

# The Transhumanist Anthropocene: From the climate crisis to upgrading humanity

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## Abstract

This paper identifies a significant shift in the current dynamics of the Anthropocene driven by transhumanism. While the Anthropocene has traditionally emphasized humanity's impact on Earth's systems, transhumanist visions now direct this transformative force toward the biological and cognitive constitution of the human. This has two main implications for the Anthropocene dynamics: first, it marks an expansion of human action toward the technical control of human biological and cognitive capacities; second, it generates unprecedented living conditions that redefine what it means to be human. To capture this development, we introduce the notion of the "Transhumanist Anthropocene." With it, we point to a *novel trajectory within the overall Anthropocene dynamics*. This is characterized by a reinforced anthropocentrism, the rise of a techno-religion shaped by transhumanist thought, a reduction of the perceived urgency of the climate crisis, and an increasing reliance on techno-solutionist models of environmental governance. We argue that this significantly complicates efforts toward a sustainable future in the face of the climate crisis.

## Keywords

Anthropocene, transhumanism, digitalization, techno-politics, climate crisis, artificial intelligence

## Introduction

In the 21st century, a defining feature of the Anthropocene is the *socio-technical transformation of digitalization* (e.g. Brevini and Murdock, 2017; Crawford, 2021; Creutzig et al., 2022; Falk et al., 2024; Grumbach and Hamant, 2018; Hornborg, 2015; Travis, 2018). Some researchers have explored digitalization's effects on the Anthropocene pointing toward its challenges regarding, for example, Earth system stability, social equity, or human agency (Creutzig et al., 2022). Others have especially highlighted the material footprint of the digital transformation (e.g. Brevini, 2021; Hao,

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2019); and yet others have focused on digital technologies' potentials for climate adaptation and solutions (e.g. Jörisen, 2023). Digital technologies are seen as both a problem and a solution.

In this paper, we acknowledge these discussions and argue that there is a fundamental, qualitative shift in the dynamics of the Anthropocene that has received far less attention. By analyzing recent scholarship on digitalization and its transhumanist influences, we show how this implies a novel understanding of the Anthropocene. Our core argument is this: the qualitative shift in Anthropocene dynamics is fueled by the transhumanist strand within the digital transformation. Previously, the Anthropocene was mainly characterized by humanity's effects on the natural environment and the planet (e.g. Dalby, 2016; Hamilton et al., 2015; Zalasiewicz et al., 2015). Now, the transformative force of humankind has also and explicitly turned toward the biological and technological re-engineering of the human itself.

Our starting point is the recognition of the significant influence of transhumanist thought on the digitalization of societies (Latzer, 2022; Thomas, 2024: 17–21). Transhumanism is marked by the strong belief that human biological evolution can and should be technically controlled and improved beyond current human limitations. These visions are accompanied by advances in digital technologies, including Artificial Intelligence (AI), as well as human enhancement technologies in biotechnology, medicine, robotics, and genomics. The contentious transhumanist conviction in the Anthropocene is now “that the evolutionary development of humankind is not at its end point” (Latzer, 2022: 338), but it must be surpassed through technological means in order to improve individual and societal well-being.

As a consequence, there is now a transhumanist quality within the Anthropocene dynamics. The planetary-scale force of human intervention – the impact on Earth's system – is now expanding from being directed at Earth's ecological systems to also being directed at human biological and cognitive processes themselves. This has significant repercussions for the understanding of both the Anthropocene and the governance of our planet. To develop this argument, the paper proceeds as follows. First, we outline the Anthropocene concept and the reasons for its inception. Second, we present critiques of this concept that have produced refined and related notions. Following this, we propose the term *Transhumanist Anthropocene* to explicitly denote the new qualities the transhumanist strand of digitalization brings with it. We highlight that the Transhumanist Anthropocene marks one increasingly dominant trajectory of a multidimensional epoch which incorporates diverse and simultaneous developments. Lastly, we describe the effects of these new transhumanist qualities, with a specific focus on current responses to the climate crisis.<sup>1</sup>

## The Anthropocene concept

The term *Anthropocene* refers to a new geological epoch, beginning sometime between the late 18th century and the mid-20th century (Crutzen, 2002)<sup>2</sup>. Introduced in the early 2000s, the term formally recognizes the destabilizing impact of human activities on Earth's systems (e.g. biosphere, cryosphere, or hydrosphere), most critically evidenced by the climate crisis caused by anthropogenic CO<sub>2</sub> emissions (Crutzen and Stoermer, 2000; Zalasiewicz et al., 2015, 2024). The Anthropocene was introduced as a useful concept that has enabled interdisciplinary discussions, ranging from Earth system sciences to philosophy (Hamilton, 2016; Zalasiewicz et al., 2017). Policymakers have turned to the concept to guide environmental governance focused on mitigation and adaptation (Zalasiewicz et al., 2024: 981), while scholars use it to analyze a range of social and ecological challenges (Hamilton et al., 2015). “It has become a contentious term and a lightning rod for political and philosophical arguments about what needs to be done, the future of humanity, the potential of technology and the prospects for civilization” (Dalby, 2016: 34). As such, the Anthropocene signals two things: the anthropocentric view that humans have significantly disrupted Earth's systems, and that they must now find ways to respond (Zalasiewicz et al., 2024; see also Davis and Todd, 2017).

This can be traced back to its historical origins, which can roughly be summarized within three trajectories, as Anthropocene scholar Clive Hamilton and his colleagues describe it (Hamilton et al., 2015: 2–3). First, the concept is used to denote a new *geological* epoch, aiming to provide a precise starting point based on evidence from sedimentary rock strata and other geological data (e.g. Crutzen, 2002). Second, it is adopted within *Earth system science*, where it is used to emphasize the significant shifts in Earth's systems caused by human activity, such as climate change and species extinction (e.g. Zalasiewicz et al., 2024). Third, the notion is found in the *humanities and social sciences*, which expand the concept to encompass the broad, cumulative effects of human activities, highlighting socio-cultural transformations and marking a fundamental shift in human-environment relationships (Hamilton et al., 2015: 2–3).

