# The Transhumanist Challenge to Liberal Individuals

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**Abstract:** Transhumanist technologies and thinkers pose a grave threat to political liberalism. While previous work has indicated that transhumanist technologies could weaken liberal democracy by introducing inequalities or eliminating shared grounds of intersubjective rationality, I argue that transhumanist technologies can fully undermine the most essential of liberal principles: individual citizens. I show that transhumanist philosophy and the technologies it endorses aim at the elimination of individual subjects by breaking down all conceptual and actual barriers between subjects and objects as well as different subjects. I then outline the importance of individual identity and subjecthood in conceptions of liberalism and suggest that liberals must either accept the transhumanist horizon or consider anew more substantive accounts of human nature they have previously sought to avoid.

'We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.'
T.S. Eliot, Four Quartets

# Introduction

Ever since Elon Musk bought Twitter in late 2022, his companies and political influence have been seen as increasingly threatening by mainstream proponents of liberal democracy, especially after his appointment as Senior Advisor to the President in the Trump Adminis-

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tration. Musk's actions and the opposition they provoked contributed to a pre-existing climate of anxiety about the future of liberal democracy that views populism, aspiring far-right autocrats, and misinformation as the main threats to liberal societies today.1 Yet amidst the controversy around Musk's various ventures and the broader apparent threats to liberalism, one of his companies—Neuralink—has steadily made announcements that attract far less attention. Neuralink produces brain-computer interface devices (BCIs) that can be implanted into humans' skulls, with its first implant carried out in early 2024.2 Though they remain in beta testing, BCIs such as Neuralink attempt to fuse human minds with the internet, AI, and other digital entities. Currently intended to be therapeutic for those lacking certain capacities from injury or birth, many BCI developers seek to eventually produce truly transhumanist technologies that contribute to 'the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values.'3

<sup>1</sup> See Jan-Werner Müller, What is Populism? (University of Pennsylvania Press, 2016); Timothy Snyder, On Tyranny: Lessons from the Twentieth Century (Crown, 2017); Jason Stanley, How Fascism Works: The Politics of Us and Them (Random House, 2018); Madeline Albright, Fascism: A Warning (HarperCollins, 2018); William A. Galston, Anti-Pluralism: The Populist Threat to Liberal Democracy (Yale University Press, 2018); Anne Applebaum, Twilight of Democracy: The Seductive Lure of Authoritarianism (Knopf, 2021); Francis Fukuyama, Liberalism and Its Discontents (Farar, Strauss, Giroux, 2022); Daniel Steinmetz-Jenkins, ed., Did It Happen Here?: Perspectives on Fascism and America (W. W. Norton, 2024); Kara Swisher, 'Move Fast and Destroy Democracy', *The Atlantic*, 5 March 2025, https://www.theatlantic. com/technology/archive/2025/03/the-elon-musk-way-move-fast-and-destroy-democracy/681937/.

<sup>2</sup> Some research seeks to introduce BCIs without open brain surgery. See Peter Mitchell, Sarah C.M. Lee, Peter E. Yoo, et al., 'Assessment of Safety of a Fully Implanted Endovascular Brain-Computer Interface for Severe Paralysis in 4 Patients: The Stentrode With Thought-Controlled Digital Switch (SWITCH) Study', JAMA *Neurology* 80.3 (2023), 270-278.

<sup>3</sup> Humanity Plus, 'Transhumanist FAQ', n.d., https://www.humanityplus.org/ transhumanist-faq. Humanity Plus is an organization of scholars and activists that 'advocates...to expand human capabilities'. The group especially focuses on extending the human lifespan and 'slowing down and reversing the damages of aging', as well as more generally expanding what are considered 'normal' human capacities with various technologies. Musk is not a main source of transhumanist ideas for me in this article, but his rhetoric and the initiatives of his companies reflect the The response to Neuralink's announcements, in contrast to other events in 'Muskworld', has largely been silence: a few commentators alternated between cheering its possibilities, doubting its potential, and drawing attention to the animals killed during testing.<sup>4</sup> Notably absent from these commentaries was any discussion of whether Neuralink posed a threat to liberal democracy, as many suggested of Musk's other activities. That media silence has been reflected in the academic scholarship on BCIs more generally, where there are plenty of figures who critique transhumanism but few who attend to the distinct ways that BCIs might challenge liberal political order.

This article is not the first to address liberalism and transhumanism—on the contrary, in recent years their relationship has been frequently scrutinized.<sup>5</sup> Ben Ramanauskas has tentatively endorsed transhumanism on liberal grounds of increasing autonomy,<sup>6</sup> while critics such as Francis Fukuyama, Michael Sandel, and Jürgen Habermas have argued that transhumanist technologies could harm liberal

popularization of transhumanist philosophy. He has, for example, said that he seeks 'a symbiosis with artificial intelligence'. See Sigal Samuel, 'Elon Musk Reveals His Plan to Link Your Brain to Your Smartphone', *Vox*, July 17, 2019, https://www.vox.com/future-perfect/2019/7/17/20697812/elon-musk-neuralink-ai-brain-implant-thread-robot; Lolo Jacques, P.N. Mayer, and Claude-Hélène Mayer, 'Elon Musk 4.0: A Psychobiography of Transhumanism and Frankl's Existential Meaning Theory', *International Review of Psychiatry* (2025), 1–18.

<sup>&</sup>lt;sup>4</sup> Musk's announcement about the first Neuralink surgery, for instance, received just a few paragraphs in a single article in the *New York Times* in January 2024, compared to dozens of stories about his ownership of Twitter, and hundreds on his other political and entrepreneurial interventions. The *Times* published a single follow-up story on Neuralink in May 2024. See Christina Jewett, 'Despite Setback, Neuralink's First Brain-Implant Patient Stays Upbeat', *The New York Times*, 23 May 2024, https://www.nytimes.com/2024/05/22/health/elon-musk-brain-implant-arbaugh. html.

<sup>&</sup>lt;sup>5</sup> The posthumanist challenge of defining the human in reference to the animal and plant world has been treated by scholars such as Joshua Foa Dienstag. Dienstag insists that the human/nature divide must be maintained, but he opts for a linguistic/existential definition of humans rather than anything metaphysical. Dienstag's approach may succeed vis-à-vis the nonhuman natural world, but it falters in the face of increasingly sophisticated artificial technologies capable of—at least on the surface—using language. See Joshua Foa Dienstag, 'Dignity, Difference, and the Representation of Nature', *Political Theory* 49.4 (2021), 613-36.

<sup>&</sup>lt;sup>6</sup>Ben Ramanauskas, 'BDSM, Body Modification, Transhumanism, and the Limits of Liberalism', *Economic Affairs* 40 (2020), 85–92.

democracy by introducing profound new inequalities into society,<sup>7</sup> eliminating a sense of the givenness of human life,8 or damaging shared grounds of intersubjective rationality.9 Others including Susan Levin, Jay Conte, and Ralph Weir have focused on attacking transhumanism's coherence. 10 Assessments of BCIs have largely been limited to the potentially unpleasant experiences of those who have received the implants.<sup>11</sup> But these critiques have centred on the threat of transhumanism to certain operational values or procedures within liberal practice rather than liberalism's theoretical foundations. By contrast, my focus is on liberalism's core premises and metaphysical presuppositions: namely, how liberal and transhumanist philosophies understand the category of the human and how this is reflected in their attitudes toward BCIs.

Transhumanist thinkers and technologies are devoted to actualizing in material reality a philosophic commitment to unbounded individuals, a direct challenge to the necessarily autonomous individuals at the heart of political liberalism. Though transhumanists often identify as hyper-individualists, in a sense consistent with libertarian liberalism, I show that the instantiation of their ideas and technologies in material reality poses a grave threat to liberal ideas of the individual and by extension liberal institutions. Liberals have not adequately considered the grave questions that transhumanism raises, including whether in a transhumanist world 'individuals' will obviously remain self-originating sources of claims—and if not, how democracy would work without discrete citizens who vote and for

<sup>7</sup> Francis Fukuyama, Our Posthuman Future: Consequences of the Biotechnology Revolution (Farrar, Straus & Giroux, 2002); Steve Fuller, 'Morphological Freedom and the Question of Responsibility and Representation in Transhumanism', Confero 4.2 (2016), 33-45. See also Jonathan Taplin, The End of Reality: How Four Billionaires Are Selling a Fantasy Future of the Metaverse, Mars, and Crypto (PublicAffairs, 2023). <sup>8</sup> Michael J. Sandel, The Case Against Perfection: Ethics in the Age of Genetic Engineering (Harvard University Press, 2007).

<sup>9</sup> Jürgen Habermas, *The Future of Human Nature*, tr. H. Beister and W. Rehg (Polity, 2003).

<sup>10</sup> Jay Conte, 'Transhumanism and the "Stable Self" (Canadian Political Science Association, 2016); Susan B. Levin, Posthuman Bliss? The Failed Promise of Transhumanism (Oxford University Press, 2021); Ralph Stefan Weir, 'The Logical Inconsistency of Transhumanism', Philosophy, Theology, and the Sciences 10.2 (2023), 199–220.

<sup>11</sup> Frederic Gilbert et al., 'I Miss Being Me: Phenomenological Effects of Deep Brain Stimulation', AJOB Neuroscience 8.2 (2017), 96-109.

whose sake government supposedly exists. Given these threats, liberals can no longer sidestep the metaphysical question 'What is a person?' and restrict themselves to a pragmatic definition of individuals that takes their ontological existence for granted. Since transhumanism has put the person into question, liberal antifoundationalism is no longer sustainable.

The paper has two main parts. First, I argue that transhumanist philosophy and the BCI technologies it endorses aim at the elimination of individual subjects by breaking down all conceptual and actual barriers between individuals and technologies, and even between individuals. Though sceptics might consider transhumanism a remote and implausible phenomenon that only concerns science fiction and distant generations, I show how the technologies are already changing what it means to be human and can reasonably be expected to continue to do so. Second, I outline the importance of individual identity and subjecthood in John Rawls' political liberalism. In the conclusion, I put these two parts together and suggest that political liberals must realize that their political assumption about the existence of individuals cannot avoid metaphysical foundations given our altered technological landscape. As the transhumanist challenge reveals, it is entirely plausible that technology will disprove the self-evident existence of autonomous liberal individuals. In such circumstances, I argue that liberalism's method of avoiding metaphysics is unfeasible, and we will have to decide whether to accept transhumanism's comprehensive doctrine or recommit to a more classical, metaphysical understanding of human life.

