

The Human and Beyond: Transhumanism, Historicity, Humanness

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QUEEN

"Who Wants To Live Forever" 1986

Who wants to live forever,

Forever is our today,

Who waits forever anyway?

Introduction

The transhumanist movement (acknowledged its diversity) has caught attention in the academy, especially in the humanities, due to its bold claims for the future of humanity. Criticisms usually express concerns that technological enhancements may rob us of our humanness. This essay intends to be a small contribution to this debate.

In a former paper of ours,¹ we developed an argument questioning transhumanist proposals for creativity, emphasizing the role of human lifespan and especially childhood and adolescence to allow for the genuinely new. In the present paper human life-course is still our concern, but taken into its entirety from birth to death. Then and now we employ the concept of natality, drawn from Hannah Arendt, to describe newness through the succession of generations. This time the focus will be on another concept, "historicity," and we will ask whether transhumanist thought takes it into account.

To accomplish this goal, we first describe the meaning of historicity, not only in

existentialist thought but also in biology, psychology and sociology. We also relate historicity to anxiety, life-stories and natality, following Arendt. Second, we point to a negative side of historicity, the accumulation of experiences as we age, both good and bad, which is a threat to intergenerational dynamics. Third, we analyze some of the transhumanist thought to the extent that it does not engage human historicity in its proposals. We present three reasons for this absence: its one-sided view of human nature, with the denial of our finitude; its lack of acceptance of the load of accumulated experience as we age, disregarding also threats to personal identity; finally, by stressing directed evolution, its disregard for the role of epigenetics and contingency in the constitution of the human. In short, despite its criticism of an essentialist human nature and its commitment to change, transhumanist thought in practice deny the value of history, both past (by judging it simply as a preparatory stage) and future (by regarding it as an endless unfolding of technological progress).

To close our argument, we bring to the fore some theological reflection on human nature, through the “dust” motif, to describe human finitude. Some passages from Genesis, Psalms and Qoheleth are discussed, to relate finitude and historicity and to call attention to the futility of trying to be “like gods.” To the extent that transhumanist thought disregards the dialecticity of human nature and history, and the resulting fundamental anxiety, envisioned future beings are not human anymore, resulting in the loss of identity.

Some preliminary reflections on historicity

The word “historicity” (*Geschichtlichkeit*), having had a long history in the German speaking world, has more than one meaning. What is relevant to us is the historicity of the human condition during one’s lifespan, marked by contingency and freedom. As Kurt

Salamun says, reflecting on Karl Jaspers thought: “A boundary situation is evident in the inevitable fact that I am always in situations and cannot escape the historicity of existence. I cannot live without struggling and suffering and cannot avoid guilt. I must die. . . . The moral attitudes in the face of death are courage without self-deception [and] a profound serenity in spite of pain.”²

Typical of this existentialism is the contrast just described with non-boundary situations where routine, planning and rational control of one’s life are in order. Constitutive of the concept of human historicity are others such as “temporality” and “finitude”. We take temporality as referring to one’s own experience of time—heterogeneous, irreversible, contingent—creating scars and opportunities. It is contrasted with chronological time—law-bound, homogeneous and objective. “Finitude,” on the other hand, may be understood as follows: “It expresses a guise of life that is intelligible only in light of the immanent awareness of its essential limitation . . . finitude as an existential resource for, rather than an obstacle to, understanding ourselves and the world.”³

Instead of “serenity” (Salamun), Wentzer argues that finitude allows for responsible action. The same difference may be spotted between Heidegger and Arendt, as we will suggest below.

Historicity combines the features of temporality and finitude. Historicity may be said to be the unfolding of the self in time; this self is simultaneously bound to historical, contingent time, and free to act and to fulfill. There is no historicity without someone’s anxiety (*Angst*),⁴ where freedom and fate compete with each other. It is not out of place to

² Kurt Salamun, s.v. “Karl Jaspers,” *Dictionary of Existentialism*, Haim Gordon, ed. (London: Routledge, 2013 [1999]), 225-31, at 228.

³ Thomas S. Wentzer, “Finitude.” In *The Blackwell Companion to Hermeneutics*. Eds. Niall Keane and Chris Lawn (London: Wiley-Blackwell, 2016), 188-96, at 188.

⁴ For a discussion of anxiety and a particular strand of Transhumanism, see Hava Tirosh-Samuels, “In Pursuit of Perfection: The Misguided Transhumanist Vision.” *Theology and Science*, 16:2 (2018), 200-222, at 208. DOI: 10.1080/14746700.2018.1463659

speak of the “human predicament” at this point. This is not merely contingency, for it has to involve finitude and guilt.

We have inherited this anxiety from past evolutionary processes, perhaps a byproduct of a success, namely, an organism well-adapted to an ancestral environment. However, humans are aware that this body is finite and defective. At the same time, humans long for the unbound and the perfect. This longing contributes to our culture and history, considered in their radical contingency—what happens to us during our lifespans may be rather different from our plans and wishes, for good or for ill, and this is also a trace of the human predicament.

It is through the burdens of existence, in the framework of historicity, temporality and finitude, that human accomplishments happen. Following Wentzer’s remarks above, finitude is not only an existential obstacle, but also a resource to knowledge and responsible behavior. The very characteristics that seem to keep us in a cage are the pre-conditions necessary for freedom and a fulfilled life. We may call wisdom the human capacity to entertain this contradiction and to translate it into small lessons useful to new generations. True wisdom is thus reached toward the end of a life course lived “authentically and without self-deception” (Salamun).

Historicity and the sciences

Historicity can be also thought of in the sciences, at least in analogical terms. We take examples from three different areas: evolutionary biology, social sciences, and psychology.