In these diverse ways, the Anthropocene discourse has always been about understanding the crises-ridden and destabilizing living conditions of the current epoch. Right from the beginning the term was connected to the currently unfolding climate crisis. As Paul J. Crutzen writes in one of the articles introducing the Anthropocene: due to “anthropogenic emissions of carbon dioxide, global climate may depart significantly from natural behavior for many millennia to come” (Crutzen, 2002: 23). Hence, with its inception the concept was used to name and describe “the effects of humans on the global environment” (Crutzen, 2002: 23). But not only this, the term was also employed to identify and call for human action to counteract these destructive effects, and “to guide society toward environmentally sustainable management during the era of the Anthropocene.” (Crutzen, 2002: 23)

As such, the concept has originally been accompanied by “humanistic narratives,” where the human is put at the center and displayed as the “transcendental actor of the Anthropocene” (Biswas Mellamphy and Vangeest, 2024: 601). The human has caused the crises of the Anthropocene, now the human is the one who must solve them. In other words, the Anthropocene is employed both to understand the unprecedented living conditions and to call for climate action. From this follow two important conclusions for the meaning of the term Anthropocene, particularly in discussions within the social sciences (Hamilton et al., 2015: 2–6).

1. The concept uniquely highlights the epoch-defining *direction of human actions*: Humans have become a force (implicitly) directed at destabilizing the Earth systems (e.g. biosphere, cryosphere, or hydrosphere). Their impact is on par with natural phenomena like volcanism or tectonic activity (e.g. Crutzen and Stoermer, 2000; Zalasiewicz et al., 2017). This effect comes mainly as the result of the exploitation of the environment and is accompanied by anthropocentric and capitalist logics (e.g. Biswas Mellamphy and Vangeest, 2024).<sup>3</sup>
2. The Anthropocene outlines the *effects of human actions for human inhabitants* and their living conditions: The result is an epoch of unprecedented human living conditions. In other words, human actions have „altered the planet’s habitability“ (Wallenhorst and Wulf, 2023: 8). Humanity is facing unprecedented environmental changes, with rapid ecological shifts that may not be reversed, even with global sustainability efforts. This marks a new epoch not only characterized by a mere global ecological crisis. But this marks a new “regime of existence for the Earth” and entirely new living conditions for humanity (Hamilton et al., 2015: 4, emphasis added). Living in the Anthropocene means to living “in a hotter world increasingly characterized by catastrophic events and new risks, including the possibility of an ice-free planet.” (Hamilton et al., 2015: 4)

In the following, we build on these two key insights of the Anthropocene discourse. We argue that in light of the digital and transhumanist socio-technical transformation, these insights need to be revised (see Section 5). Before analyzing this in more detail, the next section discusses the common and important criticisms of the Anthropocene concept.

## Critiques of the Anthropocene concept

The Anthropocene concept has long received important criticisms, due to its disregard of colonial and capitalist histories (Åsberg, 2017; Chakrabarty, 2009; Davis and Todd, 2017; Haraway, 2015; Malm and Hornborg, 2014; Moore, 2016a). From these works it can clearly be derived that the very term *Anthropo-cene* is misleading or at least imprecise. Not the entirety of a homogenous humanity has impacted the Earth with a geological force. It is only a small number of people within the minority world that are truly responsible for the crises of the Anthropocene (e.g. Malm, 2016). The effects of human action are distributed unequally and are mainly felt by the majority world (e.g. Haraway, 2015; Moore, 2016a) – that is, in island nations such as Fiji, the Dominican Republic or African countries such as Kenya or Uganda (Mottley, 2021; World Meteorological Organization, 2024). These critiques have brought with it a variety of different concepts and versions to rethink the Anthropocene.

A key critique comes from critical feminist scholar Donna Haraway, who argues that while the Anthropocene concept highlights humanity's planetary impact, it overlooks the specific historical and political forces – like capitalism and colonialism – that drive ecological crises (Haraway, 2015, 2016). As such, she proposes alternative terms like Capitalocene and Plantationocene to better capture the systems of exploitation underpinning these changes (Haraway, 2015: 162).

A similar critique can be found in Jason W. Moore's as well as Andreas Malm and Alf Hornborg's work (Malm and Hornborg, 2014; Moore, 2016a). These authors also argue that the Anthropocene concept fails to adequately explain the underlying causes of the fundamental transformation of the changes of Earth's systems (Moore, 2016b: 6). Moore analyzes that the Anthropocene concept often resorts to a simplistic dualism between "humans/society" and "nature" (Moore, 2016b: 4). Malm and Hornborg argue more strongly that the Anthropocene concept is analytically flawed altogether, as it portrays humanity as a unified species responsible for the current ecological crisis (Malm and Hornborg, 2014).

In that sense, all of these authors emphasize that the Anthropocene framing neglects crucial questions of capitalism, power, class, and anthropocentrism (Malm and Hornborg, 2014: 63). The human interventions leading to the Anthropocene are not the responsibility of a unified humankind but of a tiny minority, namely the owners of the means of production, within a highly unequal global context shaped by capitalism and colonialism.<sup>4</sup> According to this criticism, the Anthropocene concept hinders a proper understanding of the origins of climate change, and makes it difficult to challenge the status quo and envision alternative futures (Malm and Hornborg, 2014: 64–68). Hence, these authors suggest and prefer the term Capitalocene.

In line with these views lies what is called the "ecocentric critique" of the dominant Anthropocene concept (Åsberg, 2017; Biswas Mellamphy and Vangeest, 2024; Washington et al., 2017). This critique challenges the dominant, human-centered Anthropocene narrative by rejecting the idea of human superiority over nature and calling for a more relational, interconnected view of humans and the Earth (Biswas Mellamphy and Vangeest, 2024: 603). It seeks to de-center the human, promote care and repair over control and exploitation, and often includes a decolonial perspective that critiques the Anthropocene's ties to colonial and technocratic ideologies (Washington et al., 2017: 35–37). This approach also frames the Anthropocene concept as imprecise and calls for an integration of environmentalism with anti-colonial principles (Biswas Mellamphy and Vangeest, 2024: 604; Washington et al., 2017: 39).

Others have proposed to specify the Anthropocene with notions such as the "technosphere" (Haff, 2014, 2017), or to call it the "Technocene" altogether (Hornborg, 2015). The geoscientist Peter Haff introduced the term technosphere to refer to the vast, self-sustaining global technological system – from infrastructure to governance – that now shapes the planet (Haff, 2014: 127; see also Donges et al., 2017). Slightly different is the term "Technocene" introduced by Alf Hornborg (Hornborg,

2015), which foregrounds technology and its entanglement with global inequalities as central to the crises of the Anthropocene. This broadly aligns with the Capitalocene critique, as Hornborg argues that modern technologies depend on asymmetric global exchange – cheap labor, colonial land, and unequal resource flow-, and make industrial progress possible for some at the expense of others (Hornborg, 2015: 61).<sup>5</sup> Yet others have also called this the “digital Anthropocene” with a similar focus specifically on the impact of digital technologies (Maguire et al., 2023; Travis, 2018).