Finally, I would like to note that Rawls' political liberalism is not the only political theory that transhumanism threatens. Transhumanism is incompatible with—or at least challenges the premises of—a wide range of individualist political philosophies, such as Marxism, Kantianism, agonism, anarcho-capitalism, communism, and libertarianism, and the article could have been written with a focus on any one of these theories. But I have chosen Rawlsian political liberalism because I take it to be the most widespread and commonly defended form of political philosophy today, even as Rawls's influence has notably declined from its peak in the 1990s. I also believe that Rawls's theory continues to capture the operating assumptions of public institutions in Western liberal democracies, especially insofar

as politicians and intellectuals remain resistant to overtly defending a metaphysical doctrine for fear of being labelled intolerant. In showing how transhumanism threatens core institutions of political liberalism and makes avoiding a metaphysical definition of individuals impossible, this article is to some degree consistent with recent work by thinkers such as Samuel Moyn and Katrina Forrester that historicize political liberalism and question its suitability to our current moment.<sup>12</sup> Unlike these other studies, however, my focus on the historical contingency of political liberalism's account of the individual shows specifically how liberal theory's antifoundational approach to human nature cannot succeed under the twenty-first century technological conditions. In the face of probable transhumanist futures, I conclude by offering two possible postliberal paths forward.

### 1. Transhumanism and Individuals

In her succinct appraisal of transhumanism, Susan Schneider describes it as a 'philosophical, cultural and political movement which holds that the human species is now only in a comparatively early phase and that its very evolution will be altered by developing technologies.'13 I argue here that transhumanism is a growing school of thought—instantiated in technologies it endorses—with a metaphysical doctrine of unbounded individuals. This metaphysical doctrine denies that there is such a thing as an essentially human agent, or that individual 'natural' humans are or should be the basis for how we think about politics or society. I focus on how transhumanists have an unbounded account of 'human nature', how they welcome the possibility of dissolving distinct persons, and how these convictions are already being instantiated in technologies.

Transhumanists often make claims in broad terms and do not draw clear distinctions between their general metaphysical ideas or modal notions, specific claims about the present reality they believe technology has already instantiated, and future circumstances that

<sup>&</sup>lt;sup>12</sup> Katrina Forrester, In the Shadow of Justice: Postwar Liberalism and the Remaking of Political Philosophy (Princeton University Press, 2019); Samuel Moyn, Liberalism Against Itself: Cold War Intellectuals and the Making of Our Times (Yale University Press, 2023).

<sup>&</sup>lt;sup>13</sup> Susan Schneider, 'Future Minds: Transhumanism, Cognitive Enhancement, and the Nature of Persons', in The Penn Center Guide to Bioethics, ed. V. Ravitsky et al. (Springer, 2009), 95-111, at 95.

are likely—but not certain—to occur. Unlike many other philosophic traditions, transhumanism does not yet possess any 'giants' whose work might be taken as synecdoche for it. These two facts pose a challenge to any serious study of transhumanist ideas: while often underdeveloped philosophically, they are increasingly actualized in material reality to a greater degree than competing schools of thought. To address this interpretive challenge, I emphasize a few key transhumanists such as Nick Bostrom, James Hughes, and Julian Savulescu, and also supplement my analysis of transhumanist work with reference to a related school of philosophy that has developed in the past 40 years, new materialism.<sup>14</sup> New materialists share many of the same convictions as transhumanists yet offer more engagement with the substantive philosophic problems at play. They do not agree with transhumanists on many fronts, as I will note. But I reference their work—especially Jane Bennett's—because they share a certain metaphysical horizon with transhumanists and help us understand transhumanist aspirations.<sup>15</sup> In the following sections, I disentangle transhumanism's metaphysical and ontological claims, as well as its predictions for the future.

# Transhumanism's Metaphysical Claims

Though transhumanists often ignore such questions and even seem to be committed to a form of hyper-individualism, an unlimited account of selfhood is central to their theory and praxis. They generally point towards the possibility (and desirability) of abolishing humans as they have heretofore existed, <sup>16</sup> and unite around a belief that identity should be determined only by an agent's will or desires at a given moment, unconstrained by any constant physical or conceptual limit, such as human finitude, particularity, and the dependence of

<sup>&</sup>lt;sup>14</sup> Though its popularity is more recent, transhumanism's roots are in older work such as Norbert Wiener, *Cybernetics, or Communication and Control in the Animal and Machine* (Harvard University Press, 1948).

<sup>&</sup>lt;sup>15</sup> Jane Bennett, 'A Vitalist Stopover on the Way to New Materialism' in *New Materialisms: Ontology, Agency, Politics*, eds. D. Coole and S. Frost (Duke University Press, 2010), 47. Bennett's 2010 book *Vibrant Matter*, for instance, has accrued more than 20,000 citations in 15 years. See Bennett, *Vibrant Matter: A Political Ecology of Things* (Duke University Press, 2010).

<sup>&</sup>lt;sup>16</sup> Conte, 'Transhumanism and the "Stable Self", 5-6; Joachim Diederich, 'A Critique of Transhumanism', 2023, 9, https://www.researchgate.net/publica-tion/369591051A\_Critique\_of\_Transhumanism.

mind upon a fragile body. Nick Bostrom, perhaps the world's most prominent transhumanist scholar, writes overtly in his 'Transhumanist FAQ' that transhumanists define humans not by their physical and psychological capacities but by their wills and desires. He affirms technologies that further these wills and desires as intrinsically good for humanity.<sup>17</sup> Bostrom means that we should not refer to any pre-existing bodily forms or capacities in conceptualizing the human. He explicitly attacks figures such as Leon Kass and Francis Fukuyama for being deluded that there exists any 'mysterious essential human quality [or] "Factor X"' sufficient to define human existence.<sup>18</sup> Instead, Bostrom insists that we must identify ourselves with our ability to make choices about our lives, an ability we may use to change our physical form, augment current capacities, or merge our bodies and psyches with other entities. We do not have an essence that puts fundamental limits on what we are or should be. Rather, what we are is up to us. Other transhumanists, such as Woodrow Barfield, emphasize that this absence of background constraints on human becoming lends itself to sudden and significant shifts in the fundamental identity of the species. At present, for instance, humans are becoming 'less biological and more "digital technological".'19

For all their gleeful denunciations of superstitious essentialism, however, transhumanists do not often examine the philosophic premises underlying their claim that there is no 'Factor X' definitive of human life. For a deeper understanding of how the position functions, I turn to the work of new materialist Jane Bennett. (Though I will also clarify where new materialism diverges from transhumanism.) The key argument of new materialism, implicitly present when transhumanists describe human-machine hybrids as 'transhumans', is that humans have no immaterial essence such as a form, soul, spirit, or vital life force that sets boundaries around what a human is or can become. As a result, humans and all other beings are always part

<sup>&</sup>lt;sup>17</sup> Nick Bostrom, 'The Transhumanist FAQ', 2003, https://nickbostrom.com/ views/transhumanist.pdf.

<sup>&</sup>lt;sup>18</sup> Nick Bostrom, 'In Defense of Posthuman Dignity', Bioethics 19.3 (2005), 202-214, at 204-05, 209.

<sup>&</sup>lt;sup>19</sup> Woodrow Barfield, 'The Process of Evolution, Human Enhancement Technology, and Cyborgs', Philosophies 4.10 (2019), 1-14, at 6. Barfield acknowledges that these developments may introduce 'moral issues', but he devotes a mere paragraph to the subject and does not appear especially concerned.

of assemblages that mean we cannot singularly identify ourselves independent of them.

This is tantamount to rejecting the classical account of the human being, on which each individual is the combination of physical matter (hyle) and immaterial form (morph $\bar{e}$ ) that at once identifies them as a member of the class 'human' and marks them as a distinct individual of that class. This theory was never unanimously held, and thinkers especially disagreed on whether to emphasize matter or form as the principle of individuation, an issue that was complicated by interspecies difference.<sup>20</sup> Yet despite these disagreements, there is a clear coherence and consistency to the tradition. Though this account is often associated with religions such as Christianity and Islam, it stretches back to pre-Christian pagan philosophy in ancient Greece and many other cultural traditions, including some Native American ones.21 As John Cottingham has shown, even the irreligious often assent to some idea of an immaterial life-force that combines with our material being to render us fundamentally distinct from both nonhuman beings and other individual humans.<sup>22</sup>

We can see the consistency in the classical 'human essence' account of humans when we observe how it is squarely dismissed by new materialist philosophers including Bennett, Samantha Frost, and Diana Coole, who argue that there is nothing immaterial to humans, nothing in living things that is fundamentally not present in other things typically considered non-living.<sup>23</sup> Because they deny humans any formal identity, new materialists generally—and Bennett especially—argue that describing something as human or non-human is an inaccurate accounting for the world.<sup>24</sup> 'Human', in new materialist thinking, does not reflect a descriptive or normative set of

<sup>&</sup>lt;sup>20</sup> In medieval thought, individuality was often defined by the body, not the soul. Other theories did not maintain that souls were bounded entities, including quite a few Averroist and Franciscan thinkers. Thanks to Jose Maria Andres Porras for pointing this out to me. See Robert Pasnau, *Metaphysical Themes* 1274-1671 (Oxford University Press, 2013).

<sup>&</sup>lt;sup>21</sup> Samuel Piccolo, 'Nature in Native American Political Thinking', *American Political Thought* 131 (2024), 1-29, at 16-18.

<sup>&</sup>lt;sup>22</sup> John Cottingham, In Search of the Soul (Princeton University Press, 2020).

<sup>&</sup>lt;sup>23</sup> Diana Coole and Samantha Frost, 'Introducing the New Materialisms' in *New Materialisms: Ontology, Agency, and Politics*, eds. D. Coole and S. Frost (Duke University Press, 2010), 1-43, at 20–21.

<sup>&</sup>lt;sup>24</sup> Bennett, Vibrant Matter, 4.

characteristics that belong to a specific discrete being.