First, historicity is a concept in evolutionary biology. Philosopher of biology Eric Desjardins, for example, argues that historicity is related to multiple possible pasts and

outcomes.⁵ It is also related to path-dependence, a concept drawn from Economics and Sociology. Contingency is due both to external accidents (e.g., massive extinction) and stochastic processes. In evolutionary biology we also have “life history” theories, which help us to understand trade-offs in life—investing for example time and energy in personal “capital” (e.g., developing a stronger body, mastering a set of skills) rather than in reproduction.⁶ These are blind processes, like those in Desjardins’ description, far removed from the mixture of blind and purposeful processes that mark human history.

Moving now to a middle-order theory, Epigenetics, we overcome the determinism of the DNA and may speak of its fate in face of a changing environment. Embodiment scholar Lisa Blackman, says that there are “important questions about what exactly counts as biological data given the historicity of matter and the materiality of history,”⁷ with the implication that the biological is understood today as somehow connected to human history. Ethnologists Stefan Beck and Jörg Niewöhner also speak of physiological historicity extending our biographies beyond our own birth and death.⁸ Due to epigenetics, our bodies acquire far more significance than is the case when only DNA rules.

In the social sciences life courses of human beings (“life course theories” and “life span approaches”) have been the subject of recent scholarship in this field. Social work expert Elizabeth D. Hutchinson argues that life course perspective starts from individual lives trying to understand their continuities and twists, and then focusing on social contexts that reveal the interdependence of humans.⁹

⁵ Eric Desjardins, “Historicity and experimental evolution,” *Biology and Philosophy* 26 (2011), 339–364, at 339. Doi 10.1007/s10539-011-9256-4.

⁶ Daniel B. Krupp, “Marital, Reproductive, and Educational Behaviors Covary with Life Expectancy,” *Archives of Sexual Behavior* 41 (2012), 1409–1414. Doi 10.1007/s10508-012-9949-z.

⁷ Lisa Blackman, “The New Biologies. Epigenetics, the Microbiome and Immunities,” *Body & Society* 22:4 (2016), 3-18, at 12.

⁸ Stefan Beck and Jörg Niewöhner, “Somatographic Investigations Across Levels of Complexity,” *BioSocieties* 1 (2006), 219–227, at 223.

⁹ Elisabeth D. Hutchinson, “A Life Course Perspective”. In *Dimensions of Human Behavior: The Changing Life Course*, ed. Elisabeth D. Hutchinson, 4th ed. (Los/Angeles/London: Sage Publications, 2011), 1-38, at 2.

Sociologist Barbara Mitchell adds that “the concept of life course implies age-differentiated social phenomena distinct from uniform life-cycle stages.”¹⁰ There is an “increasing diversity associated with aging. The longer one lives, the greater the exposure to factors that affect the aging process.”¹¹ “Aging” connotes human finitude, whereas “exposure to factors” point to human temporality and historicity. We will see in more detail, in the next section, this effect of one’s long life.

We also have “Lifespan Developmental Psychology,” increasingly rooted in biocultural, evolutionary concerns. According to psychologists Paul Baltes and Jacqui Smith, “Proposals about the biocultural architecture of the lifespan highlight its inherent incompleteness and aging-based increase in incompleteness and vulnerability.”¹² Topics studied include “wisdom, intergenerational dynamics, and the influence of changing historical contexts on individual development.” Chance events, turning points that change the lives of individuals, are the focus of this approach.

We see that lifespan psychology highlights first, the slow, ambiguous but sure transitions, ontogenetic steps in life. Second, we have the contingency of one’s lifespan. Unintended and unanticipated events mark the existence of human lives. Behind these approaches there is the finitude which includes conflict of interests and hard choices, both in societal and individual terms. They generate anxiety, a permanent experience in human condition. Time-bound events are not only contingent, but also filled with mixed feelings.

Historicity and Hannah Arendt’s thought

¹⁰ Barbara A. Mitchell. “Life Course Theory.” In *International Encyclopedia of Marriage and Family*, Vol. 3, ed. James J. Ponzetti, 2nd. Ed. (New York: Thomson Gale, 2003), 1051-1055, at 1051.

¹¹ *Ibid.*, 1053.

¹² Paul B. Baltes and Jacqui Smith, “Lifespan Psychology: From Developmental Contextualism to Developmental Biocultural Co-constructivism,” *Research in Human Development* 1:3 (2004), 123-144, at 123.

We can infer from these considerations that life course—the slow transitions from infancy into old age shaping one’s unique identity—matters. This life course is unrepeatable, one chance to build something meaningful for life, with longings for what someone could have been if other choices were made in life, a restriction that certainly causes anxiety. As we saw above, anxiety is linked to our historicity, and reflects both fate and freedom. Let us now turn our attention to a more positive side of historicity.

Political Scientist Jonathan P. Schwartz, for example, argues that for Heidegger the past is an aspect of temporality, so it is rooted in our existence as essentially historical beings, referring to our “historicity.” “Historical” for Heidegger is much more than a sequence of well-known events recorded by civilizational historians and placed in bound narratives. Our lives are grasped as narratives that stretch out from birth to death. “It is these unique stories that allow us to have an identity—to become a ‘who’ rather than a ‘what.’”¹³ The ability to grasp ourselves as a unique “who” requires a confrontation with our temporality. Schwartz also links Heidegger with his disciple Hannah Arendt. In his opinion, she has an account of historical methodology that links our existence as narratively structured agents and the histories we produce.¹⁴

According to historian Taran Kang, the difference between Arendt and Heidegger on historicity is that “her celebration of the public realm is at odds with his contempt for it; and her emphasis on natality sounds like a deliberate rebuttal to his fixation on death and mortality.”¹⁵ He then proceeds arguing that Arendt’s approach shatters chronology to stress fragmentariness, historical dead ends, failures and ruptures.¹⁶ For him Arendt sees in every

¹³ Jonathan P. Schwartz. *Arendt's Judgment: Freedom, Responsibility, Citizenship* (Philadelphia: University of Pennsylvania Press, 2016), 31.