Following these theoretical endeavors, we suggest to rethink the Anthropocene concept in light of the transhumanist strand in the digitalization of society (see also Latzer, 2022: 351). While researchers have noted digitalization’s material impacts like energy use or resource consumption (e.g. Brevini, 2021), we argue that the influence extends deeper. We contend that the Anthropocene has acquired a new transhumanist quality, driven by a “techno-religious” belief in converging technologies (Latzer, 2026: 2). In the following we delineate the connection of transhumanism and the Anthropocene in detail.

## Transhumanism

### *Transhumanism & digitalization*

Transhumanism in its current dominant form has to be situated within the broader socio-technical transformation known as digitalization. It represents one of digitalization’s most extreme and most consequential ideological strands. Transhumanism is a multifaceted, hard-to-define ideology.<sup>6</sup> At the same time it is a movement centered around the questionable belief that the human species can and should use technology to overcome its fundamental limitations, including those related to biology and cognition (e.g. Mularoni, 2024: 18–58; Puzio, 2022: 25; Tirosch-Samuelson, 2018: 200). Importantly, transhumanism is not a single theory but rather a collection of visions and ideological currents. Not all transhumanists subscribe to the same ideas and practices (e.g. singularitarianism, extropianism, or cryonics). What unites them, however, is a shared orientation. This is a specific vision of progress driven by technology, and the conviction that human biological evolution can and should be actively steered and modified.

To understand transhumanism’s significance, we situate it especially in its close connection to digital technologies and within the broader process of digitalization.<sup>7</sup> Digitalization describes the sweeping socio-technical transformation through which digital technologies increasingly reorganize economies, politics, and social life. Media scholar Michael Latzer captures this structure with the concept of the “Digital Trinity” of datafication, algorithmization, and platformization (Latzer, 2022: 335). This framework makes graspable that digitalization in the 21st century works mainly through three interconnected processes. The *Datafication of Life Domains* that doubles the world in the form of digital data, thus creating a new asset class of small and big data. The *Algorithmization of Decision-Making* that turns this new asset class of data into economic, political, and social capital, typically through automated manipulation of users. Finally, the *Platformization of Markets* that creates the optimal organizational forms (two- or multisided markets) for further datafication and algorithmization in all areas of life. These three processes reinforce each other in a co-evolutionary manner and are at the core of the digital transformation.

Most recently, digitalization is spearheaded by AI developments. Critical AI theorist Paul Schütze describes this latest iteration of the digital transformation with the notion of “AI Futurism” (Schütze, 2024, 2025). AI technologies are a central and integral part of the Digital Trinity. They are increasingly dominating the visions and ideas of digitalization and promise an impact on all parts of societal life (e.g. D’Ignazio and Klein, 2020; Jarrett, 2022; Lindemann, 2025; Mühlhoff and Henningsen, 2025). As Schütze describes, AI Futurism presents these technologies as an unavoidable step toward the future (Schütze, 2024: 3). This development is not entirely new. Rather,

these narratives are rooted in historical ideas of techno-futurists which already in the 19th and 20th century aimed at overcoming human limits by technological means (Thomas, 2024: 57). Futurism can therefore also be seen as a forerunner of current transhumanism (Thomas, 2024: 17–19). Important for our discussion is that, today, these visions co-evolve with the dynamics of the Digital Trinity, AI technologies and transhumanism.

Mapping this co-evolution, however, requires conceptual clarity. Transhumanism is not equivalent to digitalization. Digitalization, as described through the Digital Trinity of datafication, algorithmization, and platformization, is a broad socio-technical transformation that reshapes economies, politics, and social life exceeding any single ideological agenda. Transhumanism, by contrast, is a specific movement and ideological strand within this larger transformation. It takes the logic of digitalization to its most radical conclusion by directing it explicitly toward the enhancement and eventual transcendence of the human species itself.

Yet, while transhumanism is only one strand of digitalization, it has become its current spearhead. This means transhumanism actively drives digitalization in a specific direction, pushing the Digital Trinity toward ever more extreme visions of human transformation. It is, in short, a specific and extreme ideological strand of digitalization. Especially in recent years, it operates in close alliance with AI technologies, which themselves represent a dynamic frontier of the Digital Trinity. AI Futurism provides transhumanism with both the technical infrastructure and the cultural narratives. It provides the framing of superintelligence, mind-machine merging, and radical cognitive enhancement not as speculative fantasies, but as inevitable next steps. In this sense, transhumanism, digitalization and AI development are mutually reinforcing.

The co-evolution of the Digital Trinity, AI Futurism, and transhumanism is backgrounded by a broader faith in the potential of technology per se, a transhumanism-shaped techno-religion marked by the feedback loop of sacralizing technology and the self, coupled with a strongly future-oriented perspective (Latzer, 2026). Transhumanism is therefore connected to digitalization in the sense that the expansion of the Digital Trinity in the 21st century marks an explicit pursuit to enhance humankind (Latzer, 2022: 337).

### *Transhumanist goals*

Transhumanists envision a future where converging technologies such as genomics, robotics, informatics, and nanotechnology will enable radical human enhancement (Puzio, 2022: 57; see also Bostrom and Savulescu, 2009 for one of the first academic normalizations of this topic). This is often described as the “nano-bio-info-cogno convergence” (NBIC convergence; Latzer, 2022: 337–338). The belief is that the NBIC convergence will pave the way for a new phase of human evolution and lead to the emergence of superhuman entities, including autonomous and superintelligent machines (Latzer, 2022: 338–340; Schnetker, 2019: 87; Thomas, 2024: 13–23).

These goals and their framing as transhumanist go back to biologist Julian Huxley (1957), who voiced the belief in a controlled, technologically driven evolution of human capabilities (Latzer, 2022: 338; Thomas, 2024: 12). Some people point out that the modern form of transhumanism – in its popularity driven by digital technologies around the 1990s – goes back to Max More (Fuller, 2017; Thomas, 2024: 12), who himself claimed to have coined the term in its current meaning (see e.g. More, 2023). Yet, the historical roots of transhumanism are complex and have even been traced back to Nietzsche’s idea of the superhuman, the Enlightenment and even earlier schools of thought (e.g. Latzer, 2022: 338–339; Mularoni, 2024: 21–39). However, at its core, transhumanism – as we observe it here – is driven by two interconnected ideas: (1) the enhancement of the human being, that is making people healthier, more capable, and longer-lived by overcoming biological and cognitive limits (e.g. Bostrom, 2005, 2014a; Bostrom and Savulescu, 2009); and (2) the ultimate transcendence of the human biological being altogether, through the merging of humans and machines,

mind uploading, and the emergence of a superintelligence (e.g. Kurzweil, 2000, 2005). Both ideas share that human biology is not a limit, and that technology ought to become the means by which humanity transcends this limit. Here, we see the specific understanding of progress inherent to transhumanism: technological innovation is understood as a primary driver of human well-being and should be actively accelerated. While there are different versions of transhumanism and while it spans both speculative and mainstream academic debates, we observe one core conviction that remains consistent: human limits are a problem technology can and should solve.