Instead, Bennett insists that human abilities such as cognitive capacities, actions, or agency are merely one variation of the 'thing-power' that exists in 'nonhuman bodies, forces, and forms'.25 'Thing-power' is simply the ability to enact changes in the world, and for new materialists it means acknowledging that 'these capacities are manifest in varying degrees across different species of being', and 'that they are indelibly material in their provenance.' As such, 'the difference between humans and animals, or even between sentient and non-sentient matter, is a question of degree more than of kind.'26 Denying the existence of any human essence or soul, and suggesting that human agency is on a 'flat' continuum with the agency of all other things leads to a third commitment, perhaps new materialism's most straightforward claim of all: there are not 'humans' and nonhumans but only groupings of 'assemblages'.

'Assemblages' are 'ad-hoc groupings of diverse elements, of vibrant materials of all sorts. Assemblages are living, throbbing confederations' that are uneven within, as 'power is not distributed equally across its surface.'27 As an example, Bennett describes the process of writing her book Vibrant Matter not as the product of her agency as a single human but one emerging

from the confederate agency of many striving macro- and microactants: from 'my' memories, intentions, contentions, intestinal bacteria, eyeglasses, and blood sugar, as well as from the plastic computer keyboard, the bird song from the open window, or the air or particulates in the room, to name only a few of the participants. What is at work here on the page is an animal-vegetable-mineral-sonority cluster with a particular degree and duration

For Bennett and other new materialists, there is no such thing as a human essence or human agent—only human agency. And human agency arises only by accident within 'assemblages' that rely upon

<sup>&</sup>lt;sup>25</sup> Bennett, Vibrant Matter, 122.

<sup>&</sup>lt;sup>26</sup> Coole and Frost, 'Introducing the New Materialisms', 21.

<sup>&</sup>lt;sup>27</sup> Bennett, *Vibrant Matter*, 23-24.

<sup>&</sup>lt;sup>28</sup> Bennett, Vibrant Matter, 23.

the 'thing-power' of the other entities that comprise them.<sup>29</sup> This is a complete rejection of the boundedness of the classical 'ensouled' account. Whereas those committed to describing living beings, including humans, as the unity of immaterial (mind, soul, etc.) and material (limbs, organs, etc.) elements argue that this unity is a discrete agent, new materialists deny that this unity can be meaningfully distinguished from the assemblages of which it is a part.

To be clear, new materialism is not fully congruent with transhumanism. New materialists tend to be diagnostic in their aims and far less overtly enthusiastic about employing technology to transform humans. New materialists are committed to the idea that reality is constituted by material relations exclusively, while some transhumanists—in their appeals to uploading consciousness to the cloud—clearly have visions of a realm of mind that transcends embodiment. Perhaps more immediately relevant, transhumanists often claim to be for increasing human autonomy and distinctiveness via technological change, while new materialists are far more concerned with flattening what they believe to be erroneous and harmful hierarchies between humans and nonhumans, living and non-living. Only some thinkers, such as Donna Haraway, fit in both camps. Nevertheless, with the detailed conceptual claims of new materialists

<sup>&</sup>lt;sup>29</sup> Transhumanist Andy Clark makes a similar argument. See Andy Clark, *Natural-Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence* (Oxford University Press, 2004).

<sup>&</sup>lt;sup>30</sup> Bennett, *Vibrant Matter*, ix. For a comparison of posthumanism and transhumanism, see Cary Wolfe, *What Is Posthumanism? Beyond Humanism and Anthropocentrism* (University of Minnesota Press, 2009); Donna Haraway, 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century' in *Simians, Cyborgs, and Women: The Reinvention of Nature* (Routledge, 1991), 149-81.

<sup>&</sup>lt;sup>31</sup> Haraway, 'A Cyborg Manifesto'. As Cary Wolfe observes, Haraway is no doubt skeptical of transhumanist claims of rational perfectibility, even if she has no theoretical objections to human-machine cyborgs. See Wolfe, *What Is Posthumanism?*, xiii. Posthumanists are often wary of transhumanists because the latter see transformations of the self as ultimately in the service of the self. As N. Katherine Hayles puts it, transhumanists do not abandon the 'autonomous liberal subject' but expand it into the 'realm of the posthuman'. See Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (University of Chicago Press, 1999), 287. For my purposes, these distinctions are not crucial, since both traditions reject the existence of a normative *natural human*, and Hayles and others do not appreciate how transhumanists would effectively abandon the autonomous liberal subject even as they might claim to expand its power.

such as Bennett, we can see how transhumanists also hold a position that denies any bounded immaterial essence to humans, and why they endorse our self-transformation into human-machine assemblages without fearing that we are losing what it means to be an individual human. Transhumanists and new materialists also share areas where their cogency is questionable. It is unclear how exactly new materialists can discretely distinguish one assemblage from another or what exactly life would look like if we stopped abiding by the distinctions between entities. It is also unclear how transhumanists can simultaneously deny that there is any human essence but also seek to defend and augment human choice and autonomy—who or what is it that they believe is making the choices? Though my purpose in this section is simply to understand, not critique transhumanism or new materialism, the fact that they are assailable on similar grounds reflects their fundamental metaphysical similarities.

Present and Future Improvements to the 'Human' In an essay called 'Letter from Utopia', Nick Bostrom pretends to be a posthuman being writing from an idyllic techno-future to the humdrum humans of today:

I am one of your possible futures. One day, I hope, you will become me. Should fortune grant this wish, then I am not just a possible future of yours, but your actual future: a coming phase of you, like the full moon that follows a waxing crescent, or like the flower that follows a seed. I am writing to tell you about my life—how marvelous it is—that you may choose it for yourself.<sup>32</sup>

Bostrom's suggestion in the last line that we may 'choose' this sort of future for ourselves is emblematic of the most significant aspect of transhumanists' reconception of the human: we can choose to be whatever we want, as there is nothing about being 'human' that restricts us to a fixed identity. Transhumanists claim that the idea of the 'self' is a fiction that we ought to radically transform by merging ourselves—including our patterns of thought—further with technology. Steve Fuller describes this transhumanist commitment as 'morphological freedom', or the presumption that we are 'free to be whoever

<sup>&</sup>lt;sup>32</sup> Nick Bostrom, 'Letter from Utopia', Studies in Ethics, Law, and Technology 2.1 (2008), 1-7, at 1.

we want'.33

At the mild end of such identity-changes, transhumanists suggest that merging our thoughts with technology will allow us to follow 'patterns of thinking' that we prefer. Susan Schneider offers some prosaic examples, such as the 'deletion of a few memories to remove bad chess playing habits and facilitate better chess strategies.'34 But not only do transhumanists seek new individuals capable of editing their minds to improve certain skills, they also endorse the possibility of erasing individual identity altogether. James Hughes argues that technology will eventually leave us no choice but to admit that discrete self-aware persons are fictions. He envisions a world in which, having successfully fused our brains with computers, we can 'easily modify, borrow, or drop, merge with others, and separate any of their external and internal features', with the result that 'there won't be distinct lines between individuals anymore.'35 Such complete control over the brain will 'slowly make clear that cognition, memory and personal identity are actually many processes that can be disaggregated'.36

Hughes identifies six possible transhumanist technologies that would result in the dissolution of a singular self. These include: (1) 'identity malleability', in which there is 'parent, social, and personal control of memory, identity, and personality'; (2) radically enhanced posthumans; (3) the identity sharing concomitant to the practice of shared or sold memories, thoughts, and skills; (4) identity cloning; (5) distributed identity, wherein distinct persons are 'distributed over, or sharing, set of bodies and machines'; and (6) group identity, where a number of bodies and machines are 'integrated into a collective identity'.<sup>37</sup> The most widely praised and endorsed of Hughes's projects is a proposed technology involving the 'uploading' of an individual's mind from the brain to what we would now call a computer system. This uploading could supposedly occur either slowly, 'replacing the nervous system with artificial components one neuron at the time', or in a moment, with a comprehensive brain-scan that encodes one's

<sup>&</sup>lt;sup>33</sup> Fuller, 'Morphological Freedom', 34.

<sup>&</sup>lt;sup>34</sup> Schneider, 'Future Minds', 8.

<sup>&</sup>lt;sup>35</sup> James Hughes, 'The Future of Death: Cryonics and the Telos of Liberal Individualism', *Journal of Evolution and Technology* 6.1 (2001), 1-24, at 16.

<sup>&</sup>lt;sup>36</sup> Hughes, 'The Future of Death', 16.

<sup>&</sup>lt;sup>37</sup> Hughes, 'The Future of Death', 16.

thoughts, feelings, and memories on a computer. Either way, Hughes promises, uploading will 'free us from our biological limitations'.38 Hughes and others see this uploading as an eminently desirable development, and choosing it is a legitimate use of our ability to choose our own identity.

Transhumanist Julian Savulescu has predicted and endorsed similar transformations to those described by Hughes. Savulescu's thinking begins with a simple argument about human enhancement: that performance-enhancing drugs ought to be allowed in competitive athletics.<sup>39</sup> His claim is essentially that humans naturally differ in their levels of relevant hormones, and that this genetic lottery ought not to restrict our freedom. As Jay Conte explains, Savulescu

cleverly forces readers to ask: On what grounds could you permit treatment for a disorder such as Cystic Fibrosis but not for EPO production [red blood cell production for endurance athletes]? Why is a genetic disadvantage seen to be unnatural, while a genetic advantage is said to be perfectly natural?<sup>40</sup>

Savulescu's argument is a logical extension of the transhumanist foundation that there is no such thing as a natural human being, and therefore it is wrong to prevent augmentation. Surely Savulescu is thrilled with the announcement of the first 'Enhanced Games', an Olympics-style event without doping restrictions that has attracted investment from both Peter Thiel and Donald Trump, Jr. 41

But Savulescu's description of boundary-breaking does not end with the bodies of juiced-up swimmers and extends to the enhanced minds of regular people in a manner akin to Hughes's articulation. In a co-authored article called 'Merging Minds', he breaks down future entities into four categories of collective beings: Digiminds, UniMinds, NetMinds, and MacroMinds.<sup>42</sup> While the first two are

<sup>&</sup>lt;sup>38</sup> Weir, 'The Logical Inconsistency of Transhumanism', 201.