¹⁴ See also Hannah Arendt, *The Human Condition* (Chicago: The University of Chicago Press, 1998[1958]), 97.

¹⁵ Taran Kang, "Origin and essence: The problem of history in Hannah Arendt," *Journal of the History of Ideas* 74:1 (2013), 139-160, at 150. Cf. Hannah Arendt, *Essays in understanding: 1930-1954* (New York: Schocken Books, 1994), 432.

¹⁶ *Ibid.*, 140-41.

beginning a mystery and a miracle.¹⁷ In other words the uniqueness of life-events is linked by Arendt to the emergence of the new, epitomized by the reproduction and birth of human beings (natality) as a defining aspect of human history.¹⁸

Before ending this section, we must emphasize that historicity refers not only to one individual, but also to intragenerational and intergenerational dynamics. Anne O’Byrne has already emphasized that “we are natal, generational beings.”¹⁹ We may die alone, but being born requires others—natality requires being in relation to past generations, and begetting new ones. As for intergenerational dynamics, we will see below one negative aspect of historicity as we age.

Living longer lives and intergenerational dynamics

This more positive view of historicity that we have just described has a side-effect: the accumulation of “fragmentariness, historical dead ends, failures and ruptures” (Kang) leads to a load in old age (irrespective of one’s health and well-being) that is also burdensome—the older we get, the more history we have behind us. We already saw this problem when quoting Barbara Mitchell above. Deeds, memories, and emotions that we accumulate over the years are both a blessing and a burden, for ourselves and for others, with no sensible possibility of deletion. Philosopher Michael Hauskeller stresses this point by asserting that “The longer we live the more things pass by, pass away . . . the impossibility of erasing the accumulated weight of all the experiences [also preserves] our

¹⁷ Ibid., 150.

¹⁸ Ibid., 159. See also Arendt, *The Human Condition*, 96-97; and Alexander R. Colgan, *Tentativeness and Permeability in the Political Thought of Hannah Arendt* (M.A. Thesis presented to the Faculty of Social and Political Thought, University of Regina, 2011). Available at <http://hdl.handle.net/10294/3560> (Access Dec 15, 2017), 14.

¹⁹ Anne O’Byrne, *Natality and Finitude* (Bloomington: Indiana University Press, 2010), 6.

personal identity.²⁰

There is a natural tendency to throw this burden, consciously or not, onto younger generations. A similar idea can be seen in the thoughts of Hans Jonas and Leon Kass. As the former says:

Old age, in humans, means a long past, which the mind must accommodate in its present as the substratum of personal identity. . . . There is a finite space for all this, and those magicians [of biotechnology] would also periodically have to clear the mind (like a computer memory) of its old contents to make place for the new.²¹

Age and aging are as necessary to human life as natality. Aging may involve nostalgia of a more resourceful past, but it brings wisdom too. Even the “fourth age” (very old persons) has a place in the lifespan of individuals and society. On the other hand, advantages and disadvantages accumulated in life are unique in shaping one’s personality in a way that cannot be reproduced. Moreover, this unique individual remains shapeless without relationships with other persons, equally unique. Settersten argues that “the friction of human lives in action, as intimates attempt to mesh their lives together and as decisions and goals are coconstructed through iterative and often difficult processes of negotiation.”²²

Conspicuous in this description is “the friction of human lives in action.” “Friction” is a word that has both negative (impediment) and positive (like in a car’s clutch) sides, well described by the author. Relating to other selves causes both joy and pain, and helps to mold one’s personality.

But to say that old age imposes a burden on younger generations is just half of the story. As even personal experience may show, the contact of the elderly with children may

²⁰ Michael Hauskeller, “Forever Young? Life Extension and the Ageing Mind,” *Ethical Perspectives* 18/3 (2011), 385-405, at 390. See also Richard A. Settersten Jr., “It takes two to tango: The (un)easy dance between life-course sociology and life-span psychology,” *Advances in Life Course Research* 14 (2009), 74–81, at 75.

²¹ Hans Jonas, “The burden and blessing of mortality,” *Hastings Center Report* 22/1 (1992), 34-40, at 40.

²² Settersen, “It takes two to Tango,” 78.

be gratifying for both. It is as if the accumulated past (in negative and positive terms) may be relieved only with the encounter with the new. This intergenerational process (that tacitly implies that the former generation will “pass the torch” to the arriving one) is part of what we call historicity.

This process usually implies into “intergenerational justice” and its correlates. This may be approached in several ways (e.g., the realm of law studies), but we take the simplest one, such as the concept advanced by sociologist Vera King: it happens when “the subject, ‘with a finite lifetime and infinite desires’, must divide his/her share of time, the time in which he/she as culture-bearer plays a limited part in the historical process, with the preceding and subsequent culture-bearers.”²³ Life-span psychology is also informed by concerns to what happens between subsequent generations, according to Baltes and Smith.²⁴ For demographer Ulrich Feeser-Lichterfeld, the “Relationships and interactions between different age groups and generations seem to be the best protection against rigidity and the vital condition for generativity,”²⁵ and this also links the succession of generations to historicity. The threat of rigidity becomes especially poignant when we face the historical increase in average life expectancy, something that is likely to continue.

Sociologists Alex Dumas and Bryan Turner ask present what they “see as the core issue of justice: how would individuals with the benefit of prolongevity exercise intergenerational responsibility in terms of the transfer of resources and opportunities?”²⁶ In Arendtian terms, every new birth is a protest against the scene set by older generations.²⁷ So for Hauskeller we should “forego the opportunity to extend our own lives

²³ Vera King, “The Generational Rivalry for Time,” *Time & Society* 19:1 (2010), 54–71, at 60.

²⁴ Baltes and Smith, “Lifespan Psychology,” 123-124.