This means that for transhumanists it is an active task to use technological progress to enhance humans (Tirosh-Samuels, 2018: 205). This ranges from the goal to overcome the limits of the human body and mind, over the merging of humans and machines, to leaving earthly boundaries altogether and colonizing space (Geburu and Torres, 2024; Mularoni, 2024: 18–58; Thomas, 2024). Some people, for instance, argue that humans ought to use “biomedical means of moral enhancement, that is, pharmaceutical, neurological or genetic means of strengthening the central moral drives” (Persson and Savulescu, 2019: 7). In general, current key concepts of transhumanism include: morphological freedom, the right to modify one’s body and mind according to one’s desires; overcoming biological limitations; creating superintelligence, including Artificial General Intelligence (AGI), to save and better humankind; and ultimately the goal of transcending human biology (Geburu and Torres, 2024). As critical feminist scholars Leonie Möck and Toni Loh summarize the fantasies of the infamous transhumanist Nick Bostrom: the new superior human is more intelligent, more moral, more beautiful, healthier, and potentially immortal to a degree that exceeds our current capacity to even imagine (Möck and Loh, 2022: 8; see also Bostrom, 2014b).

### *Critiques of transhumanism*

Transhumanist visions do not go uncontested. For example, political scientist Fukuyama (2004) famously identified transhumanism as the world’s most dangerous idea, arguing that technological enhancement would erode a shared human essence. Thus, the visions that make transhumanism a powerful driver of digitalization – namely its techno-religious faith in progress, its alliance with AI Futurism, and its particular understanding of what it means to improve the human – have also raised fundamental criticism. One of the leading critiques targets transhumanism’s claim to speak for humanity as a whole (e.g. Puzio, 2022: 88–91).<sup>8</sup> As philosophy of technology scholar Anna Puzio shows in her notable book “Super-Humans” [*Über-Menschen*] (2022), the concept of a “human species being” or a “human nature” cannot be unambiguously determined – neither through the definition of a human species, nor through a characteristic human life form, nor through any clear distinction between the “natural” and the “artificial” (2022: pp. 88–90). Nonetheless, transhumanism, Puzio explains, both presupposes a fixed human essence and treats it as deficient and in need of correction (2022: pp. 94–95). This assumption, however, is untenable and normatively dangerous (2022: p. 95).

A second line of criticism concerns who exactly transhumanism’s visions of progress serve. As scholars have noted, the movement has remained overwhelmingly white, male, and Anglo-American in its membership and outlook (e.g. Geburu and Torres, 2024). Critics argue that transhumanist promises of surpassing biological limits effectively reproduce the structural inequalities of current capitalist societies (e.g. Thomas, 2024: 218). The transhumanist vision of human enhancement has also been linked to a long history of eugenics (Geburu and Torres, 2024: 4–6). The drive toward genetic optimization, population control, and the production of superior bodies is not new, and critics have situated it within colonial and patriarchal traditions of deciding which lives are worth improving and which are not (e.g. Möck and Loh, 2022: 14). Far from being a neutral project of human betterment, transhumanism in this reading encodes a highly particular set of social hierarchies into its technological ambitions.

A third and closely related concern is the political economy behind these visions. Transhumanist goals are not primarily driven by democratic deliberation but by venture capital speculation, overwhelmingly concentrated in Silicon Valley (Schnetker, 2019: 8; Thomas, 2024: 41). This raises the prospect of a future in which access to enhancement technologies follows existing lines of wealth and privilege, and in which a tech elite achieves superhuman longevity while others are left behind. This dynamic is reinforced by transhumanism's entanglement with long termism (e.g. Gebru and Torres, 2024). This is an ideology that orients moral and political attention toward imagined future existential risks spanning millions of years, thereby drawing focus away from the very real and present crises of the Anthropocene (e.g. Gebru and Torres, 2024; Thomas, 2024: 173–177). In this sense, transhumanism does not merely distract from necessary social and political transformation. Rather, it actively displaces it, focusing on a techno-utopian horizon, rather than addressing the inequalities and ecological crises of the present (e.g. Latzer, 2022; Schütze, 2025).

## A new quality of the Anthropocene

The analysis of the digital transformation in the context of the Anthropocene, however, is not new. For instance, Wickberg and Gärdebo (2023) have employed a historical lens and analyzed the digital transformation as a key driver of Anthropocene history. Similarly, Jörissen (2023: p. 947) emphasizes “the importance of digital means and infrastructures for new forms of cultural resilience” in addressing the Anthropocene's crises. Most notably, Creutzig et al. (2022) outline digitalization's influence on Earth system stability, equity, and human agency, detailing effects on resource use, inequality, and political control. We agree with the findings of Creutzig et al. But, our argument further extends their analysis. We contend that the transhumanist strand of digitalization has now led to *a qualitative shift in the dynamics of the Anthropocenes*. In order to better understand this observation, we propose the term *Transhumanist Anthropocene*. With this, we explicitly highlight the new transhumanist qualities within the broader dynamics of the Anthropocene. At the same time, we recognize that this represents only one trajectory within a multi-dimensional epoch, which, as described above, can also be looked at in terms of a Capitalocene or a Technoscene.

The precise nature of the qualitative shift in the dynamics of the Anthropocene we observe becomes clear in how our analysis differs from Creutzig et al. (2022). Our argument diverges in three important respects. First, Creutzig et al. examine digitalization broadly – analyzing its effects on resource use, labor markets, equity, and planetary stability (2022: pp. 485–490). In contrast, we focus specifically on the *transhumanist* strand within digitalization. Our concern is not digitalization as such, but the trajectory it acquires when driven by transhumanist visions of human enhancement and technological transcendence. Second, a key move in Creutzig et al. is to trace how digitalization reshapes the relationship between human societies and Earth systems, that is how digital technologies affect the classical Anthropocene dynamics of planetary destabilization (2022: p. 480, 485). We extend this by identifying a *qualitatively new* dynamic. With transhumanist digitalization, human action is no longer directed only at ecological systems but explicitly at the biological and cognitive constitution of the human itself. This dual directionality, toward both Earth's systems and human biological evolution, is what we capture with the Transhumanist Anthropocene. Third, Creutzig et al. conclude that collective global governance can still redirect digitalization toward positive outcomes (2022: p. 494, pp. 499–500). We argue that the transhumanist trajectory narrows these possibilities substantially. In the following we show how it reinforces anthropocentrism, fosters techno-religious faith in techno-fixes, and reduces the urgency of present climate action in ways that make effective regulation increasingly difficult to achieve. In our view, this results in a bleak outlook, particularly in relation to the climate crisis.

