

TWO CULTURES OF THE POSTHUMAN FUTURE

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ABSTRACT

The posthuman has been looming large on the human horizon lately. Yet there is no shared understanding of what a posthuman future could possibly mean, and the tension between a technological-scientific prospect of posthumanity and the critical posthumanist scholarship of the humanities is growing palpable. Whereas the former harbors a novel sense of historicity signaled by the expectation of an eventual change to bring about the technological posthuman as a previously nonexistent and other-than-human central subject, the latter theorizes a postanthropocentric subjectivity of beings still human. In doing so, it extends the already familiar emancipatory concerns of the human world over the nonhuman, with special attention paid to the ecological other. Despite the occasional claims of critical posthumanism to bring humanities and technological-scientific approaches to a shared platform, the prospect of technological beings of unparalleled power and the ecotopia of species equality do not fit together very well. In this article I argue that, in their present shape, technological posthumanity and critical posthumanism represent hardly reconcilable social imaginaries and two cultures of the posthuman future. My intervention is a plea for developing a more profound and mutual understanding of both. Instead of advocating particular agendas that nevertheless claim validity for the entirety of planetary life and the entire scholarly enterprise of knowledge production, we could invest more in efforts to come to grips with both social imaginaries and venture jointly into the creation of the conceptual tools of a new knowledge economy of understanding the rapidly changing world and our own (post)human prospects.

Keywords: posthumanity, posthumanism, historicity, technology, humanities, anthropocentrism, two cultures

OVERCOMING ANTHROPOCENTRISM: A HUMANITIES CONTEST

One of the most curious incidents of recent humanities scholarship is the simultaneous announcement of the human and the nonhuman turn. It was only yesterday that scholars—mostly affiliated with object-oriented ontology and new

materialism—declared the all-encompassing nonhuman turn in a volume published in 2015.¹ They made the case for a growing sense of anti-anthropocentrism as the new collective agenda of the humanities and the social sciences. Yet even before the proclamation could gain some attention and could be reviewed by this very journal in 2017,² Sverre Raffnsøe had already announced the human turn in 2016.³

Unless the entirety of the humanities whimsically shifts identity on a yearly basis, the situation poses the question: what could this possibly mean? On the one hand, there is the nonhuman turn, aiming at the status of being a metaturn. According to the introduction of the volume, it is “meant to account for the simultaneous or overlapping emergence of a number of different theoretical or critical ‘turns’—for example, the ontological, network, neurological, affective, digital, ecological, or evolutionary,” with the common thread in their diverging takes being that they all “argue (in one way or another) against human exceptionalism.”⁴ On the other hand, the human turn intends to capture the sheer opposite of efforts to decenter the human. In Raffnsøe’s view, what we witness in the age of the Anthropocene is rather that “the human being has taken on a new significance as a decisive factor in the world.”⁵ And, indeed, after the humanities quickly appropriated the term that originally emerged as a potential geological marker—an epoch defined by anthropogenic changes in the earth system—it has become fairly common to refer to it as the “age of humans,” a new sociocultural condition that demands a reconfiguration of thought in practically all domains of knowledge.⁶ With respect to historical studies, Dipesh Chakrabarty’s ongoing engagement in conceptualizing the challenge is the most insightful to this day.⁷ Like the majority of the Anthropocene literature, it springs out of a perception of the human as more powerful than ever, with heightened capacities that threaten the order of nature, and within nature, the human itself.

The result is the startling situation in which the human appears as exceptional

1. *The Nonhuman Turn*, ed. Richard Grusin (Minneapolis: University of Minnesota Press: 2015).

2. Adam Dodd, “The Crisis of Humanity: Or, What if We Have Never Been Human?” *History and Theory* 56, no. 1 (2017), 138-145.

3. Sverre Raffnsøe, *Philosophy for the Anthropocene: The Human Turn* (Basingstoke, UK: Palgrave, 2016).

4. Richard Grusin, “Introduction,” in Grusin, ed., *The Nonhuman Turn*, x.

5. Raffnsøe, *Philosophy for the Anthropocene*, xiii.

6. For the original popularization of the Anthropocene to name a “many ways human-dominated” geological epoch, see Paul J. Crutzen, “Geology of Mankind,” *Nature* 415 (2002), 23. With a few notable exceptions, the way in which the humanities appropriate the Anthropocene does not seem to coincide with the aims and concerns of the scientific discourse from which the term is borrowed. See Zoltán Boldizsár Simon, “Why the Anthropocene Has No History: Facing the Unprecedented,” *Anthropocene Review* 4, no. 3 (2017), 239-245.

7. For the initiative, see Dipesh Chakrabarty, “The Climate of History: Four Theses,” *Critical Inquiry* 35, no. 2 (2009), 197-222. For the latest, see Dipesh Chakrabarty, “The Politics of Climate Change Is More Than the Politics of Capitalism,” *Theory, Culture and Society* 34, no. 2-3 (2017), 25-37; and Dipesh Chakrabarty, “Anthropocene Time,” *History and Theory* 57, no. 1 (2018), 5-32.