²⁵ Ulrich Feeser-Lichterfeld, “Intergenerational Justice in an Extreme Longevity Scenario.” In *Demographic Change and Intergenerational Justice*, ed. Jörg C. Tremmel (Berlin/Heidelberg: Springer, 2008), 127-134, at 132.

²⁶ Alex Dumas and Bryan S. Turner, “The life-extension project: A sociological critique,” *Health Sociology Review* 16:1 (2007), 5–17, at 15. See also John Lachs, “Is Aging a Disease?” *H E C (Health Ethics Committee) Forum* 16:3 (2004), 173-181, at 177.

²⁷ Arendt, *The Human Condition*, 191.

in order to make room for others who can still do what we have long ceased to do: to look at the world with fresh eyes.”²⁸ The important thing is that future generations will be better off through our self-surrender. However, this sacrifice is less of a burden if we assume that children are a gift to us (something associated to natality), a source of reward and happiness too.

Now that we have introduced the ideas of historicity, anxiety, life-extension and natality, we are ready to deal with transhumanist proposals.

Is Transhumanism Compatible with Human Historicity?

All the reflections above on historicity offered a background to account for the transhumanist drive in favor of technological interventions in human beings, aiming at enhancement and life-extension, be it by reworking our biological bodies or by replacing them altogether for robots and other artificial beings.²⁹ Two questions can be addressed to these advances: 1) Do they assume and keep human historicity? 2) How does their defense of life extension face the accumulated load of old age and the consequent need for new generations?

In order to see what transhumanists (and like-minded people) have to say about these questions, we have searched some of their main publications, in periodicals and magazines. We also searched in Google Scholar and other data-bases with sets of words such as “robotics historicity” and “artificial intelligence historicity.” We also included in the keywords the names of some major transhumanists, like Aubrey de Grey, Russell Blackford, Ray Kurzweil, Julian Savulescu, Nick Bostrom, and Anders Sandberg. In all cases the search yielded just a few references to historicity, mostly from the critics of

²⁸ Hauskeller, “Forever Young?,” 398.

²⁹ We acknowledge that there no clear boundaries between both.

transhumanism.

Exceptions display understandings of historicity that ironically look a-historical. For example, Mark Bickhard, a specialist in cognitive robotics, argues that the difference between simulated sociality and actual sociality is the developmental and historic [sic] potentialities of the latter.³⁰ For him (who is not a transhumanist), historicity has to do with social interactions unfolding in time. There is an element of normativity in these interactions, moral decisions towards, e.g., friendship. Non-normative interactions do not seem to be much of a concern.

Still, according to Bickhard, if at the present robots cannot achieve the status of agents, this might be possible in the future, if “a model of emergent normativity as it occurs in biology, and in human beings in particular” is achieved.³¹ However, this model is too rationalistic and it supposes that humans are in control of their behavior. It does not match the depth of historicity as developed above—starting from the biological level, life courses yield both normativity and uncertainty. This double possibility is described by Eric Desjardins, anticipating a discussion on the possibility of rehearsing biological behavior in computational terms. According to him, the advantage of mathematical models and simulations is that only they “can give a global (almost omniscient) view. These projection tools make possible inferences based on what comes at the ‘end.’”³² However, mathematical (computer simulation) models “never achieve the complexity of living systems, and this lack of realism is a critique that any simulation must be ready to accept.”³³

Artificial intelligence, if it wants to make any sense at all, has to proceed as if

³⁰ Mark Bickhard. “Robot Sociality: Genuine or Simulation?” In *Sociality and Normativity for Robots: Philosophical Inquiries into Human-Robot Interactions*, eds. Raul Hakli and Johanna Seibt (Heidelberg: Springer, 2017), 41-66, at 41.

³¹ *Ibid.*, 62.

³² Desjardins, “Historicity and Experimental Evolution,” 357.

³³ *Ibid.*, 362.

simulations would emulate human behavior, but most practitioners are aware that it is just “as if” (*Pace* Turing Test). Transhumanists, however, do assume that this “as if” will eventually disappear, and human and machine behavior would be indistinguishable. As transhumanist Martine Rothblatt argues,

Digital consciousness is about life and the living, because, as you will learn, digital consciousness is *our* consciousness. . . . you and I will be able to have an ongoing relationship with . . . everything . . . that goes with family life—both the good and the bad—long after our flesh and bones have turned to dust.³⁴

This ahistorical and body-free permanence, by the way, could be experienced as a nightmare, since new generations would permanently face their forebearers, who are likely to watch and judge behaviors of their descendants.³⁵

So it seems that more radical transhumanists are distrustful of human historicity. This is also due to a number of factors, starting from their understanding of *human nature*. They challenge an essentialist view of human nature, such as that by bioconservatives like Leon Kass and Francis Fukuyama. They uphold instead that the only the only thing which could be said about human nature is that it is about change.³⁶

According to Michael Hauskeller, there are in transhumanist thought two contrasting views of human nature. The first “one understands nature as that which confines us, setting limits to what we can do and be (. . . in form of our own bodies . . .), while the other understands nature as that which allows and indeed urges us to overcome all limits and boundaries.”³⁷ In the same manner, he argues, these two natures work against each other, the “bad” one (closer linked to historicity) due to constraints and the other due to its supposedly liberating character. The whole transhumanist project, then, assumes that “The

³⁴ Martine A. Rothblatt. *Virtually Human: The Promise and the Peril of Digital Immortality* (New York: St. Martin's Press, 2014), 9-10

³⁵ For a critique of this restriction of Freedom, see Tirosh-Samuelson, “Pursuit of Perfection,” 207.