**Table 1.** Extension of the (simplified) key characteristics of the original Anthropocene within the transhumanist Anthropocene.

Characteristics	Anthropocene		Transhumanist Anthropocene
Direction of human actions	<ul style="list-style-type: none"> <li>– Earth system constitution</li> <li>– Transforming Earth's systems</li> </ul>		<ul style="list-style-type: none"> <li>– Human biological and cognitive constitution</li> <li>– Transforming human biological evolution</li> </ul>
Effect of human actions for human inhabitants	<ul style="list-style-type: none"> <li>– New regime of Earth's systems</li> <li>– Restricting future habitability of Earth</li> <li>– Instrumentalized environmental</li> </ul>	Now extends to →	<ul style="list-style-type: none"> <li>– New regime of the cognitive and biological conditions of being human</li> <li>– Restricting future paths of what it means to be human</li> <li>– Instrumentalized cognitive and biological conditions of being human</li> </ul>

### What is qualitatively new?

In light of the transhumanist dynamic within digitalization, we must revisit the *two core elements of the Anthropocene discourse* identified at the beginning: (1) the Anthropocene concept uniquely highlights the epoch-defining *direction* of human actions, and (2) this results in specific *effects* of these actions on human inhabitants and their living conditions. In light of transhumanist digitalization, these two core elements of the Anthropocene concept must now be extended (see Table 1).

1. The *direction* of human action is expanding. From altering Earth's systems, human actions are now explicitly turning toward the systematic technological engineering of human biology and evolution. As a result of transhumanist developments – such as the pursuit of AGI through the use of NBIC technologies – the actions formerly directed mainly at the environment are now also directed toward human biological and cognitive capacities. This means that human influence on Earth's systems has expanded to include influence on the human itself. “The end of nature” as we know it, brought about by the Anthropocene's polycrises (Hamilton et al., 2015: 4), is now accompanied by a transhumanist drive to fundamentally transform the biological and cognitive conditions of human existence itself. With this, the “epoch of humankind” takes on a new meaning: humans are now striving to redefine themselves. Previously, human intervention primarily altered “the Earth's trajectory” (Hamilton et al., 2015: 3). Now, this is accompanied by the hijacking of biological human evolution toward the creation of “super-humans.” According to transhumanist visions, the main driver of this shift is technological progress, which places human enhancement and the supposed technical control of human evolution at the center of this new epoch. In the Transhumanist Anthropocene, human actions are increasingly transforming both Earth's ecological systems and the biological and technological conditions of being human simultaneously.

These novel developments in turn, also transform the traditional dynamics of the Anthropocene. Transhumanists hope that enhancing the human will bring with it the capability to better solve the multiple crises of the Anthropocene. They suggest that technological progress and control can help solve the climate crisis. This means that the belief in the technological enhancement of human biological and cognitive capacities, in turn, influences the ways humans interact with Earth's ecological systems. Through the endeavor to technologically enhance humans, new methods of controlling, dominating and exploiting the environment are emerging. For instance, as Mads Ejsing

critically highlights, ecomodernists (a strand of transhumanists) aim to avert the dangers of climate change by “not only decoupling the human from nature,” but also by increasing “technological control over nature” (Ejsing, 2023: 246). The near-divine human powers envisioned by transhumanists are then presented as solutions to the climate crisis.

However, in reality, the transhumanist visions are not currently producing the positive effects they promise. On the contrary, transhumanist endeavors are among the key drivers of a further exploitation of the Earth. As critical media scholar Benedetta Brevini shows, particularly the AI boom and the quest for AGI have massive impacts on the environment (Brevini, 2021: 63–91). From energy consumption and rare earth mining to toxic e-waste, the transhumanist digitalization exploits and destabilizes entire landscapes and ecosystems (see also Halpern, 2021). Thus, the new quality of the Anthropocene – technologically engineering human biology and evolution – negatively impacts the older dynamics of the Anthropocene – transforming Earth’s ecological systems.

2. The *effects* of human actions on human inhabitants are expanding. From unprecedented living conditions for humans, we can now also observe *unprecedented living conditions of “being human”*. This results from point one above: directing human actions toward the technological engineering of human biological and cognitive capacities produces new living conditions. Originally, the Anthropocene marked a fundamental transformation of Earth’s systems. It signified unprecedented living conditions regarding the planet’s habitability. For humans, this meant to grapple with and finding themselves in a world of destabilized and increasingly uninhabitable Earth systems. Transhumanist endeavors are now aiming to change “the system of being human” – the cognitive and biological conditions of being human. From this perspective, it becomes an obligation to technologically create “new and better humans.” This means that the transhumanist imperative, along with the techno-religious belief in the inherent potential of digital technologies, fundamentally alters the room of possibility and thought of what it means to be human. As Mahaswa et al. write, this restricts humans in their ability to freely move into the future. This happens “not by limiting autonomous decisions,” but because the transhumanist ideology “has imprinted, and continues to deepen, its structures within” the very essence of being human (Mahaswa et al., 2025: 4). In other words, with the rise of the transhumanist digitalization, the space of being human is becoming increasingly constrained.

Critical media scholar Alexander Thomas observes that within the transhumanist digitalization the human becomes instrumentalized (Thomas, 2024: 126). Digital technologies become a means to achieve a transcendental and divine future of a super-human species. These transhumanist visions are accompanied by “closing possibilities and narrowing creative and ethical spaces to rethink *Anthropos*.” (Thomas, 2024: 126) What some transhumanists might claim to be an “opening time to a multiplicity of individual paths” (Taillandier, 2021: 232), is in fact a restriction of paths. The “new human” must be seen as a function of the socio-technical dynamics of the Digital Trinity shaped by transhumanist visions and driven by the latest developments such as AI Futurism. If the only path forward is technological progress, the “new human” becomes a pre-defined part of this path. The “Transhuman” becomes the means to uphold the functioning of the Digital Trinity (Thomas, 2024: 216). With this, the human takes center stage in a double sense. On the one hand, in the classical sense as the central actor behind the massive changes to Earth’s systems (Hamilton et al., 2015: 6). On the other hand, in the novel sense, as both the subject and object of controlling the future of human biological evolution and becoming a superhuman.