(human turn) and nonexceptional (nonhuman turn) at the same time. The potential confusion is, however, easily dissipated by Raffnsøe's contention that the human turn "points onwards, to a posthuman turn that raises new challenges and new possibilities for understanding the human."⁸ The emerging "posthuman" understanding is supposed to do away with human exceptionalism, much like the nonhuman turn, and the necessity to develop an anti- or postanthropocentric stance lies precisely in the recent perception of human exceptionalism having potentially damaging consequences. On this note, Raffnsøe cites one of the main advocates of critical posthumanism today, Rosi Braidotti, speaking for the necessity of a posthuman humanities and claiming that "the Humanities need to find the inspirational courage to move beyond an exclusive concern for the human . . . and to embrace more planetary intellectual challenges."⁹

All this eventually brings the human and the nonhuman turn to the shared objective of overcoming anthropocentrism.¹⁰ This shared objective, however, tones down their respective claims of grandiosity and self-importance. The intention to overcome anthropocentrism has already been the central agenda of critical posthumanism for the last two decades or so. Critical posthumanism draws upon a philosophical criticism of humanism and what is variously referred to as the figure of "Man," the Protagorean measure of all things, the Cartesian subject, or the liberal subject of human mastery, agency, and reason. In doing so, it claims to rethink the human and map the interconnectivity of the human and the nonhuman (from animals to objects and machines) within a larger scheme of planetary life.

In Braidotti's version of critical posthumanism, the aim of overcoming anthropocentrism is fused with antihumanism, poststructuralism, feminist critique, postcolonial thinking, and environmental theory.¹¹ In a more down-to-earth manner, complementing the heavier theoretical work of other approaches, Cary Wolfe traces an emerging posthumanist sensibility through a variety of fields ranging from animal studies to contemporary art and media.¹² Such a posthumanist sensibility, however, does not entail the abandonment of all previously held values. As Neil Badmington warns, giving in to the urge to posit a complete break with humanism would be a mistake.¹³ Accordingly, when introducing critical posthumanism to historical studies, Ewa Domanska also

⁸. Raffnsøe, *Philosophy for the Anthropocene*, xvii.

⁹. *Ibid.*, 62. Raffnsøe quotes Rosi Braidotti, "Posthuman Humanities," *European Educational Research Journal* 12, no. 1 (2013), 11. The same passage can also be found in Rosi Braidotti, *The Posthuman* (Cambridge, UK: Polity, 2013), 153.

¹⁰. This is so even if the nonhuman turn attempts to distance itself from the "posthuman turn" and the idea that a "historical development" leads from human to posthuman. Being completely unaware of its own appeal to historicity, it nevertheless advances what it itself calls a "historical" claim about "developments in academic discourse" that it wishes to shepherd. See Grusin, "Introduction," x-xi.

¹¹. Braidotti, *The Posthuman*, esp. 45-50.

¹². Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010).

¹³. Neil Badmington, "Theorizing Posthumanism," *Cultural Critique* 53 (Winter 2003), 10-27.

makes explicit that the intention is not to completely reject humanism and its values, but “to consider how those values (justice, tolerance, equality, dignity, human rights, etc.) became a part of the definition of uniqueness and exceptionality of the human kind,” if only in order to “anticipate the shape of the ‘humanities’ in the future, i.e. when the humanities become posthumanities.”¹⁴

That said, whatever appeared initially as a curious incident of two conflicting worldviews looks now to be more of an internal competition. Under manifold headings, a large variety of humanities scholarship today aims at the single objective of overcoming anthropocentrism, as if there were a prize to be awarded to whoever gets there first. But the resolution of the apparent confusion within humanities scholarship is not the happy end of the story I want to tell. The shared (post)humanities platform constitutes only the initial condition of a larger incomprehension between critical posthumanism and a technological-scientific approach to the posthuman that I will call *technological posthumanity*.

CRITICAL POSTHUMANISM AND TECHNOLOGICAL POSTHUMANITY

Making distinctions is a risky business. To be clear, it is not my intention to create monolithic divisions between critical posthumanism and technological posthumanity. Rather, I prefer to conceive of the distinction as a useful conceptual tool, designed to make sense of distinctive concerns and agendas in a multifarious discourse on the posthuman future. In fact, critical posthumanists also define their particular approaches through such distinctions, in which the overall relation of critical posthumanism to technology-oriented approaches looks somewhat ambivalent.

As an example, consider Cary Wolfe’s treatment of transhumanism, which needs a concise introduction first. As its name suggests, transhumanism intends to transcend the human condition by means of technology and the advancements of science (from biotechnology to nanotechnology and artificial intelligence).¹⁵ It desires to bring about beings ranging from bodily, cognitively, and morally enhanced humans to beings literally other-than-human. What counts as a posthuman being depends, of course, on what one considers as human. Transhumanism is nevertheless more concerned with what posthuman beings would be than with the question of how human beings should be conceived of today (even though their definition of the posthuman entails definite views on what qualifies as human).