³⁶ Nick Bostrom discusses this difference in “In Defense of PostHuman Dignity.” *Bioethics*, Vol. 19, No. 3 (2005), 202-214

³⁷ Michael Hauskeller, “Human Nature from a Transhumanist Perspective,” *Existenz* 8:2 (2013), 64-69, at 64.

true human is still to be created. And it is to be created by us³⁸ as a progress-oriented being. To achieve god-like creativity, we have to “fulfill our destiny and become truly human, we need to aspire to the highest. Potentially, we are all gods, and because we are and to the extent that we are, we ought to be gods.”³⁹ In order to arrive at this goal the confinements of our current nature (suffering, disease, death, so typical of our historicity) have to be overcome.

Still, according to Hauskeller, one of the main tenets of transhumanism is that “we need a longer life in order to be able to realize the many possibilities of our existence.”⁴⁰ However, this realization clashes with our current nature. In the words of political scientist Janice Freamo : “If man [*sic*] is defined by what he makes, or action is subsumed by the idea of making, then man’s temporality, and specifically his death, comprise the terms of his existence.”⁴¹ As we discussed in previous sections, historicity implies a limited life-span, and so the number of possibilities is finite. The meaning of our lives has to be fulfilled within these boundaries.

Philosopher and entrepreneur James Ogilvy adds that “the aspiration to immortality, the denial of death, is the denial of a part of life that gives it definition. Our finitude is . . . a constraint that makes for meaning and significance.”⁴² But constraints are not the sole source for meaning—there is also openness for the new: “Obsolescence . . . is a precondition for the possibility of novelty. Gods and goddesses may have little use for

³⁸ Ibid.

³⁹ Ibid., 66. Hauskeller here quotes Gregory Stock, who endorses Prometheus’ efforts to steal the fire of the gods. See Gregory Stock, *Redesigning Humans: Our Inevitable Genetic Future*. New York: Houghton Mifflin Harcourt, 2002.

⁴⁰ Ibid., 67. Cf. Anders Sandberg, “Transhumanism and the Meaning of life.” In *Religion and Transhumanism: the unknown future of human enhancement*, eds. Calvin Mercer and Tracy J Trothen (Santa Barbara: Praeger/ABC-CLIO, LLC, 2015), 3-22, at 8.

⁴¹ Janice Freamo, “Approaching Aging Through the Philosophy of History.” Paper presented at the International Political Science Association Annual Conference, 2014. Available at http://paperroom.ipsa.org/papers/paper_31719.pdf. (Accessed September 08, 2016), at 7.

⁴² James Ogilvy, “Human Enhancement and the Computational Metaphor,” *Journal of Evolution and Technology* 22:1 (December 2011), 81-96, at 82. See also Nelson R. Kellogg. “Cybernetic Immortality and its Discontents.” *Theology and Science*, 13:2 (2015), 162-174, DOI: 10.1080/14746700.2015.1023526

novelty, but we do. Our species needs death in order to evolve, in order to be a bridge and not an end. Mortality is a feature, not a bug.”⁴³

That is one of the reasons why historicity (linked as it is to our finitude, contingency and the simultaneity of control and loss of control in life towards our own destiny) seems to be absent from transhumanist thought, marked as it is by a one-sided view of human nature. Keeping historicity would imply the undermining of the entire project of transhumanism.

Taking the argument still further, and as we saw in the preceding section, each of these “many possibilities of existence” cannot start anew, as if each one were the first in our lives. The “accumulated past” would afflict any one of them.⁴⁴ Now we may recall Jonas’ remark above about biotechnological “magicians.” One of these magicians is Aubrey de Grey, who promises, for example, that someone “will live to experience the rejuvenation of your body into a flesh that is years or even decades younger, biologically, than your chronological age, leading ultimately to an endless summer of literally perpetual youth.”⁴⁵

The metaphor of the “endless summer” supposes that enhanced humans do not experience the other three seasons—the rhythm of the year that may account for human historicity, despite its circular character.⁴⁶ But in order to achieve this eternal bliss, bad memories should be erased,⁴⁷ and many think that this will be possible and even desirable.

⁴³ Ibid., 83.

⁴⁴ Cf. Hauskeller, “Human Nature from a Transhumanist Perspective,” 67.

⁴⁵ Aubrey De Grey and Michael Rae, *Ending Aging: The Rejuvenation Breakthroughs that Could Reverse Human Aging in Our Lifetime* (New York: St. Martin’s, 2007), 335.

⁴⁶ The metaphor also reminds us of the millennialist tendencies in Transhumanism, widely acknowledged by some defenders and critics as well. Analysts resort also to the concepts of “apocalyptic” and “eschatology.” All three concepts may include discourses of “end of history” and “end of time,” further stressing ahistorical trends in Transhumanism. For discussions, see James J. Hughes, “The Politics of Transhumanism and the Techno-millennial Imagination, 1626–2030”. *Zygon*, vol. 47, no. 4 (December 2012), 757-776; and Sandra A. Ham, “Spirituality in Christian Transhumanism: Commentary on Cole-Turner, Green, and Cannon, *Theology and Science*, 14:2 (2016), 202-217 .

⁴⁷ R. U. Sirius and Jay Cornell, *Transcendence: The Disinformation Encyclopedia of Transhumanism and the Singularity* (San Francisco: Red Wheel/Weiser, 2015), 123.

However, as we also saw above, erasing all memories implies erasing one's identity.⁴⁸ The lack of acceptance that the accumulated past (both of the species and the individual) is both an asset and a liability is the second reason why historicity is absent from transhumanist thought, a liability that is further increased when we take into consideration the discussion on intergenerational dynamics above.

Similar objections as those to millennialism can be applied to mind uploading as well.⁴⁹ If we recall Salamun's quotation above on Jaspers, we see that transhumanism deals basically with non-boundary situations, since it aims at planning and rational control. Uploaded minds (in the cloud or materialized in robots) are optimal venues to accomplish this aim. Once again, they will be atemporal beings, lacking historicity as explained above.