It is important to highlight that these visions are not discussed within a homogenous humanity. Nor are they about finding or enhancing what is “truly human.” In fact, there is no such thing as

“the human” (Katz, 2020: 181). But the focus on and the very idea of “the human which has to be enhanced” is itself a transhumanist narrative. Crucially, this narrative is brought to life by the top-down and socio-economic power of big tech (Geburu and Torres, 2024). Especially in the Anglo-American and European context, tech corporations and the billionaires at their top (e.g. Elon Musk, Peter Thiel, Sam Altman) dominate the visions of humanity’s futures. These visions are built on a specific social order and produce “racialized, classed, and gendered models of the self [the human]” supposedly passing as ““universal” what in fact constitutes a white, elite, and masculinized perspective.” (Katz, 2020: 122) This reproduces socio-economic and racialized power dynamics. In that sense, the transhumanist vision to alter the living conditions of being human must be understood as deeply entangled with capitalist and techno-solutionist logics.

In sum, the notion of the Transhumanist Anthropocene highlights how the two core elements of the Anthropocene discourse are now being extended (see Table 1). Human actions are now also targeted at the deliberate technological engineering of human biology, evolution, and cognitive capacities. This leads to unprecedented living conditions characterized not only by a transformation of the Earth but by a profound reconfiguration of the human itself. What is new is not that humans change. They always have. Nor is it new that human bodies are affected by Anthropocene dynamics. They clearly are. What is new is the emergence of an explicit ideological program, driven by the transhumanist strand of digitalization, that actively pursues the technological engineering of human biological evolution as a goal in itself. It is this deliberate, technologically driven directedness and its effects that marks the qualitative shift we identify.

### *The effects of the transhumanist anthropocene*

In their paper “Digitalization and the Anthropocene,” Creutzig et al. (2022) identify three main areas in which the digital transformation is currently effecting the dynamics of the Anthropocene. First, they highlight its effects on equity. Digitalization leads to global and local power asymmetries and contributes to increased economic and social inequalities (Creutzig et al., 2022: 485–487). Second, they highlight the effects on democracy and governance. Data accumulation often leads to monopoly power of big tech corporations or states and thus enables control over users or citizens (Creutzig et al., 2022: 488). Third, they highlight the environmental effects, pointing to emissions, water consumption, and pollution resulting from the production of digital technologies, the operation of data centers and the growing stream of e-waste (Creutzig et al., 2022: 489–490). In addition to the effects Creutzig et al. cover, we contend that an explicit understanding of the Transhumanist Anthropocene, as outlined above, points to the following new implications:

- The Transhumanist Anthropocene reinforces *a strong anthropocentrism*. Within it, the human becomes both the destabilizer of the planet and its potential savior through technological enhancement. Just as the environment was once the object of control, now human cognitive and biological capacities become an explicit target as well. While visions of human control and technological solutions have been part of the Anthropocene debate from the very beginning (e.g. Crutzen, 2002), transhumanist digitalization now intensifies these dynamics. We are witnessing an amplification of what has been called a “strong anthropocentrism” (Biswas Mellamphy and Vangeest, 2024; Kopnina, 2019). Transhumanist visions are built on ideas of human supremacy, positioning the human as the central and only worthy actor of the Anthropocene (Biswas Mellamphy and Vangeest, 2024: 602). The alleged goal is „a new dawn for humankind. Science will make us faster, healthier, smarter, stronger, and morally if not perfect then perfectible.“ (Koch, 2020: 180) This is exemplified in the very concrete aim of human enhancement and technological control over evolution. For

instance, there are dubious debates around biotechnologically enhancing genes to tackle the climate crisis. The highly problematic idea here is that modifying genes could be used to improve the morality of the masses to improve their will for climate action (see Schnetker, 2022). Hence, transhumanist digitalization reinforces a strong anthropocentrism, focusing on the human as a central and quasi-divine actor, which leads us directly to the following further effect.

- Part of the Transhumanist Anthropocene is a techno-religion that *sacralizes technology and the self*. Latzer (2026) argues that the reinterpretation of Enlightenment ideals by transhumanism threatens core democratic values of the prevailing Kantian understanding of Enlightenment, such as critical reasoning, freedom, and autonomy. Transhumanism repeats several classical key Enlightenment motives, especially strict anthropocentrism, the belief in the improvement of the human condition, the aspiration to overcome suffering and dependency, and the ideal of human self-determination. What distinguishes it from humanism, however, is that classical humanism primarily linked human flourishing to education, moral autonomy, and political emancipation, whereas transhumanism increasingly ties it to the technical redesign, enhancement, and (self-)optimization of the human being itself. It differs most clearly in its view of the human being as inherently deficient. In transhumanism, the human being no longer appears as a free, imperfect being endowed with dignity, but rather as a project to be (self-)optimized. In this sense, transhumanism does not continue humanism, it radicalizes one of its central aspirations by shifting the focus from cultivating human capacities to technologically overcoming human biological and cognitive limits. In Western societies, the prevailing Enlightenment sought “to replace religion as the primary source of knowledge and world explanation with rationalism and modern science” (Latzer, 2026: 2). Today, however, the transhumanist trajectory of digitalization is generating “a new social form of techno-religion” (Latzer, 2026: 2). This techno-religion re-enchants society, endows technology with divine solutionist power, and generates transhumanist myths (Latzer, 2026: 2). In doing so, it endangers key values of human rights, such as freedom from external interference and the capacity for autonomous action (Latzer, 2026: 5; see also Coeckelbergh, 2022; Park, 2024; Scherer et al., 2023). In the Transhumanist Anthropocene, therefore, “a new (digital) mythology is emerging: this time one centered around a blind faith in the technical controllability of human evolution” (Latzer, 2026: 5). This development undermines prevailing Kantian Enlightenment ideals of human autonomy and critical thought. Yet, this does not imply that we should aim to restore the Western-centric, strictly anthropocentric Enlightenment model of the 18th century. Its recognized shortcomings, highlighted by eco-centric, posthuman, and post-colonial critiques, remain crucial. Nevertheless, we cannot neglect that some of the Enlightenment’s key ideals are fundamental parts of the current democratic order, particularly in Anglophone and European contexts. Transhumanist digitalization erodes these values and, with this, the Transhumanist Anthropocene is displacing traditions of critically interrogating technological development, including those offered by eco-centric, posthuman, and post-colonial thought. Especially this effect is detailed by the next point.
- The Transhumanist Anthropocene *neglects other possible paths toward the future*. From this perspective on environmental governance and climate action is locked in on technological solutions and human control. The result is that alternative approaches become secondary. Concretely, this means that ideas such as degrowth, sufficiency or critical post-human futures are largely neglected (e.g. Åsberg, 2024; Kopnina, 2019; Kwet, 2024; Loh, 2023). For instance, eco-centrism – understood as the idea that humans are an equal part of nature (Washington et al., 2017) – is not a relevant debate in the dominant narratives on how to

tackle the climate crisis. On the contrary, as we have seen above, the Transhumanist Anthropocene reinforces the human/nature dichotomy.