<sup>&</sup>lt;sup>39</sup> Julian Savulescu, 'Justice, Fairness, and Enhancement', Annals of the New York Academy of Science 1093.1 (2006), 321–38.

<sup>&</sup>lt;sup>40</sup> Conte, 'Transhumanism and the "Stable Self"', 13.

<sup>&</sup>lt;sup>41</sup> Joshua Gabert-Doyon, 'Donald Trump Jr. Invests in "Steroid Olympics", Financial Times, 13 February 2025, https://www.ft.com/content/8f065bdb-1574-4327a24e-3cf193232caa.

<sup>&</sup>lt;sup>42</sup> Julian Savulescu et al., 'Merging Minds: The Conceptual and Ethical Impact', Neuroethics 16.12 (2023), 1-17, at 5.

best understood as types of enhanced human brains built on the 'key starting block' of BCIs,<sup>43</sup> the last two involve many different individuals exchanging cognitive information via 'multi-directional' Brain-Computer-Brain Interfaces. These are essentially technologies that allow our minds to be linked to others in the way that different computer processors are connected via the internet, which means the formation of new 'collective minds'.<sup>44</sup>

With these technologies, Savulescu and his co-authors argue that the individual identity and agency of their constitutive beings will be radically attenuated. Of UniMinds, for instance, they write:

If two individuals unify their minds using a BBI [Brain-Brain Interface] and perform an action in that state, and then disconnect from that BBI, are those two individuals (a) collectively responsible for the action (b) individually responsible for the action by virtue of now being two separate individuals, or (c) individually responsible for the action by virtue of having acted as one (unified) agent? Are the two individuals equally responsible? Or perhaps there is no individual who is responsible anymore, as the responsible agent (the UniMind) has technically ceased to exist?<sup>45</sup>

In this work and others, Savulescu does not take a clear stand on how, precisely, moral agency or responsibility should be conceived in a world of NetMinds and MacroMinds. But he does insist that we ought to move away from 'the conceptual binarity—individual or collective—dominating contemporary thinking about moral agency and responsibility'.<sup>46</sup> In another article, Savulescu notes that BCIs and their influence on 'our' thoughts and emotions will 'at the very least cause friction with relation to common-sense accounts of autonomy, and subsequently moral responsibility'.<sup>47</sup> In short, with BCIs in every skull, and instantaneous connections between our own brains, those of others, and AI programs, the common-sense idea of separate people, separate minds, and separate agency quickly breaks

<sup>&</sup>lt;sup>43</sup> Savulescu et al., 'Merging Minds', 3.

<sup>&</sup>lt;sup>44</sup> Savulescu et al., 'Merging Minds', 4-6.

<sup>&</sup>lt;sup>45</sup> Savulescu et al., 'Merging Minds', 12.

<sup>&</sup>lt;sup>46</sup> Savulescu et al., 'Merging Minds', 15.

<sup>&</sup>lt;sup>47</sup> Julian Savulescu et al., 'The Ethics of Thinking with Machines: Brain-Computer Interfaces in the Era of Artificial Intelligence', *International Journal of Chinese & Comparative Philosophy of Medicine* 21, no. 2 (2023), 16.

down according to Savulescu and transhumanists more generally.

In these works, Savulescu does not dwell on another consequence of collective beings, namely the possibility that our participation in them might permit us to 'live' much longer than humans have traditionally been able to. (Though elsewhere, in an article endorsing genetic enhancements oriented to longevity, he notes that 'the truly significant enhancement would be immortality' and implies that we should hope for it).<sup>48</sup> For other transhumanists, however, the most important potential change that these technologies bring is indeed transcending—or in the very least indefinitely postponing—death. Many refer to traditions of thought that accept death as a natural element of living as 'deathist philosophies', and insist that 'death should be voluntary.'49 Simon Young goes so far as to call death an 'obscenity',50 and funders of transhumanist technologies such as Peter Thiel have been forthright about their efforts at immortality.<sup>51</sup> This anti-death position should not be surprising, since if there is no transhistorical essence to the human person, then there is no reason why we should be chained to the same end of life that all humans have traditionally experienced.

Some transhumanist thinkers admit that their conception of the self is radically different from the self as commonly understood in liberal democratic traditions. 'Radical longevity and cognitive enhancement will push liberal democratic society to adopt post-liberal individualist moral, legal, and political frameworks that do not assume personal identity', writes James Hughes. 'It is hard to discern... what meaning "liberty, equality, and fraternity" would have without the convenient fiction of autonomous individuals as citizens.'52

<sup>&</sup>lt;sup>48</sup> Julian Savulescu, 'Rational Freedom and Six Mistakes of a Bioconservative', *The* American Journal of Bioethics 19.7 (2019), 1-5, at 4.

<sup>&</sup>lt;sup>49</sup> Humanity Plus, 'Transhumanist FAQ'; Simon Young, Designer Evolution: A Transhumanist Manifesto (Prometheus Books, 2006), 42–44.

<sup>&</sup>lt;sup>50</sup> Young, Designer Evolution: A Transhumanist Manifesto, 42.

<sup>&</sup>lt;sup>51</sup> Mick Brown, 'Peter Thiel: The Billionaire Tech Entrepreneur on a Mission to Cheat Death', The Telegraph, 19 September 2014, https://www.telegraph.co.uk/ technology/11098971/Peter-Thiel-the-billionaire-tech-entrepreneur-on-a-mission-to-cheat-death.html; Ross Douthat, 'Peter Thiel and the Antichrist', New York Times, 26 June 2025, https://www.nytimes.com/2025/06/26/opinion/peter-thielantichrist-ross-douthat.html.

<sup>&</sup>lt;sup>52</sup> James Hughes, 'Transhumanism and Personal Identity', in *The Transhumanist* Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy

Likewise, Diana Coole and Samantha Frost argue that technological changes will render 'obsolete' many longstanding ethical and political categories. 'As scientists succeed in bridging species, artificially creating and extending human and animal life, and manipulating and synthesizing genes to create new life forms, they muddle the concepts and boundaries that are the ground for much ethical and political thinking', Coole and Frost insist. 'Smart synthetic life forms... challenge our very conception of ourselves as persons', because they make it impossible to maintain any sort of common-sense divide between individual humans and between humans and other forms of intelligent life.<sup>53</sup> Even as he welcomes these technological developments, Hughes concedes that 'contemporary transhumanism has yet to grapple with the radical consequences of the erosion of liberal individualism on their projects of individually chosen enhancement and longevity.'54 Transhumanists do not linger on the risks that these erosions pose, but it is telling that even those most enthusiastic about the changes recognize how disruptive they would be.

In sum, transhumanism rests on the philosophic denial there are factual or normative boundaries to the human being. Transhumanists seek to increasingly merge humans with technologies that prove the absence of these boundaries. They believe the idea of the autonomous individual, so foundational to liberalism, is a convenient fiction that has probably never existed and will soon be extinct. They contend we ought to work towards the elimination of existing conceptual limitations on the self, up to and including attitudes that treat death as inevitable.

By suggesting that we can and should choose to transform ourselves in ways that make our future existence unrecognizable to our present self, transhumanists may ultimately be advancing an incoherent philosophy. As Jay Conte has argued, transhumanists claim to elevate individual selves and their desires while endorsing developments that would seemingly abolish a ground for those very same selves or desires. Their metaphysics of motion does not leave room for the identification of any 'stable self'. 55 While I agree with Conte

of the Human Future (Wiley-Blackwell, 2013), 227-234, at 227.

<sup>&</sup>lt;sup>53</sup> Coole and Frost, 'Introducing the New Materialisms', 22.

<sup>&</sup>lt;sup>54</sup> James Hughes, 'Contradictions from the Enlightenment Roots of Transhumanism', *Journal of Medicine and Philosophy* 35.6 (2010), 622-640, 635.

<sup>&</sup>lt;sup>55</sup> Conte, 'Transhumanism and the "Stable Self"'.

in principle, philosophic incoherence does not mean that transhumanist convictions will be unable to instantiate themselves in the world, even if it does mean that the changes will not occur in the manner that they advocate and expect.

# Transhumanist Technologies Today and Tomorrow

Those unconvinced by transhumanism might be inclined to dismiss their ideas as dim possibilities. They might argue that the technologies are just extensions or accelerations of what is already possible or has been for some time. Though true immortality may always remain a pipe dream for the millenarian 'tech bros' in Silicon Valley, and many of the most ambitious technologies are likely a while away from full functionality, we must be honest about where certain technologies are intended to lead us, and how some are already beginning to transform what it means to be human.

To begin, transhumanists focus on the way human-made technologies are already integrated with what might be typically considered our independent selves. They argue that many of us are already a kind of transhuman, with implanted pacemakers, attached prosthetics, or iPhones that may as well be stitched to our palms. As Jay Conte has written, 'the only real difference between the WiFi-connecting millennial of today and [a cyborg future], the transhumanist will note, is one of speed.'56 For the transhumanist, a woman with a pacemaker, a prosthetic arm full of microchips, a cochlear implant, or Siri in her AirPods has become so enmeshed with technology that it does not make sense to describe her as merely 'human' in the sense of biological morphology used in previous centuries. Because so many of her everyday functions are dependent upon technology, she has already become a trans-human and is well on her way to becoming even more of one.<sup>57</sup>

Woodrow Barfield enthusiastically predicts that 'between now and the end of the century, we will see the development of more technology to replace biological parts, and to possibly create new features of human anatomy and brain functionality.' Though in this stage 'of human enhancement, artificial intelligence will exist pri-

<sup>&</sup>lt;sup>56</sup> Conte, 'Transhumanism and the "Stable Self", 4.

<sup>&</sup>lt;sup>57</sup> See Francesca Paolo Adorno, *The Transhumanist Movement* (Springer, 2021), 153–55.

marily on devices external to the human body', Barfield expects it to soon be replaced by direct implantation. 'Technology that is directly implanted in the brain will increase the computing and storage capacity of the brain, opening up new ways of viewing the world, and moving past the capabilities of the brain provided by biological evolution, essentially extending our neocortex into the cloud.'58 Barfield is talking about devices such as Neuralink that allow for a symbiosis between the human brain and the artificial 'brain' of AI neural networks.