¹⁴. Ewa Domanska, “Beyond Anthropocentrism in Historical Studies,” *Historiein* 10 (2010), 118-119.

¹⁵. The sense in which I use the term “technological-scientific prospects of posthumanity” typically means a technological vision of the future that makes use of scientific results. It does not refer to anything like a shared vision of scientists working in laboratories that aim at a posthuman future, although in many cases the work of scientists may be inspired by such practical technological use, pointing toward such a future.

Nick Bostrom, the most widely known representative of transhumanist thought today, declares the agenda by claiming that “we can overcome many of our biological limitations.”¹⁶ Such an agenda places the burden of explicitly defining the human on those who express worries about it. For Francis Fukuyama, usually associated with bioconservatism, the source of anxiety inherent in the ambitions of overcoming biological limitations is the possible loss of “human nature.” Needless to say, the notion of human nature enjoys a considerably bad reputation today, even if Fukuyama’s definition of it does not entail an inherent and static human quality. Fukuyama makes use of the notion as “the sum of the behavior and characteristics that are typical of the human species,” in which “typicality” is understood as “a statistical artifact—it refers to something close to the median of a distribution of behavior or characteristics.”¹⁷ Another example of someone who defines the human in light of the transhumanist agenda is Nicholas Agar, who rejects radical enhancement and bioconservatism equally. Agar’s unease derives from the possibility of the reproductive isolation of potential posthumans from humans. Agar thinks that there is “a good chance that radical enhancement will in fact create reproductive barriers, and therefore will result in beings who are not human.”¹⁸

The diverging concerns of Bostrom, Fukuyama, and Agar are bound together by a biological understanding of the human as a species (notwithstanding their diverging views on the human species itself), and their entire debate revolves around the possibility of posthumans not belonging to the human species. I will return to this point later, addressing the characteristics of the technological posthuman in more detail. For now, what I wish to point out is only that none of these things matter for Wolfe in sketching the relation of his critical posthumanism to transhumanism. After introducing transhumanism as a “strand of posthumanism,” Wolfe begins to discuss Bostrom’s essay on the history of transhumanism.¹⁹ As Bostrom claims continuity with Enlightenment ideals of human perfectibility, Wolfe finds that transhumanism fails the anti-anthropocentrism test.²⁰ But if transhumanist thought is perceived as anthropocentric, then (in light of critical posthumanist standards) it simply should not qualify as posthumanist, which eventually makes Wolfe claim—two pages after establishing the affiliation between transhumanism and posthumanism—that transhumanism is in fact “the intensification of humanism,” which is the opposite

¹⁶. Nick Bostrom, “Transhumanist Values,” *Journal of Philosophical Research* 30, issue supplement (2005), 8.

¹⁷. Francis Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (New York: Farrar, Straus and Giroux, 2002), 130.

¹⁸. Nicholas Agar, *Humanity’s End: Why We Should Reject Radical Enhancement* (Cambridge, MA: The MIT Press, 2010), 21.

¹⁹. Nick Bostrom, “A History of Transhumanist Thought,” *Journal of Evolution and Technology* 14, no. 1 (2005), 1-25.

²⁰. Wolfe, *What is Posthumanism?*, xiii.

of his own sense of posthumanism.²¹ Finally, after establishing the conflicting imperatives, two pages later Wolfe refers to transhumanism in quotes as “‘bad’ posthumanism.”²²

That the relationship between critical posthumanism and technology-oriented approaches is a hard nut to crack can be demonstrated by further examples. Like Wolfe, Braidotti argues for the sovereignty of her own critical take through contrasting it to what she also considers as different strands of contemporary posthumanist thought. After quickly dismissing a “reactive approach” associated with Martha Nussbaum as a defense of humanism, Braidotti distances herself from what she calls “analytic posthumanism.” By this, she refers to the approach of science and technology studies that investigates the intersections of human and nonhuman. And again, the allegedly politically neutral stance of science and technology studies proves still to be too much indebted to humanist values.²³ But glancing at science and technology studies is not yet an engagement with the ongoing debate on the technological prospect of creating posthuman beings. And when Braidotti eventually comes to this prospect, she ventures into a discussion of ideas put forward by Gilles Deleuze and Felix Guattari to conceptualize the relationship between human and machine,²⁴ still without consulting the abovementioned debates and without mapping how exactly the technological-scientific imagination conceives of either the machine, the human, or their relationship.

That said, I do not wish to create the impression that there is no exchange whatsoever between critical posthumanism and technological-scientific prospects. Tamar Sharon’s recent plea for a mediated posthumanism (committed to a nonhumanist stance that critical posthumanists would welcome) investigates both sides in a book-length analysis of posthumanist discourse.²⁵ Sharon develops a fourfold classification in which a “dystopic” and a “liberal” posthumanism accounts for the bioconservative and transhumanist poles in the human enhancement debate; a “radical” posthumanism refers to a Braidotti-type critical posthumanism inspired by poststructuralism; and a “methodological” posthumanism covers the efforts of science and technology studies (the same one from which Braidotti distances her approach). Finally, it is impossible not to mention the brilliant and pioneer work of Katherine Hayles in the 1990s on the posthuman of cybernetics research,²⁶ examining the relationship between the “liberal humanist subject” and the cybernetic posthuman while tracing the

²¹. *Ibid.*, xv.