- The Transhumanist Anthropocene *reduces the urgency of climate action*. As a result of the strong faith in human agency and techno-solutionism, transhumanist digitalization fosters a sense of serenity toward the climate crisis. As Clive Hamilton fittingly puts it: “We are witnessing . . . a recovery . . . of the Anthropocene as an event to be celebrated. . . . A new breed of ‘eco-modernists’ welcomes the new epoch as . . . a sign of our ability to transform and control, . . . as an opportunity for humans to realize their full potential” (Hamilton, 2015: 41). The hope that technology will eventually save humanity – whether through human enhancement, the transcendental singularity, or simply by leaving the planet – obscures the urgency of the climate crisis in the present. Transhumanist promises shift societal and individual attention toward the future, masking the continued exploitation of the environment in the present. An example of this can be found in Orit Halpern’s text “Planetary Intelligence” (Halpern, 2021). She describes how companies in the Atacama desert now optimize their mining of rare earths (crucial resources needed to build digital technologies) with the help of AI. Through this optimization, the extraction of finite resources can supposedly be stretched into an infinite future. Where previously resource depletion and water scarcity-imposed limits, technological advancements now create an illusion of boundless opportunities. These technological advancements make it increasingly “difficult to imagine running out of materials or suffering catastrophic events” (Halpern, 2021: 245). This shows how the strong belief in technological progress reduces the perceived urgency of addressing the climate crisis in the present. While, in reality, the current state of Earth’s systems calls for a radical departure from our current trajectory to avoid imminent disaster (IPCC, 2023).
- The Transhumanist Anthropocene *restricts the perspective on environmental governance*. It seems no longer possible to envision a world without technology, without human control over nature, and ultimately without human enhancement. As described above, this marks a shift in how the climate crisis is perceived. The Transhumanist Anthropocene introduces a specific standpoint from which environmental problems are addressed. From this position, the only imaginable paths forward involve employing technological solutions, creating a super-human species, or, in its extreme form, eventually leaving the planet. The Transhumanist Anthropocene comes with an imperative to increase technological control over nature, such as with geoengineering, increased resource efficiency, or simply by “playing God at a planetary level” (Lynas, 2011 as cited in Ejsing, 2023: p. 248). For instance, transhumanist visions might accept higher resource and energy consumption of technologies today in order to achieve human enhancement and a supposedly better world in the long run. We can observe this locked-in perspective on techno-solutionism both in academic and policy debates. For instance, much research, especially in connection with the recent AI boom, focuses on technological solutions to environmental challenges (e.g. Cowls et al., 2023; Floridi and Nobre, 2020; Rolnick et al., 2019). Similar perspectives can also be found in the latest IPCC (2023) report, where technological solutions are presented as a necessary and even essential part of climate mitigation paths. Seemingly, environmental governance without techno-solutionism is no longer imaginable. All of this cumulates in the last effect.
- The Transhumanist Anthropocene implies a *capitalist trajectory for the future*. It will likely intensify, or at least maintain, existing inequalities as well as the asymmetric distribution of climate effects. The digital transformation intensified by transhumanism is currently shaped by the interests of venture capital and big tech (Creutzig et al., 2022). Visions of human enhancement are primarily driven by powerful political and economic actors and the tech elite, the “prophets” of a transhumanist techno-religion within the Digital Trinity (Latzer,

2022; Thomas, 2024). As Koch (2020: p. 187) notes, “the promise of species advance quickly devolves to the advantage of those with access to enhancing technologies rather than a societal (or better, global) advance toward a better shared future.” This means that there will inevitably be tensions between those who control technological advances and those who may not even have access to them. The question of who can afford such technological enhancements becomes central. As Gebru and Torres (2024) argue, this is closely linked to questions of racism, ableism, and even eugenics. Despite claims that everyone could benefit equally, Gebru and Torres suggest that problematic eugenic ideas, such as a focus on “intelligence” and concerns about “dysgenics,” persist (2024: p. 9). This exclusive and discriminatory character is exemplified in the development of AGI. Leading transhumanists, for example, “have suggested that AGI should be developed by ‘some small vanguard of elite super-programmers and uber-scientists’” (Gebru and Torres, 2024: 17). This implies that a small elite defines what it means to be “human” for everyone else – while, as we have seen above, the notion of “the human” is problematic in itself (see also Haraway, 2015). As Thomas observes, the result of these dynamics will be a new “technohuman condition” (Thomas, 2024: 126). In classic capitalist fashion, this will be a condition of closedness, reserved for those with socio-economic privilege.

## The future of the transhumanist Anthropocene

What do these effects imply for the future of the Anthropocene? In the literature, this question is often framed under the headings of the “good,” “bad” or “ugly” Anthropocene (Dalby, 2016; Ejsing, 2023). The *good Anthropocene* expresses the hope that humanity can overcome current environmental crises. The idea is often linked to ecomodernist thinking, suggesting that technological advances offer opportunities for a thriving human future (Dalby, 2016: 35; see also Ellis et al., 2024; Hamilton, 2016). The *bad Anthropocene* suggests that the future will be negative for most of humanity, as the sixth – now human-induced – extinction event on the planet is only about to accelerate (Dalby, 2016: 33). Climate science now points to a disastrous future with significant global temperature increases. Hence, many see the good Anthropocene as a delusion ignoring the likely suffering of the majority of humanity (Hamilton, 2014). The *ugly Anthropocene* focuses on the messiness of this new era, emphasizing the complex and conflictual struggles for economic and political hegemony (Dalby, 2016: 34–36). Simon Dalby, for instance, argues that neither the “good” nor the “bad” narratives fully capture reality, and the “ugly” will likely be decisive in shaping the future (2016: p. 35).

In a similar taxonomy, Creutzig et al. outline three possible scenarios for the future of the Anthropocene (2022). The first describes a path toward *planetary destabilization*, aligning with the bad Anthropocene, which reflects our current trajectory. The second highlights a *green but inhumane* path, broadly corresponding to the ugly Anthropocene, focusing on the potential loss of agency and democratic values. The third is a path of *deliberate action for the good*, aligning with the good Anthropocene and describing the best possible outcome with global efforts toward immediate and stark environmental governance (Creutzig et al., 2022: 492). Creutzig et al. contend that while planetary destabilization currently appears to be the most likely scenario, there remains room to influence this outcome through collective global efforts.