Musk's Neuralink is indeed the most famous of BCIs in development, the sort of technology that transhumanists celebrate. The company surgically implants a small device—essentially a chip attached to a set of microscopic wire electrodes—in the brain to monitor and stimulate thousands of neurons.<sup>59</sup> The monitored activity is transmitted to a computer outside of individuals' skulls, which can likewise communicate back to the implanted chip and electrode wires. So far, the company has only tested the device in two quadriplegic men who use Neuralink to control computers and play games such as Counterstrike, Mario Kart, and chess.<sup>60</sup> Neuralink also recently received FDA approval to begin trials of 'Blindsight', a device that, when connected to the brain implant, will supposedly be able to restore sight to the blind or otherwise visually impaired.<sup>61</sup>

Such therapeutic purposes make BCIs seem like benign tools to restore function to those who have lost capacities by accident or bad genetic luck. Yet as Dvija Mehta explains, even therapeutic uses of Neuralink generate circumstances in which our sense of identity and selfhood quickly attenuates. In Mehta's telling, the difference between a mental 'happening' and 'doing' is a crucial distinction: we might think we want to do certain things but decide against ac-

<sup>&</sup>lt;sup>58</sup> Barfield, 'The Process of Evolution, Human Enhancement Technology, and Cyborgs', 11.

<sup>&</sup>lt;sup>59</sup> Brian Fiani et al., 'An Examination of Prospective Uses and Future Directions of Neuralink: The Brain-Machine Interface', *Cureus* 13.3 (2021), 1–4.

<sup>&</sup>lt;sup>60</sup> See "PRIME Study Progress Update—Second Participant," *Neuralink*, 21 August 2024, https://neuralink.com/blog/prime-study-progress-update-second-participant/.

<sup>&</sup>lt;sup>61</sup> Anshul Panda, 'Neuralink's "Blindsight": A New Hope for the Blind Receives "Breakthrough Device" Status from FDA', *International Business Times*, 18 September 2024, https://www.ibtimes.sg/neuralinks-blindsight-new-hope-blind-receives-breakthrough-device-status-fda-76140.

tualizing them. But with Neuralink the actualization is done by this implanted technology, and the gap between happening and doing is made far narrower. For Mehta, the only way to render BCI implantees' experience coherent is for them to 'think of the implant as part of their self-identity and within the borders of their inner life.'62 The disruption to how we conceive of identity may be minimal if therapeutic uses return users to what many would consider 'normal' human function, but we can already anticipate how BCIs' transformation of identity would work in more serious augmentations of function.

Crucially, these are only BCIs in their nascent form. Though its official stated intentions are vague—Neuralink's website says only that it hopes to 'expand how we experience the world' or 'unlock human potential tomorrow'—Musk has been clear of where he sees the technology going, describing Neuralink's long-term goal as 'human' AI symbiosis'. He has insisted that memories will be able to be uploaded to an external backup and then downloaded into other bodies or robot bodies. 'The future is going to be weird,' he conceded at a Neuralink demonstration. Speaking of Blindsight, Musk claims that it 'has the potential to be better than natural vision and enable you to see in infrared, ultraviolet or even radar wavelengths. '65

It is unlikely that everything Musk predicts will actually occur, and his theory of memory that allows him to believe ideas can be transferred like PDFs is specious, to say the least. Some serious neuro-specialists and engineers working in and around the BCI field are sceptical about the claims BCI-boosters make, including the plausi-

<sup>&</sup>lt;sup>62</sup> Dvija Mehta, 'Why Elon Musk's Neuralink Brain Implant Reframes Our Ideas of Self-Identity', *BBC News*, 17 April 2024, https://www.bbc.com/future/article/20240416-why-elon-musks-neuralink-brain-implant-reframes-our-ideas-of-self-identity.

<sup>&</sup>lt;sup>63</sup> Jim Reed and Joe McFadden, 'Neuralink: Can Musk's Brain Technology Change the World?', *BBC News*, 3 February 2024, https://www.bbc.com/news/health-68169082.

<sup>&</sup>lt;sup>64</sup> CNET, 'Neuralink: Elon Musk's Entire Brain Chip Presentation in 14 Minutes (Supercut)', 2020, via YouTube, https://www.youtube.com/watch?v=CLU-WDLKAF1M.

<sup>&</sup>lt;sup>65</sup> James Paul, 'Musk Claims Neuralink's Breakthrough Blindsight Device Will Soon Restore Vision In People Who Are Born Blind', *Mashable India*, 18 September 2024, https://in.mashable.com/tech/82386/musk-claims-neuralinks-breakthrough-blindsight-device-will-soon-restore-vision-in-people-who-are-bor.

bility of truly merging minds with AI.<sup>66</sup> Many hope or believe that the problem of consciousness is simply too complex for it to ever be meaningfully combined with artificial intelligence. But while it is important not to be too credulous of transhumanists' technological claims, especially when it involves braggadocious figures like Musk, it is undeniable that many of the transhumanist dreams will come true in some form within the lifetimes of young people today.

There are dozens of other companies and research labs with less bombastic members than Musk working on transhumanist technologies of differing degrees of complexity.<sup>67</sup> In 2019, for instance, a team of computer scientists, psychologists, and neuroscientists from the University of Washington and Carnegie Mellon University released their first report on 'BrainNet', 'the first multi-person non-invasive direct brain-to-brain interface for collaborative problem solving', precisely the sort of network that Hughes and Savulescu see as portending the arrival of collective beings.<sup>68</sup> 'Smart contact lenses' could allow for the projection of 'virtual' reality, recordings, or even live streaming directly on the eyeball.<sup>69</sup> These technologies have not yet merged with powerful AI programs such as OpenAI's ChatGPT, but they almost certainly will be able to in some capacity soon. Already, researchers have used implanted BCIs and AI neural networks to synthesize speech from the brain activity of ALS patients.<sup>70</sup> This

<sup>&</sup>lt;sup>66</sup> Yanxiao Chen et al., 'Several Inaccurate or Erroneous Conceptions and Misleading Propaganda About Brain-Computer Interfaces', *Frontiers in Human Neuroscience* 18 (2024): 1–12.

<sup>&</sup>lt;sup>67</sup> For a detailed taxonomy of all the different types, see Argyro P. Karanasiou, 'On Being Trans-Human: Commercial BCIs and the Quest for Autonomy', in *The Cambridge Handbook of the Law of Algorithms*, ed. W. Barfield (Cambridge University Press, 2020), 757–74.

<sup>&</sup>lt;sup>68</sup> Linxing Jiang et al., 'BrainNet: A Multi-Person Brain-to-Brain Interface for Direct Collaboration Between Brains', *arXivLabs*, 2019, 1–16; See also: Dane Mitrey, 'BrainNet—Brain-to-Brain Interface for Direct Collaboration Between Brains', *Neurohive*, 23 October 2018, https://neurohive.io/en/state-of-the-art/brainnet-brain-to-brain-interface/.

<sup>&</sup>lt;sup>69</sup> Scott Stein, 'Smart Contact Lenses: You Can Control a MicroLED Display With a Flick of Your Eyes', *CNET*, 2 April 2022, https://www.cnet.com/tech/computing/smart-contact-lenses-you-can-control-a-microled-display-with-a-flick-of-your-eyes/.

<sup>&</sup>lt;sup>70</sup> Miguel Angrick, 'Online Speech Synthesis Using a Chronically Implanted Brain-Computer Interface in an Individual with ALS', *Scientific Reports* 14 (2024), 9617.

therapeutic intervention demonstrates the feasibility of AI technology that could, before long, be used by humans to speak extemporaneously with the aid of a ChatGPT style program, 'my' thoughts, words, and expressions no longer being relevant categories.

The science writer Rebecca Casale has outlined how more widespread adoption of BCI technologies like Neuralink might occur:

Early adopters will be a mix of forward-thinking risk-takers, like today's billionaires shooting themselves into space, and comparatively naïve fame-seekers, like today's influencers looking for their next clickbait. We'll marvel at the spectacle. Then the technology will inch its way into our lives. Our friend's cousin will get one. Then our accountant. Then our sister. There will be a day when we can take a \$20,000 loan to get a Neuralink, with the guarantee that we can command a \$200,000 salary with our mental enhancement. Once Neuralink becomes mainstream, the financial and social pressure to join the herd will be immense.<sup>71</sup>

Casale's scenario indicates how even those resistant to BCI augmentation would be under intense pressure to turn themselves into a transhuman. How could an accountant without an AI BCI, and thus unable to instantaneously calculate all numbers and figures, possibly be expected to find work? How could a lawyer without immediate knowledge of all legal histories hope to win a case? It is not hard to imagine those without BCIs being left, like the Amish today, to live their comparatively primitive lives in some quaint corner of the world.

A true shift of transhumanism from a set of speculative claims to a set of individual-destroying technologies instantiated in the world has not yet occurred. But given the already astonishing capabilities of these technologies, and the devotion of their champions and financial backers, it is likely that BCI implants and other devices will radically transform the bounds of what we have previously considered human individuals. To repeat myself, this does not mean transhumanists are correct that future cyborgs will constitute a superior class of human, seamlessly and blissfully augmented by technology. As Conte has shown, the very fact that they seek to both augment

<sup>&</sup>lt;sup>71</sup> Rebecca Casale, 'Neuralink and You: A Human-AI Symbiosis', *Science Me*, January 2022, https://www.scienceme.com/neuralink-and-you-a-human-ai-symbiosis.

and dissolve the stable self means that transhumanists cannot provide a stable standard by which any sort of improvement could even be measured. Nevertheless, these capabilities do mean that many individual subjects will in all probability be very *different* to how they have been conceived in recent centuries. Political liberals, I argue next, need to think deeply about what this probability means for their understanding of the world.

# 2. Political Liberalism and Individual Subjects

Having established the core convictions of transhumanists, especially their rejection of bounded discrete individuals, I now turn to political liberalism. Political liberals, most famously John Rawls, attempt to justify liberal institutions and procedures by articulating an 'overlapping consensus' for pluralistic modern societies. Political liberals offer a political definition of individual humans that aspires to accommodate a wide range of comprehensive doctrines about human nature present in contemporary liberal cultures and avoids defending any single doctrine. Despite its adherence to a political definition of individuals that circumvents metaphysical premises, I argue, political liberalism still has an account of individual selves that is bounded—and in the face of the transhumanist critique of persons, one that is implicitly metaphysical, not merely political.<sup>72</sup> This is because transhumanist ideas are not only increasingly present in liberal democracies, but are also steadily being instantiated in material reality—meaning that unlike other nonliberal ideologies, transhumanism affects the ideas of today's democratic citizens, down to the very body and mind of which they are comprised. In such conditions, liberals' method of avoiding questions of comprehensive doctrine is not feasible.