²². *Ibid.*, xvii.

²³. Braidotti, *The Posthuman*, 38-45.

²⁴. *Ibid.*, 89-95.

²⁵. Tamar Sharon, *Human Nature in an Age of Biotechnology: The Case for Mediated Posthumanism* (Dordrecht: Springer, 2014).

²⁶. N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999).

disembodiment of information through three stages of the history of cybernetics.

This partial glimpse is obviously very far from being a full account of the existing classifications of a multifarious scholarship on the posthuman. But it is more than enough to raise the question: why make yet another distinction? I can think of two good reasons. First, as the above brief discussion indicates, critical posthumanism is typically less interested in a closer investigation of the characteristics of technological-scientific prospects than in advocating for its own agenda. This often results in an insufficient understanding of the scientific-technological prospect of posthumanity, which is nevertheless influential in (post)humanities scholarship. Second, the distinction I wish to introduce differs from those mentioned above in that it is not about different versions of the same thing but about discordant social imaginaries. There most certainly are intersecting and overlapping sets of concerns and agendas that bring together critical posthumanism with technological posthumanity. But in order to properly map such intersections, what needs to be understood first is what separates and characterizes them in their own rights.

As of now, *within the humanities*, critical posthumanism speaks both *for* itself and *about* discourses on a technological posthumanity in critical posthumanist terms. Such one-sided advocacy seems to constitute an obstacle to making sense of the technological imaginary without simply projecting over it the concerns and the terminology of critical posthumanist scholarship. This of course does not mean that critical intervention is unnecessary; it only means that the critical arsenal usually deployed has been designed to address concerns of the human world. Instead of merely applying already existing forms of critique, it might be more fruitful to develop more adequate critical tools of thought that arise out of conceptual efforts directed at gaining an understanding of the technological imaginary. There might be much more to technology-oriented approaches to the posthuman than a reductionist understanding of them as simply defenders of “humanist values” and “the liberal subject.”

THESES ON TECHNOLOGICAL POSTHUMANITY

To illuminate the distinction between critical posthumanism and technological posthumanity, I would like to advance three theses on the latter. The theses are interdependent and altogether attest to the conflicting senses of historicity that respectively inform approaches to the posthuman in (post)humanities scholarship and in the technological-scientific domain.

On this note, the first thesis states precisely that *an appeal to historicity is the defining characteristic of technological posthumanity*. As it is common knowledge that technological approaches to the posthuman typically invoke a historical trajectory, I do not intend this to be a spectacularly novel claim or a profoundly deep insight. It is rather the basis on which the next two theses can be advanced. The first thesis condenses the moral of the earlier discussion in the

following statement: whereas technological approaches to the posthuman are defined by a future expectation of entering an epoch of posthumanity, critical posthumanism is defined by an opposition to humanism as a past pattern of thought. The core difference is already captured by naming the respective sides as *posthumanism* and *posthumanity*. This is not to say, however, that versions of critical posthumanism are devoid of any sense of historicity. Most of the time, they either deliberately advance or tacitly imply a claim of historical trajectory, at minimum in their intention to reinvent humanities scholarship as “posthuman humanities.” Accordingly, the first thesis states only that the principles and founding assumptions of the respective discourses are different. Whereas technological posthumanity necessitates a claim of historical succession, particular approaches within critical posthumanism may or may not advance such a claim. What critical posthumanism demands instead is a philosophical dissatisfaction with the sets of values associated with humanism.

The second thesis concerns the mode of historical succession and states that *technological posthumanity harbors a novel sense of historicity*. Instead of unfolding over the course of a historical process, the new epoch is signaled by the expectation of a singular event. The event is commonly referred to as “technological singularity,” a notion that gained popularity following Vernor Vinge’s presentation at a NASA conference in 1993. The singularity itself is the anticipated creation of greater-than-human intelligence, likely to give way to an “intelligence explosion” of such intelligence creating even greater intelligences at an increasing pace. In Vinge’s words, the singularity “is a point where our models must be discarded and a new reality rules,” representing a change “comparable to the rise of human life on Earth.”²⁷ Although machine intelligence is only one form of a potential technological posthuman, the same argument of intelligence explosion can be extended over transhumanist and biotechnological prospects. Enhanced beings may find unexpected ways of further enhancement and bring about beings completely removed from human biological limitations or, for that matter, create more advanced technologies leading to a machine superintelligence singularity-scenario. But regardless of the particularity of scenarios, the significance of technological posthumanity lies in the extent to which it relies on an eventual sense of historicity instead of invoking modern processual and developmental historical thinking.