The third reason why we think that transhumanist thought does not consider historicity is its appeal to directed evolution. This kind of approach means that we are not at the mercy of the slow and haphazard course of Darwinian evolution anymore. With advanced techniques of genetic engineering, a new field has been opened to science, namely, synthetic biology. Now we can design organisms either from some existing life form or from scratch, working at the molecular level, in order to arrive at some well-defined goals. If today these goals are restricted to simple organisms, transhumanists see in synthetic biology the potential to reengineer humans to a new level.⁵⁰ However, even if this goal were feasible, it would entail the erasure of human historicity, starting from the

⁴⁸ Cf. Hauskeller, "Forever Young?," 402. In another occasion it would be valuable to engage the matter of the maintenance of personal identity and its relationship with historicity, but there is no room to do that now.

⁴⁹ See [Giulio Prisco, "Transcendent Engineering." In *More and More. The Transhumanist Reader*, 234-240.](#) For a more extensive discussion on the problems associated with mind uploading, see Mariano Asla, "Transferencia de la mente (*Mind up-loading*): controversias metafísicas en torno a la conservación de la identidad personal," *Forum: Supplement to Acta Philosophica* 3 (2017), 169–183, at 179. See also [Leandro Gaitán, "Heaven on Earth: The Mind Uploading Project as Secular Eschatology." *Theology and Science*, DOI: 10.1080/14746700.2019.1632554](#)

⁵⁰ [Rachel Anderson, "Alternative Biologies". In *The Transhumanist Reader*, eds. Max and Natasha Vita-More \(Malden, MA: John Wiley and Sons, 2013\), 100-110.](#) Compare with Andrew Askland, "The Misnomer of Transhumanism as Directed Evolution," *International Journal of Emerging Technologies and Society* 9:1 (2011), 71-78.

haphazard course of evolution (see above our examples of historicity, life-history, and perhaps epigenetics). Even the succession of generations would be jeopardized, since members of the current birth cohort would reframe their selves continually, and new children would come only according to their design (innumerable references to “designer babies” in the transhumanist literature point in this direction).

So we may say now that we have a tentative response to both our first and second general questions about transhumanism and historicity. The answers are in the negative, on three accounts: the transhumanist selective understanding of the double character of human nature, making one incompatible with another; the impossibility of erasing the accumulated past of one’s candidate to life extension, lest human identity would be lost altogether; the appeal to directed evolution, which severs us from the biological bodies resulting from the evolutionary process, and by the same token from historicity.

Before passing to theological considerations, let us return to Hannah Arendt for a moment. Many of the quotations above by critics of transhumanism refer to aging and death, but this is just one aspect of historicity. Arendt reminds us of the new beginnings through her concept of natality, indicating that life course matters.

In her *The Human Condition* she anticipates some of the discussions that we are having nowadays about technological breakthroughs. As she says,

For some time now, a great many scientific endeavors have been directed toward making life also ‘artificial,’ toward cutting the last tie through which even man belongs among the children of nature . . . the wish to escape the human condition, I suspect, also underlies the hope to extend man's life-span far beyond the hundred-year limit.⁵¹

She is not at all saying that these advances should not take place, but she is rather concerned with humanness. Thus she says: “I confine myself . . . to an analysis of those

⁵¹ Arendt, *The Human Condition*, 2. See also p. 269.

general human capacities which grow out of the human condition and are permanent, that is, which cannot be irretrievably lost so long as the human condition itself is not changed.” What else is lost? Still, according to her, “the perfect elimination of the pain and effort of labor would not only rob biological life of its most natural pleasures but deprive the specifically human life of its very liveliness and vitality.”⁵²

Transhumanists say that they actually want to rob biology of what is considered negative traits, such as anxiety. As philosopher Patrick Hopkins mentions: “Transhumanism teaches that we can solve, or at least address, our existential anxiety, our discontent over our imaginable and actual selves, by changing the constraints of ourselves.”⁵³ But transhumanists proposals, in seeking to overcome the negative aspects of human life, may not arrive at a being that still has connections with the human. If the human condition is changed, the question we are faced with is: What is the point, after all, of creating a being that is no longer tied up to our historicity?

Some elements for a Theology of finitude

Scriptural insights

Several theologians who have worked with transhumanism called attention to similar problems, that this movement sees human finitude and historicity as simply a burden to be overcome.⁵⁴ Some of them include the theological motif of “going back to dust” (Gn 3.19) to underline our creatureliness,⁵⁵ but it seems that more can be studied about this motif. In

⁵² Ibid., 6, 120.

⁵³ Patrick D. Hopkins, “A Moral Vision for Transhumanism” *Journal of Evolution and Technology* 19/1, (2008), 3-7, at 3.

⁵⁴ See, e.g., Herbert Anderson, “Forever is Always Finite: Reflections on Radical Life Extension.” *Theology and Science*, 17:2 (2019), 223-232, DOI: [10.1080/14746700.2019.1596297](https://doi.org/10.1080/14746700.2019.1596297).

⁵⁵ For example, Terence L. Nichols, “Radical Life Extension: Implications for Roman Catholicism.” In

a recent book, theologian Michael Burdett seeks those points of correspondence and divergence between technological futurisms and the Judeo Christian understanding of the future. For the technological “futurism,” he draws extensively on transhumanist literature. According to him, “The most blatant area of difference is the Christian’s upholding of limit and creatureliness in the face of transcendence.”⁵⁶

Transcendence is linked to the communion with others and God, in the recognition of our finitude. The transhumanist quest for transcendence involves the acquisition of (computable) knowledge, considered as a good in itself. Theists, on the other hand, look for wisdom to guide their lives: “The virtuous and good life, the end of wisdom, is tied to how Christians live with others who are weak, marginalized and suffering.”⁵⁷ My hunch is that this wisdom is linked to the recognition and enjoyment of our historicity. I propose to find something more in the scriptural Wisdom literature concerning finitude and creatureliness.