<sup>72</sup>I do not attempt to analyze the differences between political liberals' conceptions of 'persons', 'individuals', 'humans', and 'citizens'. For instance, most political liberals would affirm that children are persons and citizens, but not yet political individuals in the sense that they can decide on the ends of their lives. Similarly, adult foreign residents in a country are individuals, humans, and persons but not citizens. How political liberals maintain these distinctions and whether they are justified in doing so is complicated and beyond my scope here. Instead, my concern is with what political liberals have probably always seen as the simplest case, the individual identity of beings assumed to be adult human citizens. Thanks to Oliver Traldi for pressing me on this issue.

#### Political Individuals

In the latter half of his career, Rawls focused ever more on developing a theory of political—not metaphysical—liberalism.<sup>73</sup> In regard to personhood, this meant that Rawls's liberal theory no longer relied on a specific definition of what human individuals are but aimed for potential compatibility with a plurality of definitions, just as it aimed for compatibility with a plurality of 'good lives' for those individuals. Yet I argue here that Rawlsian political liberalism's account of individuals is still bounded in a quasi-metaphysical sense, and thus unable to accommodate the transhumanist definition of humans.

Rawls's account of how and why he defines individuals politically appears in several key texts, including the essays 'Kantian Constructivism in Moral Theory' (1980) and 'Justice as Fairness' (1985), and the book Political Liberalism (1993) in which he collected and elaborated upon the ideas he had been developing over the previous decade or so.74 These discussions are a part of his broader effort at finding 'reasonable grounds for reaching agreement rooted in our conception of ourselves' and turning away from 'the search for moral truth interpreted as fixed by a prior and independent order of relations', by which he means transhistorical truths.75 He offers two reasons why he wants to avoid metaphysical or substantive answers to the matter of what individuals are. First, Rawls seems to think that the question is basically unanswerable in a way that will end discussion. In 'Justice as Fairness' and Political Liberalism, he says that the problem of personal identity 'raises profound questions on which past and current philosophical views widely differ and surely will continue to differ', and 'for this reason' he believes it 'important to develop a political conception of justice that avoids this problem as far as possible.'76 If the problem of personal identity is never going to be solved, then Rawls concludes that political theory is best

<sup>&</sup>lt;sup>73</sup> Rawls states this perhaps most succinctly in Rawls, 'Justice as Fairness: Political Not Metaphysical', *Philosophy and Public Affairs* 14 (1985), 223–51.

<sup>&</sup>lt;sup>74</sup> I partially follow Catherine Campbell's account, though Campbell ultimately seeks a defense of Rawlsianism. See Campbell, *Persons, Identity, and Political Theory: A Defense of Rawlsian Political Identity* (Springer, 2014), chapters 6-8 especially.

<sup>&</sup>lt;sup>75</sup> John Rawls, 'Kantian Constructivism in Moral Theory', *The Journal of Philosophy* 77 (1980), 515-572, at 519.

<sup>&</sup>lt;sup>76</sup> John Rawls, *Political Liberalism* (Columbia University Press, 1993), 32; Rawls, 'Justice as Fairness', 242.

served by putting it to the side. Instead, Rawls defends what he calls the 'method' or 'precept' of 'avoidance' for this question.<sup>77</sup> As Henry Richardson explains, the hallmark of the method 'is neither asserting nor denying anything about the controversial matter in question—at least insofar as that is possible.' Even though Rawls rarely discusses the method explicitly, Richardson argues that *Political Liberalism* 'employs it pervasively,' since the 'stance of avoidance is crucial to any hope for overlapping consensus.'

Second, Rawls clearly believes that there is no *need* for a political theory to have a metaphysical account of individuals. He thinks that there is a long precedent of political and legal theory in which our political identities are not metaphysical. He insists that, 'Since Greek times, both in philosophy and law, the concept of the person has been understood as the concept of someone who can take part in, or who can play a role in, social life...thus, we say that a person is someone who can be a citizen, that is, a fully cooperating member of society over a complete life.'80 In this political conception of individuals, for Rawls, we do not need to know or say anything about what individuals fundamentally are or why they are necessarily discrete and consistent. We must say only that they are the sorts of beings capable of being free and equal in public life, and that the governing regime should not coerce them into thinking of themselves in any specific way.

Rawls argues that moral—or political—persons have only two necessary characteristics. They must be able to care about justice, 'that is, [have] the capacity to apply and to act from (and not merely in accordance with) the principles of justice'. And they must be free insofar as they are able to form, revise, and rationally pursue conceptions of the good.<sup>81</sup> Rawls describes the latter attribute as an individual's

<sup>&</sup>lt;sup>77</sup> Rawls, 'Justice as Fairness: Political Not Metaphysical', 231, 240, 242. See also Connor K. Grubaugh, 'Rawls and the Rediscovery of Liberal Hope', *Perspectives on Politics* (2025), 1-16, at 5.

<sup>&</sup>lt;sup>78</sup> Henry S. Richardson, 'Avoidance, Method Of', in *The Cambridge Rawls Lexicon*, eds. J. Mandle and D. A. Reidy (Cambridge University Press, 2015), 40–41.

<sup>&</sup>lt;sup>79</sup> Richardson, 'Avoidance', 41.

<sup>&</sup>lt;sup>80</sup> Rawls, 'Justice as Fairness', 233.

<sup>&</sup>lt;sup>81</sup> Rawls, 'Kantian Constructivism in Moral Theory', 525. Incidentally, the same idea has sustained slavery as a legal—and not natural—status. If one defines personhood in terms of political participation, then if a group or class (e.g., slaves) does not have a political role, it appears to follow that they are not persons. See Peter Hunt,

capacity for being 'a self-originating source of claims'.82 These two characteristics are drawn from the existing political culture in modern democracies and are so thin that they are supposed to be compatible with a wide range of metaphysical perspectives on individual identity present in contemporary liberal societies—i.e., to constitute an overlapping consensus on personhood. Rawls accepts that the political conception of individual persons is not without metaphysical entanglements, but he hopes they are sufficiently anodyne to stave off disagreement. Even if there are 'metaphysical presuppositions' involved, he remarks, 'perhaps they are so general that they would not distinguish between the metaphysical views—Cartesian, Leibnizian, or Kantian; realist, idealist, or materialist—with which philosophy has traditionally been concerned.'83 In Rawls' mind, the account of individuals in political liberalism is so generic that none of the major disagreements within metaphysics about the nature of individuals are relevant.

For Rawls and many who follow him, this understanding of individuals is not metaphysical but rather a sort of self-evident brute fact. Such an individualism does not imply any metaphysical doctrine, since Rawls draws his belief about the existence of individuals from broadly shared assumptions in contemporary culture. Political liberalism's 'general' conception of individuals indeed accommodates a wide range of perceptions about what individuals are and to which ends they should be oriented. This makes it more capacious—and less overtly metaphysical—than other forms of liberalism. Lockean liberalism, to take just one example, depends on an account of personal self-ownership that does not permit self-destruction or suicide. As Gary Glenn helpfully outlines, Locke rejects the possibility of arbitrary power over ourselves because he rejects the possibility of unlimited power over others.<sup>84</sup> To permit suicide would be to give indi-

Ancient Greek and Roman Slavery (John Wiley & Sons, 2017). Thanks to Jose Maria Andres Porras for pointing this out. Though Rawls might insist that he is beginning with the consensus in modern liberal democracies, where slavery is illegal and widespread suffrage achieved, such a political understanding of persons is triumphalist about our present arrangements and seems to render arbitrary the exclusion of those (such as foreigners, or citizens under the age of majority) to whom liberal democracies still do not extend the full privileges of citizenship.

<sup>&</sup>lt;sup>82</sup> Rawls, 'Kantian Constructivism in Moral Theory', 544.

<sup>83</sup> Rawls, *Political Liberalism*, 29.

<sup>84</sup> Gary D. Glenn, 'Inalienable Rights and Locke's Argument for Limited Govern-

viduals unlimited and arbitrary power over themselves, legitimizing unlimited government and arbitrary power in general. Lockean liberals cannot support laws that make suicide state-sanctioned because of the Lockean theory of the self. Indeed, in the *Essay Concerning Human Understanding*, Locke devotes considerable effort to defining personal identity in terms that support the conception of human beings as persistent and discrete individual entities. 66

But Rawls' politically liberal approach diverges both on the point of suicide, and is far less concerned with defining a concrete account of selfhood. Rawls was one of several liberal philosophers who co-authored an *amicus curiae* to the US Supreme Court arguing that assisted suicide should be a constitutionally protected right.<sup>87</sup> The brief concludes by insisting that 'each individual has a right to make 'the most intimate and personal choices central to personal dignity and autonomy'.<sup>88</sup> According to Rawls's political liberalism, society should even accept individuals' theories of the self that consider it permissible to deliberately end our lives. And yet, as we shall see, this does not mean that political liberalism abandons a bounded account of what the individual self truly is.

# The Boundaries of Political Individuals

Political liberalism can accommodate a wide range of theories of the self by neither affirming nor denying controversial metaphysical claims. Some critics would immediately suggest that liberals' method of avoidance permits and perhaps even encourages the sort of slow

ment: Political Implications of a Right to Suicide', *The Journal of Politics* 46.1 (1984), 80-105, at 93. An alternative interpretation of Locke on this point asserts that we cannot end our lives because we are ultimately God's property and it is contrary to the natural law to destroy the property of another, especially when it is God's. See George Windstrup, 'Locke on Suicide', *Political Theory* 8.2 (1980), 169–82.

<sup>85</sup> Glenn, 'Inalienable Rights and Locke's Argument for Limited Government', 96. <sup>86</sup> John Locke, *An Essay Concerning Human Understanding* (Penguin, 1997), esp. 302-05. Locke argues that individuals are defined by the continuity of their consciousness across time. Locke's theory of personhood has been widely debated and criticized yet at the very least, unlike Rawls, he does not believe that the question can simply be avoided.