Finally, the third thesis goes as follows: *the eventual historicity harbored by technological posthumanity revolves around the prospect of bringing about the posthuman as a previously nonexistent central, exceptional, and by definition unknowable subject*. To gain a better understanding of the radical novelty,

²⁷. Vernor Vinge, “The Coming Technological Singularity: How to Survive in the Post-Human Era,” In *Vision-21: Interdisciplinary Science and Engineering in the Era of Cyberspace*, proceedings of a symposium cosponsored by the NASA Lewis Research Center and the Ohio Aerospace Institute, Westlake, Ohio, March 30-31, 1993, 11. <https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19940022855.pdf>.

centrality, and unknowability of the technological posthuman, I would like to flesh out its contrast to the posthuman of critical posthumanism. As mentioned earlier, critical posthumanism may or may not explicitly advance claims of historical succession, although typically it at least implicitly relies on one. Braidotti's efforts to theorize a posthuman condition belong to the former category. She even makes a similar point to mine about a new subject signaling a new epoch (in terms of a new knowledge formation) when saying that "if the proper study of mankind used to be Man and the proper study of humanity was the human, it seems to follow that the proper study of the posthuman condition is the posthuman itself."²⁸ In light of this claim, Braidotti's definition of the posthuman must be of utmost importance:

In my own work, I define the critical posthuman subject within an eco-philosophy of multiple belongings, as a relational subject constituted in and by multiplicity, that is to say a subject that works across differences and is also internally differentiated, but still grounded and accountable. Posthuman subjectivity expresses an embodied and embedded and hence partial form of accountability, based on a strong sense of collectivity, relationality and hence community building.²⁹

Then, as a representative of the technological posthuman, consider Bostrom's definition:

I shall define *a posthuman* as a being that has at least one posthuman capacity. By a posthuman capacity, I mean a general capacity greatly exceeding the maximum attainable by any current human being without recourse to new technological means.³⁰

The contrast could not be sharper. To begin with, whereas the technological posthuman is a subject biologically departing from the human subject, the posthuman of critical posthumanism is a *subjectivity* that may belong to a biologically human being just as well as to a being of biologically blurred boundaries. As also the technologically most informed critical posthumanism of Hayles makes it clear, the posthuman "does not require the subject to be a literal cyborg," meaning that "even a biologically unaltered *Homo sapiens* counts as posthuman," because "the defining characteristics involve" nothing more than "the construction of subjectivity."³¹

Wolfe's brief discussion of transhumanism is even more instructive about the difference. At a certain point, Wolfe parenthetically contrasts Bostrom's transhumanism to Donna Haraway's *A Cyborg Manifesto*,³² praising the latter for its "playful, ironic, and ambivalent sensibility" that is "suspicious—to put it

²⁸. Braidotti, *The Posthuman*, 159.

²⁹. *Ibid.*, 49.

³⁰. Nick Bostrom, "Why I Want to Be a Posthuman When I Grow Up," in *Medical Enhancement and Posthumanity*, ed. Bert Gordijn and Ruth Chadwick (Berlin: Springer, 2008) 108.

³¹. Hayles, *How We Became Posthuman*, 4.

³². Donna J. Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in Donna J. Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991), 149-181.

mildly—of the capacity of reason to steer, much less optimize, what it hath wrought.”³³ Yet it should be clear that whereas Bostrom actually wishes to be the better-than-human technological posthuman he describes, Haraway does not wish to be a cybernetic organism in the literal sense. She only intends to collapse essentialism and dichotomic thinking by introducing the boundary-defying discursive figure of the cyborg to feminist thought. If successful, the result may indeed be a subjectivity that Braidotti would describe as posthuman. Such a posthuman subjectivity, however, does not even stand a chance of intersecting with the technological posthuman. From the viewpoint of technological posthumanity, the critical posthumanist subjectivity must represent a mode of thinking and being that is available to biologically limited humans. Unlike critical posthumanism, technological posthumanity must remain silent about the actual qualities of its posthuman. The best it can indicate is the very unknowability of the other side of the eventual change it expects to take place. It is in this manner that Vinge claims that despite any anticipation and pretheorization, the “new reality” springing out of the singularity “may still be a great surprise and a greater unknown,”³⁴ and it is in this way that Bostrom argues that “much the same way chimpanzees lack the cognitive wherewithal to understand what it is like to be human . . . so we humans may lack the capacity to form a realistic intuitive understanding of what it would be like to be a radically enhanced human (a ‘posthuman’).”³⁵

The questions of unknowability and exceptionality are of course strongly connected. Technological posthumanity cannot say anything about a posthuman subjectivity (unknowability) precisely because it assumes that the posthuman greatly outperforms whatever we associate today with the human (exceptionality). To its advocates, the technological posthuman appears as the *better-than-human* being that is even more exceptional than humanism could have ever imagined human exceptionality. Needless to say, this goes against the critical posthumanist sensibility that does not aim at decentering the human just in order to replace it with an even more exceptional nonhuman other. Instead, critical posthumanism wishes to do away with human injustices to the nonhuman and with human practices of oppression and silencing, and in its anti- or postanthropocentric stance, humans matter less than previously thought because it makes sense of humans within a larger relational scheme of interconnections of all forms of life. This is most apparent in approaches to the ecological other (regardless of whether they explicitly affiliate with critical posthumanism): in Braidotti’s quasi-panpsychism with *zoe* (life) as a “cosmic energy” that forms the immanent bound;³⁶ in Domanska’s effort to theorize a new ecological humanities;³⁷ in

³³. Wolfe, *What is Posthumanism?*, xiii.