We argue that with the rise of the Transhumanist Anthropocene, these possibilities to positively influence the future might increasingly be closing. Acknowledging the processes and effects of the Transhumanist Anthropocene makes clear the dire future that lies ahead. As we saw above, once the transhumanist influence gains momentum, we witness a reinforcement of strong anthropocentrism, the strengthening of capitalist structures, the emergence of new inequalities, and the

threatening of human freedom and autonomy. At the same time, the urgency of climate action will be neglected, and environmental governance will increasingly become a techno-solutionist endeavor.

While this development is not (yet) fully realized, and there is no explicit public commitment to transhumanism, we can however already observe indicators of a growing transhumanist influence. This is exemplified, for instance within governments such as with the involvements of Elon Musk and Peter Thiel in the Trump administration in 2025 (Mühlhoff, 2025a, 2025b). One notable example is the administration's plan to prohibit the federal states from passing their own AI regulation for the next 10 year, arguing that such regulations would inhibit innovation (Bhuiyan, 2025). This clearly reflects a move toward the transhumanist vision of an AGI, a super-human intelligence, or at least of AI as the ultimate solution to major societal challenges.

As the transhumanist movement becomes increasingly influential, the trajectory of the Anthropocene will change significantly. This is particularly visible in societal responses to the climate crisis. Versions of transhumanist ideas are already present in influential policy papers. For instance, the latest IPCC report includes major commitments to strong techno-solutionism. The modeled mitigation pathways, which aim to limit global warming to below 2°C, now necessarily rely on carbon dioxide removal technologies (IPCC, 2023). Yet, these technologies and their impacts are still largely unknown, and some researchers have compared their use to literal gambling (Fulvi and Wodak, 2024). This makes it seem as if techno-fixes are our last hope: “gambling on their [carbon removal technologies] efficacy appears to be our last-ditch option” (Fulvi and Wodak, 2024: 300). Such statements reflect the extent to which techno-religious, solutionist narratives are already embedded in even the most prestigious global institutions such as the IPCC.

A similar dynamic can be seen in the debate around solar geoengineering – “shooting aerosol particles into the stratosphere to block some of the incoming sunlight and thereby cool the Earth” (Malm, 2022: 4). Paul Crutzen, the author who coined the term *Anthropocene*, – introduced this idea as a last resort if greenhouse gas emission were not sufficiently reduced (Crutzen, 2006). Now, solar geoengineering is no longer a distant possibility, but a very tangible techno-fix. In 2019, “723 climate negotiators and scientists, working with the UNFCCC and IPCC” (the major global organizations involved in climate policies), were polled on their opinion on using solar geoengineering as an emergency solution: “52 percent approved of deployment” (Malm, 2022: 34). This demonstrates, that the religion-like faith in enhanced human capacity to control the climate crisis through technology is already present in mainstream debates and policy proposals.

Thus, while the Transhumanist Anthropocene does not constitute an entirely new epoch but rather a specific dimension, it critically outlines a distinct trajectory for our future. It draws attention to a new dimension of this epoch's dynamics: the reinforced anthropocentrism, techno-solutionism, and the imperative of human enhancement. Whether the formal recognition of a Transhumanist Anthropocene is warranted remains an open question, and we explicitly put this notion up for debate. Yet, with this concept, we point to an increasingly dominant trajectory shaping the future of the Anthropocene, which deserves heightened awareness in academic and political discourse.

We believe that, in contrast to the scenarios of the good (deliberate action for the good), the bad (planetary destabilization), and the ugly (green but inhumane), the Transhumanist Anthropocene tells a different story. Its ambitions resemble a high-stakes and dangerous bet on “a story of epic future returns” (Thomas, 2024: 215). This bet profoundly influences the (im)possibility of future paths. It appears increasingly unlikely that democratic control or oversight can be exercised over the processes unfolding as a result of transhumanist digitalization. The promises of transhumanism largely function as a mystical smokescreen. The question about the future of the Anthropocene is no longer one of good, bad or ugly. Rather, as we have shown above, the future is becoming increasingly narrow and harder to control.

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## Notes

1. The climate crisis is a multi-dimensional problem of different systemic issues, such as colonialism, patriarchy, or class struggles (e.g. Fraser, 2022). Hence, talking about the climate crisis implies talking about the central crises of the Anthropocene.
2. The exact starting point is contested. The “Anthropocene Working Group” has recommended a mid-20th century boundary (Zalasiewicz et al., 2017). Others argue for different boundaries or for conceptual approaches without a boundary altogether (e.g. Chakraborty, 2025; Davis and Todd, 2017).
3. Anthropocentrism describes a worldview which sees the human species as more valuable than other non-human entities (Washington et al., 2017). This prioritizes improving human lives and well-being over that of the environment and other species (Biswas Mellamphy and Vangeest, 2024: 602). Key to anthropocentrism are human dominance and control over nature as well as valuing non-human entities primarily based on their usefulness for human purposes (Washington et al., 2017).
4. In the context of digitalization this has been discussed under the heading of “algorithmic colonialism” or “digital colonialism” (Birhane, 2020; Couldry and Mejias, 2019).
5. While Hornborg’s *Technocene* (2015) addresses technology broadly, our concept of the *Transhumanist Anthropocene* is more specific. It focuses on digital technologies and, within those, the transhumanist strand of digitalization as a particular driver of Anthropocene dynamics. We see a unique problem especially in the *transhumanist* dimension of these dynamics.
6. In the following, we describe transhumanism in its current and most dominant form. With this, we follow the way transhumanism is predominantly discussed in the public and in the critical literature (see e.g. Gebru and Torres, 2024; Latzer, 2022; Mularoni, 2024; Puzio, 2022; Thomas, 2024; Torres, 2023). It has to be mentioned however, that there are other, less dominant strands of transhumanism. For example, Sorgner argues that transhumanism deserves a nuanced, philosophically serious defense (2016). He advocates for a weak form of transhumanism that rejects a strong criticism as well as the utopian excesses of orthodox transhumanists who dream of mind uploading and transcendental existence. We acknowledge these works, yet, they are less important for our work here.
7. As Möck & Loh aptly summarize, there are also transhumanist ideas that do not necessarily rely on digital technologies (Möck and Loh, 2022: 5–10). However, as Möck & Loh also argue, these are less influential and rather niche. Hence, they are not our focus here.
8. A critique of transhumanism also comes from the perspective of a “critical posthumanism” (Loh, 2019; Puzio, 2022). Critical posthumanism is a position separate from transhumanism and as a stance that challenges traditional, humanistic dichotomies like woman/man, nature/culture, and subject/object (Loh, 2019: 8) Its aim is to overcome anthropocentrism and a restricted understanding of the “human” (Åsberg, 2017; Puzio, 2022: 329–345).

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