<sup>87</sup> The others were Robert Nozick, Ronald Dworkin, Thomas Nagel, Thomas Scanlon, and Judith Jarvis Thomson.

<sup>88</sup> See Julian Baggini, 'The Case for Legalized Euthanasia', *The Philosophers' Magazine* (Winter 1997), 26-31, at 31.

disintegration of the self that I have suggested transhumanism threatens. <sup>89</sup> Yet here I want to put aside the critics' description of liberalism and try to understand political liberals' account of individuals in their own terms. For political liberals, I argue, individual selves are not entirely unbounded, and the boundaries that exist in liberal theory will be critical to seeing how transhumanism threatens it. Most basically, political liberalism rejects any account of individuals that would permit them to enslave themselves or alienate their ability to be autonomous in the future.

Rawls' willingness to accept individuals' alienation of their liberties in private, up to the point of choosing suicide, is accompanied by his insistence that they are unable to alienate their public autonomy because of their status as citizens of a well-ordered liberal society.90 This means that while the liberal state cannot prevent people from deciding to submit themselves to arbitrary authority in private life, it will always back their ability to escape such authority.<sup>91</sup> The well-ordered liberal society protects citizens' 'liberty to do things which they regard, or which they may come to regard, as wrong, and which indeed may be wrong.'92 Adherents to the various 'comprehensive doctrines' will not usually share in political liberals' efforts to avoid metaphysical questions. But as long as those adherents generally respect individuals' right to exit civil associations, seek employment, exercise their political rights, or pursue education, political liberals can neither affirm nor deny the metaphysical claims of various comprehensive doctrines.<sup>93</sup>

Political liberals need only legislate against 'unreasonable' com-

<sup>&</sup>lt;sup>89</sup> We can see this argument in the work of Joseph Ratzinger. See, for example, Ratzinger, 'That Which Holds the World Together: The Pre-Political Moral Foundations of a Free State', in *Dialectics of Secularization: On Reason and Religion*, ed. F. Schuller (Ignatius Press, 2006). For a discussion of Ratzinger on liberalism, see J. Christopher Paskewich, 'Liberalism Ex Nihilo: Joseph Ratzinger on Modern Secular Politics', *Politics* 28.3 (2008), 169–76.

<sup>90</sup> Rawls, *Political Liberalism*, 366–67.

<sup>&</sup>lt;sup>91</sup> David Ellerman remains skeptical that Rawls' theory ultimately has much resistance to Nozick's acceptance of the legitimacy of voluntary slavery. See Ellerman, 'Inalienable Rights: A Litmus Test for Liberal Theories of Justice', *Law and Philosophy* 29 (2010), 571-599, at 592–97.

<sup>92</sup> Rawls, Political Liberalism, 367.

<sup>&</sup>lt;sup>93</sup> Kok-Chor Tan, 'Liberal Toleration in Rawls's Law of Peoples', *Ethics* 108.2 (1998), 276-295, at 278.

prehensive doctrines that do not afford adherents such opportunities. This can manifest in laws that prevent people from permanently enslaving themselves, and should protect the liberty of individuals to enter and—crucially—leave, say, billion-year contracts to the Church of Scientology. Rawls' biggest concern is clearly keeping governments from imposing a single conception of specific metaphysical ideals upon citizens, and in ensuring that the state will enforce the right of individuals to change their minds about who they are and to what ends their life will be devoted. This includes their self-identification, since the Rawlsian definition of citizens as self-originating sources of claims gives them enormous latitude to decide for themselves what they are. Political liberalism's account of individual identity and the range of possibilities available for individuals to reconceive themselves in liberal democracies appears to be constricted only by citizens' incapacity to consent to slavery.

But a closer look reveals Rawls's telling observation in passing that his 'ordinary conception of persons as the basic units of deliberation and responsibility *presupposes, or in some way involves, certain metaphysical theses* about the nature of persons as moral or political agents', and that he 'should not want to deny these claims'. <sup>95</sup> Rawls does not actually say in this footnote what these 'metaphysical theses' might be. Yet at the very least, political liberalism requires there to be persons as the basic units of deliberation and responsibility. The liberal regime exists to defend justice *for individuals*, to prevent them from being subject to arbitrary or absolute power, and to protect their ability to exercise their freedoms. Rawls assumes the existence of these persons as fundamental units of society when he attributes ideas and attitudes to them—such as the sense of justice, self-respect, or an (ambivalent) attraction to comprehensive doctrines—that he considers widespread in liberal public culture.

Seeing the structural significance of individual personhood in Rawls' theoretical system thus offers us some clues as to what its elusive metaphysical basis might be. First, political liberalism seems to require that discrete individuals actually exist and are not simply convenient fictions. Rawls does not definitively say *how* individuals

<sup>&</sup>lt;sup>94</sup> Phil Lord, 'The Eternal Commitment: Scientology's Billion-Year Contract', *International Journal of Coercion, Abuse, and Manipulation* 1.2 (2021), 82–97.

<sup>95</sup> Rawls, *Political Liberalism*, 29 n. 31. Emphasis mine.

exist or what they are—the important part for him is simply that they do exist and are politically fundamental. Even liberals critical of Rawls admit that individual selves are essential to their political theory. Sharon Krause, for instance, argues that liberals' emphasis on autonomy and personal sovereignty has blinded them to those that lack these qualities, especially marginalized groups. Yet even Krause remains committed to the liberal self, writing that 'we do not need a sovereign self to be agents, but we do need a self. Without a personal identity that precedes and endures after any given action, we cannot make sense of the experience of individual agency as action that is one's own.'96 Second, these discrete individuals are free and autonomous insofar as they can choose to exit communities that do not permit them autonomy. This means that their freedom is not dependent upon their circumstances but is rather an inherent part of who they are, as well as something they progressively actualize by choice. In other words, individuals who happen to grow up in communities that do not cultivate autonomy and freedom may not fully develop these capacities—but they still have them by dint of being persons.<sup>97</sup> If they lacked even the potential for autonomy, then political liberals could only speak of preventative measures to protect future individuals from being deprived of freedom, not ones who already have and whose conditions for liberation ought to be fostered.

Without individual persons, political liberalism loses its motivating purpose. Neither Rawls nor Krause would be willing to put this in metaphysical terms and would instead likely appeal to a sort of brute individualism I outlined earlier, a brute individualism that they would see manifest in pluralistic liberal democracies. But brute individualism is only possible so long as individuals are self-evident without appealing to metaphysical testimony. As I will argue next, transhumanism radically challenges this status quo ante.

#### Contradictions with Transhumanism

<sup>&</sup>lt;sup>96</sup> Sharon Krause, Freedom Beyond Sovereignty: Reconstructing Liberal Individualism (University of Chicago Press, 2015), 13.

<sup>&</sup>lt;sup>97</sup>We can observe this in the context of Rawls' approach to multiculturalism, wherein nonliberal cultural institutions can be tolerated within liberal societies provided that they permit individuals to exit, vote, work, and receive education. See Tan, 'Liberal Toleration in Rawls's Law of Peoples', 278; Rawls, *Political Liberalism*, xvi–xvii; *The Law of Peoples* (Harvard University Press, 1999).

Rawls claims that his politically liberal theory of individuals draws on ideas prevalent in the public culture yet does not endorse any 'particular metaphysical doctrine about the nature of persons...opposed to other metaphysical doctrines'. <sup>98</sup> It is an approach that aims at minimizing disagreement about fundamental questions of personhood that Rawls believes to be irresolvable. While Rawls' political conception of persons might be consistent with many different worldviews that hold individuals to be the basic units of society, however, political liberalism is necessarily in conflict with (or 'opposed to', to use Rawls' term) transhumanism because transhumanists do not accept the factual existence or even the desirability of individual agents. Transhumanism is therefore an 'unreasonable' doctrine by the standards of political liberalism.

As I detailed in section one, transhumanists deny that there is any empirical or normative truth to the idea of discrete human individuals distinguishable from the external world of other beings and things, including human-made technologies. They insist that personal identity or selfhood is a fiction. Nascent forms of the technologies they endorse, such as BCIs, make it conceivable that their ideas will be actualized. Such devices are not yet especially functional or widely available. They will not necessarily do what their boosters claim. But even if they only achieve a fraction of these claims, the individual identity and personal independence that provide a bedrock for liberal theory will no longer exist.

There are many other metaphysical doctrines, such as certain forms of religious fundamentalism, that political liberals deem unreasonable and undeserving of toleration. Yet 'unreasonable' religious fundamentalisms, at least of the sort that might survive in liberal societies, typically make only ideal claims about human nature. They offer speculative, controversial, and usually unverifiable accounts (by the standards of liberalism, at least) about what we are and how we should act. But 'unreasonable' transhumanists are illiberal in a fundamentally different sense, because philosophic transhumanism is connected to technologies that instantiate its ideal claims in actual human bodies—where liberals also keep score. A rise in religious fundamentalism could change the well of moral principles that political

<sup>98</sup> Rawls, Political Liberalism, 29.

<sup>&</sup>lt;sup>99</sup> Tan, 'Liberal Toleration in Rawls's Law of Peoples', 278–79.

liberals draw from, and what should be done when liberal ideals are not already present or are threatened in a society has always been a major challenge for liberal theorists. But transhumanism's challenge goes much further: as its ideals and technologies spread, they have the potential to overtly change the biological and material reality—not simply the ideological convictions—of the human subjects that make up society.

Scholars have long established that our identities are profoundly shaped by the cultural material to which we are exposed, from religious traditions to political ideology, to commercial advertising. Yet political liberalism is based on the idea that there is ultimately a self beneath that cultural material, a self which—in the right circumstances—can choose to reject aspects of the culture in which it exists. In Krause's words, liberalism presumes a 'personal identity that precedes and endures after any given action'. For political liberals, the point of politics is to limit the power of religions, political entities, or advertisers to replace autonomous selves.