³⁴. Vinge, “The Coming Technological Singularity,” 12-13.

³⁵. Bostrom, “Transhumanist Values,” 4-5.

³⁶. Braidotti, *The Posthuman*, esp. 130-138.

³⁷. Ewa Domanska, “Ecological Humanities,” *Teksty Drugie*, special issue—English edition (2015),

Haraway's web of entangled "companion species;"³⁸ or in Joyce Chaplin's paraphrase of the subaltern question "Can the Nonhuman Speak?"³⁹ At the same time, it is necessary to point out that such postanthropocentrism is still thought by humans and thus remains a specifically human concern. In this inescapable sense, the anti- or postanthropocentrism of critical posthumanism remains an overtly anthropocentric agenda: *it matters to humans that humans matter less*.

Unlike critical posthumanism and approaches to the ecological other, technological posthumanity openly upholds its centrism. Centrality is reserved not for humans, however, but for better-than-human beings (better in the sense that they outperform human beings). In technological posthumanity, humans matter less than previously thought not because we became more attentive to the fact that we share life with nonhumans, and so our hubris and injustice toward them needs to be addressed as critical posthumanism argues, but because a *previously nonexistent nonhuman* we think we are about to create is expected to matter even more. If the technological posthuman decenters the human, it is only in order to put another subject into the center. Accordingly, whenever technological-scientific debates pose the social question, the technological posthuman does not appear as the nonhuman victim of human injustice. On the contrary, it is considered as the potential source of new forms of inequality and injustice to humans.

Here the novel sense of historicity harbored by technological posthumanity is manifest most clearly. Whereas Western modernity conceptualized historical change as a development in the condition of a central subject unfolding over time, technological posthumanity changes the subject itself in terms of a replacement. The profundity of the expected change is precisely that the technological posthuman does not appear to be an improvement over the previously existing human subject and its capacities. Contrary to what the autobiography of transhumanism usually claims, the technological posthuman does not have much to do with the Enlightenment idea of the perfectibility of man over a historical process. Inasmuch as its envisioned "betterment" is directed at bringing about that which is better than human and not simply a better—perfectible—human, it defies the processual temporality of a cumulative progress of gradual perfection.⁴⁰

I have tried to conceptualize the historicity underlying many recent

186-210.

³⁸. Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008).

³⁹. Joyce E. Chaplin, "Can the Nonhuman Speak? Breaking the Chain of Being in the Anthropocene," *Journal of the History of Ideas* 78, no. 4 (2017), 509-529.

⁴⁰. This means that in making sense of technological posthumanity, it is just as important to avoid merely giving in to the self-description of technological approaches to the posthuman as it is to avoid merely projecting the critical tools of critical posthumanism over it. I make this point in more detail while reviewing a wider literature on technological posthumanity in Zoltán Boldizsár Simon, "The Story of Humanity and the Challenge of Posthumanity," *History of the Human Sciences* (2018), online-first article, DOI: 10.1177/0952695118779519. The scope of this essay is limited to contrasting the core ideas of the main representatives of two distinct approaches to the posthuman.

technological and ecological prospects by the notion of *unprecedented change*,⁴¹ referring to a configuration of change over time in which novelty does not develop out of preceding states of affairs. Unlike this, critical posthumanism is informed by the developmental historicity of Western modernity. The change it wishes to bring about is the extension of the emancipatory concerns of the human world to the larger scheme of human and nonhuman entanglements. Its concerns about interspecies injustice, oppression, and domination arise out of preceding concerns about intraspecies injustice, oppression, and domination. These concerns appear as further developments of the latest overwhelming *human* conception of *human* subjectivity (as theorized by poststructuralism), and thus represent yet another paradoxical instance of the anthropocentrism inherent in the very efforts of critical posthumanism to overcome it.

TWO CULTURES

It is hard to see how the centered but otherwise unknowable technological posthuman would fit into an ecotopia of species equality. It is equally hard to see how a critical posthuman subjectivity could resonate with the prospect of exceptional beings in technological posthumanity. It rather seems to me that *critical posthumanism and technological posthumanity are, in their present shape, irreconcilable social imaginaries.*

In most of its forms, however, critical posthumanism does not see difficulties with including the technological posthuman in its relational species kinship, and it often makes claims about its own potential to integrate humanities and social-science scholarship, on the one hand, and natural and life sciences, on the other. As to the latter, Domanska's "ecological humanities" is a good example in that it is supposed to constitute "a multidisciplinary domain of research aiming at integration and non-hierarchical treatment of the humanities and natural sciences, Western, Eastern, and native knowledges."⁴² As much as I sympathize with Domanska's aims, I think that the challenge may be even bigger and a bit different. Instead of integrating existing knowledge formations, recent technological and ecological prospects rather demand the creation of a new knowledge economy. As also in Domanska's view, this entails that what we currently conceive of as the humanities and natural sciences has to be brought together.⁴³ But bringing them together is not supposed to mean the one-sided

⁴¹. For the latest elaboration on this notion, see Zoltán Boldizsár Simon, *History in Times of Unprecedented Change: A Theory for the 21st Century* (London: Bloomsbury, 2019).