If the word “historicity” in theology is not as common as it is in philosophy, the related word “finitude” is. In the Scriptures one of the highlights is Psalm 8.4-6: “What are human beings that you are mindful of them, mortals that you care for them? Yet you have made them a little lower than God . . . You have given them dominion over the work of your hands . . .” (NRSV)

These opposite appreciations fit the double possibility of thinking about human nature, described by Hauskeller above. Transhumanists focus on the second possibility, saying that human beings are bound to steal the fire of the gods, becoming like them. In this sense, they come close to the “Image of God” theme.⁵⁸ But historicity is lost in the

Religion and the implications of radical life extension, eds Derek F. Maher, Calvin Mercer (New York: Palgrave MacMillan, 2009) 133-144, at 134.

⁵⁶ Michael Burdett, *Eschatology and the technological future*. (Abingdon [Oxon]: Routledge, 2015), 239.

⁵⁷ *Ibid.*, 241.

⁵⁸ Ted Peters. *Imago Dei, DNA, and the Transhuman Way*, *Theology and Science*, 16:3 (2018), 353-362, DOI: 10.1080/14746700.2018.1488529. However, what is precisely the “Image of God”? A young male,

process of stealing the fire, so we may resort to another path, a “theology of finitude.” The expression as such is hardly found in the literature, but the overall idea is common as we may glimpse in Burdett’s work. One major biblical theme is expressed by Genesis 1.14-19, and in particular the famous ending “. . . you are dust, and to dust you shall return.” (Gn 1.19) Let us then pursue this path.

As for the meaning of this passage in its context, we may choose the renowned commentary by Claus Westermann.⁵⁹ He does not regard this coming back to dust as a punishment. It even has a positive ring to it: The end of a life of hard work can be liberating, when humans are full of days. It is a wisdom saying, a motif found in many biblical passages, the recognition of our contingency (“dust and ashes”- Gn 18.27). The message is clear—even powerful people should not be trusted, they too return to dust (Ps 146.3-4), only the Lord is everlasting with his steadfast love (Ps 103.14-17). Without God-given breadth, we amount to nothing.

In the same vein, OT scholar Walter Brueggemann brings to us something that could be called a “theology of ash Wednesday.” His scriptural point of departure is Gn 3.19 and Ps 103.14-17. He first dismisses the traditional view that Ash Wednesday would be “a celebration of our sin and unworthiness.”⁶⁰ From the texts we cannot draw either “original sin” or the “fall.” The “‘dust formula’ is not a statement about curse, judgment, or indictment.” It is more of a statement about human personhood: “human persons are dependent, vulnerable, and precarious, relying in each moment on the gracious gift of breath which makes human life possible.” On the other hand, contrasted to “the modest

perfect in all respects? Usually the typical transhuman is to be thought of as an extrapolation of this present perfection. But in fact the crucified Christ is the strongest symbol of the *imago dei*. Marginalized people that challenge transhumanist ideals are the disabled, who complain that these ideals are ableist—see Fiona K. Campbell, *Contours of Ableism: The Production of Disability and Abledness* (Basingstoke, UK: Palgrave Macmillan, 2009), 62 ff., among other sources.

⁵⁹ Claus Westermann, *Genesis 1-11: A Continental Commentary* (Philadelphia: Fortress Press, 1994), 267.

⁶⁰ Walter Brueggemann, "Remember, You Are Dust" *Journal for Preachers* 14/2 (1991), 3-10, at 3.

status of creatureliness”, we find “the dangerous venture of ‘being like God.’”⁶¹ Dust, therefore, means that human beings are constitutionally creatures.

Brueggemann further claims that ashes and dust are even more cogent in our contemporary, Western cultural context, the same one which is a fertile soil for Transhumanism. As Brueggemann explains: “In the most drastic recognition, we have forgotten . . . the reality that we are going to die soon; of course, our technological gains reinforce our avoidance of the topic and truth of our life. We imagine that if we are smart enough and quick enough and strong enough, we can fend off such a destiny by our self-securing.” But, paradoxically, “the very threat of death that we think we have overcome in fact haunts us and drives us in debilitating ways.”⁶²

These observations also apply to the skeptic Qoheleth, who also speaks of the double nature of human beings, and more specifically of dust. He is suspicious of superiority claims-- all our achievements are but futility. OT scholar Douglas Lawrie reiterates that Ps 8 bears a dialectical view of human nature that occurs throughout the Bible: on the one hand we have human dignity and on the other human frailty. However, he reminds us that humans have no dignity in and by themselves: “they are dignified by being ‘remembered’ and ‘visited’ by Yahweh, by receiving a commission to praise and to *serve* as rulers.”⁶³

The two passages where Qoh reminds one of Gn 3.19 are Qoh 3.19-22 and 12.7, and they reflect this indecision on what humans should do. OT scholar James L. Crenshaw, when commenting on Qoh 3, says that “A divine gift is equated with the portion that is allotted to humans. Enjoyment is both a gift of God and a portion belonging to mortals.” In addition, he observes that Qoheleth “emphasizes human failure to make effective use of a

⁶¹ Ibid., 4. For a variety of viewpoints relating “being like God,” creaturehood and transhumanism, see Michael Burdett & Victoria Lorrimar, “Deification and Creaturehood in an Age of Enhancement,” *Theology and Science*, 16:3 (2018), 247-250. DOI: 10.1080/14746700.2018.1488467

⁶² Ibid., 8.