What if cultural material is no longer something external to me because it is literally implanted into my brain? This raises social questions, such as what it means if, as I speak at the wedding of a friend, I read words written in real time by AI from an invisible teleprompter in my glasses or contact lenses on my eyes. What does it mean for 'me' to 'write' this academic article if every sentence has been filtered through the AI in my skull? More fundamentally, for political liberals, what does it mean to be a Rawlsian 'self-originating source of claims' if my thoughts are instantly uploaded or downloaded to another body or to a computer, and other thoughts or feelings are downloaded to me, indistinguishable from 'my own'? For liberal democracy, what does it mean for me to 'vote' or select a candidate if I do not really exist as a discrete entity? What does it mean to be free to speak if my capacity to do so is indistinguishable from implanted software? Or, perhaps more crucially, what does it mean to be criminally responsible for an act if I do not exist as a discrete entity? Transhumanists such as Steve Fuller accept that their aspirations threaten concepts such as habeas corpus, which has always meant that 'liability for punishment is limited to what you as an individual—regardless

<sup>&</sup>lt;sup>100</sup> Krause, Freedom Beyond Sovereignty, 13.

of your status—can be alleged to have done based on the evidence.'101 Without individuals, the entire basis of what we understand as culpability and justice in liberal democracy will be swept aside.

Political liberalism—and liberal democracy more generally—exists to defend the autonomy and liberty of individual subjects. It extends basic rights to all individual citizens, and though many liberals have come to see how liberal societies fail to do this, they remain committed to it as an ideal goal. Their basic commitment is, in Rawls' terms, to 'persons as the basic units of deliberation and responsibility'. Transhumanism is a grave threat to liberalism because the philosophy and its technologies reject this basic commitment. The augmentations that transhumanists seek cannot be redescribed as free individual choices and thus be acceptable, at least *prima facie*, to liberals because they are choices based on a commitment to the dissolution of the premise of political liberalism.

# 3. Conclusion

I have argued that transhumanist philosophers believe that the liberal account of the self is a 'fiction.' They insist that hard distinctions between 'natural' humans and human-machine cyborgs are indefensible, and that what we think of as an 'individual' is a temporary fantasy we will soon have no choice but to recognize as such. Yet not only do transhumanists make such a case theoretically, they also enthusiastically endorse—and in some cases participate in producing—technologies that appear to confirm their convictions about human-machine fusions. Elon Musk is only the most famous and influential of industrial transhumanists who seek to actualize their ideas of human augmentation in material reality. I have also shown how an account of discrete individuals with consistent identity is at the core of political liberalism. Though liberals such as Rawls attempt to minimize the substantive metaphysical content of the individuals their theory posits, they never abandon their commitment to the idea that individuals exist and that they should form the basis of political life.

If liberal individualism is true, then transhumanist technologies will fall far short of what their proponents claim and pose no more

<sup>&</sup>lt;sup>101</sup> Fuller, 'Morphological Freedom', 35, 40.

<sup>&</sup>lt;sup>102</sup> Rawls, *Political Liberalism*, 29.

real threat to the individual than the philosopher's stone—or more aptly, antibiotics—did to mortality. If liberal individualism is true, then new technologies will only make cosmetic changes to the same fundamental base unit: the individual. Though I personally believe that these technologies will achieve at least some of their developers' more extreme ambitions and have offered a credulous account of transhumanism in this article, a less radical future remains possible. In such a future, BCIs will be the twenty-first-century equivalent of jetpack dreams from the 1960s: technically possible, but clunky, unworkable, and nothing like what boosters predicted.

But here I want to continue under the assumption that many remarkable transhumanist technologies will come to pass within the lifetimes of adults today. The theoretical foundation for individual persons in political liberalism is not a metaphysical theory, but a set of overlapping perspectives in liberal democratic societies. Until now, in that political world, the liberal individual has been sustained by the biological limitations of the species homo sapiens and a cultural inheritance that has long presumed the existence of persons as ontological entities. These limitations and the cultural ontology surrounding them could be taken for granted throughout the entire history of liberal philosophy because they were brute facts of the material world around us—as Joshua Foa Dienstag has written of the human-animal divide, they were never before 'perceived as being such a crucial lynchpin in need of an elaborate defence'. 103 This brute fact is what enabled thinkers like Rawls to simply set aside the question of the metaphysical foundations of the individual: as far as he could perceive, when it came to the fundamental ontology of persons, all citizens of liberal democracies were working from the same starting point. Soon, however, liberals will no longer be able to defer questions about the metaphysical nature of the individual because technological transcendence will remove those brute facts of human distinctiveness—physiological, psychological, linguistic—that have carried so much water in the past. In such a scenario, those sympathetic to the liberal tradition have two main options.

The first is simple: liberals could simply concede defeat. They can accept that there are no fixed grounds for us to understand the world or our own identity and see liberalism as a punctuated equi-

<sup>&</sup>lt;sup>103</sup> Dienstag, 'Dignity, Difference, and the Representation of Nature', 616.

librium between the false old metaphysics of presence and the true new metaphysics of motion. This means accepting the basic premise of transhumanism that being is becoming, there is no normativity in nature, and all comprehensive doctrines that claim otherwise are fictions. The post-World War 2 financial environment led previously sceptical economists to concede that 'we are all Keynesians now'. The post-transhumanist world could compel the previously sceptical to say: 'we are all Foucauldians now'—since it directly calls to mind Michel Foucault's suggestion that 'Man is an invention of recent date. And one perhaps nearing its end.' <sup>104</sup>

The second option is more complicated. In such a scenario, political liberals could own up to the fact that their political account of individuals depends on a metaphysical vision of the human person that is irreducible to self-evident or value-neutral brute facts—and then disavow the method of avoidance in this realm. As we have seen, Rawls already concedes in a passing footnote that his 'ordinary conception of persons...presupposes, or in some way involves, certain metaphysical theses about the nature of persons'. In a transhumanist world, this claim can no longer be mentioned in passing in a footnote. Liberals' 'ordinary conception' must become a more forth-right normative claim about how people *should be*—not an empty posit or operational conceit drawn from the threadbare consensus of a political culture that is rapidly disappearing.

This second path involves defending a metaphysical account of the existence of discrete humans and an appropriate moral code for them that draws on cultural, philosophical, and religious traditions pre-dating the emergence of transhumanist cyborgs—what we might call a neoclassical account of the human. Yet this individualism will not resemble Rawls' idea of a 'self-originating source of claims'. From Platonism to Christian Aristotelianism, to Islamic philosophy and beyond, the great sources of thinking about the human person attempt to square a limited individualism with human embeddedness in the natural and metaphysical order of the cosmos, as well as the social and political order of human communities. This path in-

<sup>&</sup>lt;sup>104</sup> Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (Routledge, 2002), 422.

<sup>&</sup>lt;sup>105</sup> Rawls, *Political Liberalism*, 29.

<sup>&</sup>lt;sup>106</sup> Rawls, 'Kantian Constructivism in Moral Theory', 544.

dicates that interdependence and mortality as well as individuality are attributes of what humans essentially are—and that to seek to transcend these is a normative error. <sup>107</sup> In this vision, contra Rawls' assertion, individuals are not entirely self-determining, nor are they the only relevant units of society, but nor are they fictions in the transhumanist sense. The philosophy of mereology (the study of relations between parts and wholes) understands humans in precisely this way. <sup>108</sup>

If transhumanist technologies indeed become capable of destroying discrete individuals, we will know clearly that this neoclassical metaphysics of the human does not govern the world like code does a pocket calculator. Neoclassical individualism must accept that the existence and goods of human lives cannot be taken for granted within the phenomenological world, because transhumanists will have empirical cases that clearly show that the existence of individuals is not guaranteed. Choosing the second option involves claiming only that humans are born with the potential to be discrete persons bound up in a larger cosmological order, and if they abandon that individuality or cosmic connection, they are falling short of what it means to be a person. In Aristotle's famous phrasing, 'no one chooses to possess every good by becoming another...but rather by being whatever sort he is.'109 Choosing the second option also means maintaining a distinction between therapy and augmentation, so that we might be able to judge between the technologies that help us become more complete humans and those that would destroy us by turning us into another. Entertaining some variation of neoclassical meta-

<sup>107</sup> Shawn C. Fraistat seeks to articulate a 'liberalism of care' to compensate for liberalism's overemphasis on independence and autonomy. Yet Fraistat appears to see human vulnerability and dependence as a phenomenological fact rather than something that defines humans metaphysically. See Fraistat, *The Liberalism of Care: Community, Philosophy, and Ethics* (University of Chicago Press, 2021).

<sup>108</sup> Alasdair MacIntyre, *Dependent Rational Animals* (Open Court, 1999); Nancy Sherman, 'Aristotle on the Shared Life,' in *Friendship: A Philosophical Reader*, ed. Neera Kapur Badhwar (Cornell University Press, 1993); W. Norris Clarke, 'System: A New Category of Being?', in *The Creative Retrieval of St. Thomas Aquinas* (Fordham University Press, 2009); 'Special Issue: Transhumanism & Islam', *Journal of Ethics and Emerging Technologies* 34, no. 2 (2024); Mohd Abbas Abdul Razak, 'Human Nature: An Islamic Perspective', *Journal of Islam in Asia* 8, no. 1 (2011): 251–75.

<sup>109</sup> Aristotle, *Nicomachean Ethics*, tr. R. Bartlett and S. Collins (University of Chicago Press, 2011), 1166a20-23. Emphasis mine.

physics does not mean that we must sacrifice all the civic benefits of which the liberal tradition boasts, especially since, as John Dunn has argued, the afterimage of traditional metaphysics may well be what made liberalism possible and desirable in the first place. But it does mean relinquishing some of our indiscriminate fears of comprehensive doctrines.

For those of us inclined to this second option, the prospect of transhumanism's triumphs does not inspire much cause for optimism. It will surely seem somewhat silly to try to be a 'natural' person when brain upgrades are being offered for a pittance. Yet if you believe, as Aristotle certainly did, and I suspect ultimately Rawls did too, that somewhere deeply hidden within each of us is a longing to be a complete human person with our own sense of autonomy and responsibility to a meaning greater than ourselves—not a transhumanist assemblage constantly in flux—maybe the shock of such cyborgs among us will make us think again about our civilizational technophilia. Maybe that will be just what we need to rediscover what we want to be and to truly know it, perhaps, for the first time.

<sup>&</sup>lt;sup>110</sup> John Dunn, Western Political Theory in the Face of the Future (Cambridge University Press, 1993), 40–56.