⁴². Domanska, "Ecological Humanities," 194.

⁴³. This is called for most pertinently lately in the Anthropocene debate. See, for example, Julia Adeney Thomas, "Confronting Climate Change: The Uneasy Alliance of Scientists and Nonscientists in a Neoliberal World," *Environmental History* 23, no. 1 (2018), 172-182; Libby Robin, "Environmental Humanities and Climate Change: Understanding Humans Geologically and Other Life Forms Ethically," *WIREs Climate Change* 9:e499 (2018).

reiteration of familiar humanities concerns, as often happens today in critical posthumanism.

Despite its heavy agenda and—unfortunately—oftentimes sectarian attitude, Braidotti’s posthumanism is the most attentive in warning of the potential danger of developing two cultures. By mentioning the phrase, Braidotti—without making it explicit—alludes to C. P. Snow’s 1959 Rede Lecture, published two years later under the title *Two Cultures and the Scientific Revolution*.⁴⁴ According to Snow’s otherwise highly contested views, a split had already divided the intellectual world of the mid-twentieth century into the respective cultures of “literary intellectuals” and “physical scientists.” The divide would translate today into a culture of the humanities (and much of the social sciences) and a culture of STEM disciplines (science, technology, engineering, and mathematics). The “mutual incomprehension” that Snow detected between them might look even sharper today, although along much the same lines, according to which “the non-scientists have a rooted impression that the scientists are shallowly optimistic, unaware of man’s condition. On the other hand, the scientists believe that the literary intellectuals are totally lacking in foresight.”⁴⁵

Note that this description concerns perceptions of the other and not the objective constitution of humanities and scientific scholarship.⁴⁶ Critics may be right concerning Snow’s creation of monolithic and substantially divided cultures at other passages in the lecture, but this is most certainly not the case in the above quote. It is not hard to see how today’s situation with respect to the posthuman future may fit such a description of perceptions of the other and respective concerns. Not in Snow’s very terms (scientists warning for humanity’s potential for self-destruction hardly appear as “shallowly optimistic” today) and not in a mutually exclusive sense, but as nevertheless distinguishable general tendencies and attitudes in thinking about questions of the (post)human and (post)humanity, it seems to me that we are heading toward two cultures in our perception of humanities and technology-oriented scholarship.

In addressing her own “culture,” Braidotti very sensibly warns that “if we ‘postanthropocentric posthumanists’ (not hyphenated and non-unitary subjects) are to strike a note of resonance in both scientific communities, we need to insist on a culture of mutual respect,” meaning that “cultural and social studies of science need to address their resistance to theories of the subject, while philosophies of the subject, on the other hand, would be advised to confront their mistrust and mis-

⁴⁴. C. P. Snow, *The Two Cultures and the Scientific Revolution* (New York: Cambridge University Press, 1961).

⁴⁵. *Ibid.*, 5-6.

⁴⁶. In that, Snow’s distinction clearly differs from the way in which, since the nineteenth century, the differences between idiographic and nomothetic sciences (Windelband), *Geisteswissenschaften* and *Naturwissenschaften* (Dilthey), have been discussed in the continental (German) tradition, typically with the intention of providing theoretical foundation for the former.

cognition of bio-sciences.”⁴⁷ Yet I cannot emphasize enough that, for the moment, the biggest obstacle to achieving this may be the insistence of critical posthumanism on enforcing its own single criterion of evaluation over every other possible concern. Even in the above quote, the possibility of “mutual respect” revolves around “theories of the subject” (meaning subjectivity). Without considering that such theories belong to a knowledge formation designed to make sense of former challenges concerning injustices in the human world, and without considering that this may be a demand impossible for technological posthumanity to meet (which, as shown above, simply cannot claim anything about a posthuman subjectivity), everyone is simply expected to be less resistant toward that subjectivity as theorized by Braidotti.