⁶³ Douglas Lawrie, “The dialectic of human dignity and human finitude in the psalms and the wisdom literature,” *Scriptura* 105 (2010), 608-620, at 610; emphasis his.

permanent gift, a desire either to obtain immortality or to uncover the deep mysteries of existence. In addition the context stresses the permanence of divine activity and its ultimate purpose—to instill awe and reverence in mortals.”⁶⁴

Lawrie is less optimistic in his reading of Qohelet, stating that in this book the proper attitude in facing life is “serene disillusionment.”⁶⁵ Appearances are deceiving, and what shows itself as noble is in fact quite low dressed in a fancy way. Yet, returning to the dialectics, both human dignity and fragility are present, and in the Scriptures they acquire meaning only *coram Deo*. As a conclusion, Lawrie argues that many values of the Enlightenment (e.g., autonomy) are one sided, since they leave little room for human frailty and the recognition of our dependence on others.⁶⁶

Elements from Existentialist Thinking

Understanding a creature as living “from birth to dust,” and at the same time with dignity, brings us closer to what we have described above as historicity. Now we may return to Hannah Arendt. She does not use the “dust” image in the sense above, but, much more important in her analysis is the idea of “futility.” The following quotation makes the connection with “natality”:

The life span of man running toward death would inevitably carry everything human to ruin and destruction [futility] if it were not for the faculty of interrupting it and beginning something new, a faculty which is inherent in action like a never-present reminder that men, though they must die, are not born in order to die but in order to begin [natality].⁶⁷

Historicity, therefore, starts from what we share with animals, the law of mortality.

⁶⁴ James L. Crenshaw, *Qoheleth: the ironic wink* (Columbia: University of South Carolina Press, 2013), 84.

⁶⁵ Lawrie, “The Dialectic of Human Dignity,” 615. On “serenity,” recall Salamun’s quotation at the beginning of this article.

⁶⁶ *Ibid.*, 618.

⁶⁷ Arendt, *The Human Condition*, 246.

But in humans the cycle is broken through birth and action, and they can be rescued by new beginnings. According to Anne O’Byrne, if finitude in Arendt’s works has any importance at all, it has to do with *living* finitude, not quite finite: “We encounter finitude in the experience of our own limits, but we experience them *as* limits only when we run against them in an attempt to run beyond them.”⁶⁸ This is due to the fact that, as explained above, we are generational beings. Living finitude thus implies some form of transcendence. As Arendt draws these ideas from Augustine,⁶⁹ there is an ambiguity here between Christian transcendence and secular transcendence, which Arendt adopts. But her reference to the faculty with which humans are endowed, to be open to new beginnings, are as close to the idea of grace as anyone could be.

As we just saw with Crenshaw, newness in life comes as gift from God. In Arendt this gift is expressed in more secular terms, in connection with natality. Among words other than giftedness to describe givenness and newness, Arendt speaks in terms of a biological birth as miracle, as Simon Reader suggests:

Rather than resenting the unchangeable contingency of our birth, she advises that we respond with “a fundamental gratitude for the few elementary things that indeed are invariably given us, such as life itself, the existence of man and the world” (*The Burden of Our Time*, 438).⁷⁰

As natality in Arendt involves both givenness and action, there is a secular transcendence implied in this notion, bounded by birth and death.

As much as transhumanism endorses some form of secular transcendence, it has some difficulty to cope with the weakness of a life course that ends in dust (see reference above to Martine Rothblatt). There is no sense of being a creature; this movement rather points to self-creaturehood.⁷¹ But, as James Ogilvy warns, “in taking the gods as models

⁶⁸ O’Byrne, *Natality and Finitude*, 7.

⁶⁹ cf. Arendt, *The Human Condition*, 177-78.

⁷⁰ Simon Reader, *The Ethics of Choosing Children* (Basingstoke, UK: Palgrave Macmillan, 2017), 119.

⁷¹ For a discussion of the tension between creaturehood and deification, see again Burdett and Lorrimar, “Deification and Creaturehood.”

for an enhanced humanity, we would deny our historicity and with it the temporality that is a significant part of our humanity.”⁷²

So we are back to Hauskeller’s understanding of the double nature of humans in transhumanism. As we suggested above, this duplicity may easily fall into dichotomy, and it is a source of anxiety.

Conclusion

We started from the assumption that the concept of “historicity” is relevant, both to describe human predicament over one’s life course and the drive to overcome this predicament. On the other hand, the very accumulation of past experiences, good or bad, may become a burden to the individual and his/her descendants, involving the need of intergenerational dynamics. Through the concept of natality, the recurrent and gratuitous advent of new beginnings points to the importance of new generations, and the acquiescence to their succession.

When engaging transhumanist thought, we saw that it lacks reflection on historicity. There are intrinsic limits to this thought, which can be divided in three parts: its view of human nature, containing a contradiction between finitude and god-like creativity; its non-acknowledgement of the accumulated past and the impossibility of erasure without loss of identity; and finally its proposal of directed evolution, that disregards the historicity of evolution and epigenetics. Moreover, this denial of historicity in practice closes the door to new generations, thereby ignoring natality.

For a short theological assessment of these contradictions, we employed the imagery of “returning to dust.” It is present in Gn 3.19, but also in a few Psalms and in Qoheleth.

⁷² Ogilvy, “Human Enhancement,” 83.

With the help of some biblical scholars, we saw that the dust motif is linked to human finitude, dismissing those who pretend to be “like God.” On the other hand, Psalm 8, 4-6 presents the two-fold nature of the human condition, finitude and creatureliness on the one hand and being “little lower than God” on the other. Living this double character in time marks our historicity.

As several authors quoted in the text indicate, transhumanism does not engage this double character, downplaying creatureliness and finitude. However, this project may just lead to “futility” and “folly”--finitude is not overcome, and anxiety remains as part and parcel of our condition, regardless of scientific-technological breakthroughs. The only way to erase historicity is by creating a new being, and we now are back to a central question, what is the point of it if we as humans, being left behind, cannot benefit (*qua* humans) from the outcome of such a bold technological project?