.0 is quite comfortable with our species acquiring – or at least approximating – the sorts of properties that bring us closer to the God that the Abrahamic religions say provide our ultimate source of being”⁶³. What Teilhard’s, McLuhan’s and Fuller’s work calls for, that is muted or missing in Bostrom’s approach, is thus a renewed sense of proportionality and proactive collaboration in science, philosophy and theology/worldview discourse. The alternative perspective of some natural scientists that would lead us to accept default materialism, thus excluding Mind from the universe and *telos* from reality, has grown ideologically tiresome.⁶⁴ This paper concludes that by elevating the conversation above disanthropic reasoning with a reflexive AP we can return humbly to the heart of SSH. It seems to be a goal worth striving for.

⁶² Fuller, op. cit. 2006, 5.

⁶³ S. Fuller, C. Mercer: *The Future of Humanity and Its Successors*, Series Introduction, Palgrave Macmillan, 2014.

⁶⁴ Carter himself even seems to acknowledge this, saying: “To give a meaning to the concept of probability ... the purely materialistic framework of the classical many-world system described so far needs to be extended to include allowance for the role of mind” (Carter, *Classical Anthropic Everett model*, op. cit., 5–6).