Even less sensible is the way in which, in her latest piece offering a theoretical framework for critical posthumanities, Braidotti exhibits the very “mistrust and mis-cognition” that she otherwise warns against. Consider the following passage on technological posthumanity:

At present the institutional alternative to the critical posthumanities is already in place. The Oxford Institute for the Future of Humanity embodies the hegemonic model of the posthuman as trans-humanism, implemented through a programme called “superintelligence.” It combines a humanistic belief in the perfectibility of man through scientific rationality with a programme of human enhancement. The director Nick Bostrom pledges allegiance to the European Enlightenment and adopts a moralizing discourse to combine brain research with robotics and computational sciences, plus clinical psychology and analytic philosophy, to define the posthuman as a super-human meta-rationalist entity. Bostrom is a champion of the Capitalocene, and his approach receives ample economic support from both the scientific community—“royal science”—and the corporate world.⁴⁸

It is very difficult to say anything about this passage as it does not even attempt to explore and understand what it is talking about. Here a few concerns: it mistakes Bostrom’s scholarly work on the prospects and dangers of superintelligence⁴⁹ for blind advocacy—and even for an actual “programme”—of bringing about such superintelligence; it misrepresents Bostrom’s transhumanist agenda as the overall imperative of the Future of Humanity Institute, which is engaged in investigating existential risks arising out of human activity and is focused on recent developments in (bio)technology and, indeed, AI research;⁵⁰ unlike the analysis of the previous pages indicating that transhumanism aims at something other than the Enlightenment perfectibility of man (it aims at that which is more exceptional and better than human, not simply that which is a better human), it uncritically gives in to the self-description of transhumanism as heirs of the Enlightenment.

⁴⁷. Braidotti, *The Posthuman*, 157.

⁴⁸. Rosi Braidotti, “A Theoretical Framework for the Critical Posthumanities,” *Theory, Culture & Society* (2018), online-first article DOI: 10.1177/0263276418771486, 18.

⁴⁹. Nick Bostrom, *Superintelligence: Paths, Dangers, Strategies* (Oxford: Oxford University Press, 2014).

⁵⁰. For more, visit the website of the Future of Humanity Institute: <https://www.fhi.ox.ac.uk/>.

As serious as they may be, these are only minor concerns. Most important, the quoted passage resembles more the spirit of Hungarian government propaganda than the spirit of scholarship still associated with the humanities. Just like the former, Braidotti's critical posthumanism claims that technological posthumanity is a more powerful, evil alternative. The aims and means of technological posthumanity as serving the promotion of the Capitalocene⁵¹ and corporate interests are pictured here in no better terms—and with the same number of actual references—than the aims and means of the European Union, the United Nations, the Hungarian opposition, civil society organizations, and NGOs are pictured in Hungarian government propaganda as soldiers of George Soros, all working on implementing the plan to destroy Western Christianity through directed mass migration. Needless to say, such “engagement” with technological posthumanity may indeed fulfill the function of legitimizing the agenda of critical posthumanism. But it does so at the price of sacrificing scholarly conduct and cementing the very division between the two cultures that it otherwise claims to wish to overcome.

To avoid misunderstanding, I do not want to advocate either technological posthumanity or a less combative version of critical posthumanism. The only thing I wish to advocate is the necessity of investing more in understanding and exploring both. And what I especially want to advocate is to develop a (post)humanities *understanding* of technological posthumanity. For anyone who, like I do, has a background in the tradition of the (post)humanities, this may be the most challenging task. Accordingly, my criticism of Braidotti is less an overall repudiation of the *concerns* of critical posthumanities (much of which I think it is crucial to discuss) and more an expression of disappointment with the current shape of (post)humanities scholarship. Living up to the task would require, as a first step, a more profound exploration of the other of the two cultures we are about to develop—precisely in order to avoid developing them. In this, I am absolutely in sympathy with Braidotti's critical posthumanism.

For now, however, what binds together critical posthumanism and technological posthumanity is only a shared sense that momentous changes are taking place in the world. And what separates them is practically everything they respectively think about what constitutes those momentous changes, including the vocabulary in which they conceptualize the challenge and the objectives they

⁵¹. “Capitalocene” is a term advocated most strongly by Jason Moore as an alternative to the notion of the Anthropocene. See Jason Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso, 2015). Whereas the Anthropocene emerged within earth system science and refers to human-induced changes in the earth regarded as a system, the notion of the Capitalocene shifts a scientific discussion of how anthropogenic changes can be detected in the earth system to the question of the responsibility of “capitalism” in bringing about the current condition. For the merits and shortcomings of the way in which the humanities and social sciences engage with the Anthropocene predicament, see Zoltán Boldizsár Simon, “The Limits of Anthropocene Narratives,” *European Journal of Social Theory* (2018), online-first article, DOI: 10.1177/1368431018799256.

pursue in the midst of the changes. It seems to me that the concerns of both cultures are pertinent today. Not necessarily the ways in which they are currently phrased in both critical posthumanism and technological posthumanity, but the concerns themselves that the two cultures express in their respective ways. It may very well be that they cannot even be addressed by inventing a new vocabulary with shared concepts. But maybe they can, and this is precisely what we need to find out in the first place. In order to be able to venture jointly into the creation of a new knowledge economy designed to come to terms with recent technological and ecological future prospects, first we need to develop a more profound understanding of each other, preferably before we continue to advocate particular agendas that nevertheless claim validity concerning the entire scholarly enterprise and the entirety of planetary life.

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