UDK 572
https://doi.org/10.2298/FID2401053J
Original Scientific Article
Received 25.4.2023. Accepted 3.9.2023.

PHILOSOPHY AND SOCIETY
VOL. 35, NO. 1, 001–200

To cite text:
Janković, Stefan. 2024. "A New Climate for Human Nature? Navigating Social Theory through Postnature, the Anthropocene and Posthumanism." *Philosophy and Society* 35 (1): 53–80.

Stefan Janković

A NEW CLIMATE FOR HUMAN NATURE? NAVIGATING SOCIAL THEORY THROUGH POSTNATURE, THE ANTHROPOCENE AND POSTHUMANISM

ABSTRACT

By examining debates on the Anthropocene era ignited by new materialist and posthumanist scholarship, this paper aims to discern how these perspectives can reframe the human-nature nexus. It also considers how various "developmentalist" approaches might assume the role traditionally held by the concept of human nature. The first section highlights concerns raised by posthumanist and neomaterialist scholars about the marginalized status of "nature", life, and biology within dominant constructivist viewpoints. A central argument posits that notions like "denaturalization" and biopolitics amplify societal dominance over nature, pushing social theory towards an anthropocentric and potentially biologically indeterminate stance. Contrasting this, the second section delves into modern interpretations of the planet in social theory, inspired by the emergence of the Anthropocene. This lens reveals a dynamic, co-constitutive relationship, tilting less towards the unilateral commands of "nature" and more towards understanding the evolution of human life and societal structures within Earth's expansive temporal and spatial realms. The third section further unpacks these developmental ideas by juxtaposing the theories of Bruno Latour and Tim Ingold. The paper contends that both approaches endeavor to illuminate the complex processes underpinning the evolution of life forms, underscoring the significance of culture. In conclusion, the intricate postnatural landscape of the Anthropocene necessitates a more integrated human-nature relationship. This calls for not only discarding dehumanizing facets of human nature, but also fostering a renewed sensibility – a deeper form of humanizing that acknowledges and celebrates our shared existence with other species and entities.

KEYWORDS

Anthropocene, postnature, human nature, posthumanism, planet.

Stefan Janković: Assistant Professor, University of Belgrade, Faculty of Philosophy, Department of Sociology; stefan.jankovic@f.bg.ac.rs.

> *Human nature is not the oxymoron we imagined it to be. In this new planetary age of the Anthropocene, defined by human-induced climatic, biological, and even geological transformations, we humans are fully in nature. And nature is fully in us. This was, of course, always the case, but it is more conspicuously so now than ever before: people are entangled in co-constitutive relationships with nature and the environment, with other animals and organisms, with medicine and technology, with science and epistemic politics. We live and die, play, thrive, and suffer by each other. Now is the time for greater scholarly attentiveness to such human and more-than-human worlds in sociocultural research, saturated as they are with ethical and political implications.*
>
> (Åsberg & Braidotti 2018: 1)

Introduction: A Human (Nature) in a Postnatural Landscape?

Is human nature back on the agenda? Curiously, the quote above stands in stark contrast to what was largely taken for granted in the late 20th century. As Jesse Prinz (2012) noted, the infamous nature-nurture debate, traditionally centered around the fundamental aspects of human existence, grew weary. The stance on whether biological nature can continue to be seen as a backdrop or a constraint to human becoming has become widely unpopular, objectionable, and yet superficial. A key issue here is, as Philippe Descola (2013b) underscores, the contrast between the relative simplicity of adaptive processes championed by sociobiology and the evolutionary psychology, and complexity of institutions that emerge from them. Beyond the widely-taken scrutiny to which the various contentious applications of biology have been subjected to (cf. Lancaster 2003; Lewontin 1996), however, a thoroughly troubling relationship between humans and nature nowadays acquires another dimension. While very few people consider DNA to be the fundamental force behind behavioral outcomes, recent findings in epigenetics have led to a paradigm shift. According to Lock & Palsson (2016), experts such as developmental biologists, embryologists, philosophers of biology and social scientists now understand nature and nurture as inextricably intertwined from the moment of conception. In fact, throughout history, these concepts have been fluid and constantly changing due to ongoing disputes arising over their relationship. As a result, previously established boundaries are no longer clear, which has far-reaching implications for assigning responsibility in medical, political, and familial contexts, such as poor health. The politicization of nature, expressed in debates about environmental degradation, gender and prenatal sex selection (ibid.; Newton 2007), along with current controversies surrounding the climate migration (e.g., Baldwin 2017; Bettini 2017), additionally blurs the boundaries. Thus, a misleading character of these debates is unambiguous: neither nature and nurture can be easily defined as subjects of scientific

investigation, nor such controversies could be simply resolved by science (Lock & Palsson 2016).

Yet, the surface has only been scratched. From a theoretical point of view, these *postnatural* conditions have equally loosened disciplinary boundaries, but in doing so, they have imposed distinct challenges for navigating these entanglements. Over an extended period, nature and nurture ceased to be binomial, specifically because an emerging human-technological apparatus created imposing fields of ambivalent and multilayered character. A techno-scientific boom and biotechnological entanglements have already been widely explored in contemporary classical science and technology studies (e.g., Callon 1987; Latour 1987; 1999). Donna Haraway's ([1985] 1991) iconic figure of cyborgs presents probably the most famed expression of these emerging "naturecultures". Yet, in the complex postnatural landscape where "nature" has lost its deterministic strength and become highly manipulable and politicized, and where "society" is continuously rebuilt through these hybridities, such a view has scarcely become mainstream in social theory. A capital project of dispelling the ontological weight previously given to evolution and physical constituencies in favor of history attached to conscious beings dwelling in complex societies was something that certainly aligned apparently irreconcilable "classical" thinkers (e.g., Durkheim [1916], 2005; Marx & Engels [1845] 1998). Consequentially, this has left a strong imprint on further developments in social theory. Even after acquiring a relatively secured status as a research subject half a century ago, "nature" was firmly bound to societal processes. A *postnatural* landscape, with technoscience engineering nature, biotechnology manipulating with organisms and vast amounts of daily routines relying upon medical knowledge, self-help manuals, inventions of specific diets, only amplified this situation. Existing notions of nature have become even further reinforced as purely *cultural constructs*, historicized by *praxis* and society.

It is probably the reason why various social theories since the 1970s barely managed to think about *boundary objects* such as the body or environment without potentiating the cultural frames which encircle these "natural" entities. A social body is hardly thought of as a self-regulated organism with causal reference to anything else besides lifestyles. Nor does it present an apparatus adapted through specific phylogenesis of social classes, that results in capital neurological modifications of sensory and muscular patterns (Bourdieu 1990; 1992; 2000; Downey 2014; Wacquant 2014). Alternatively, being subjected to "reflexive monitoring", the body is a manipulable platform for the construction of personal identity that includes dictation over biological processes affecting health, reproduction or longevity (e.g., Bennet et al. 2009; Crossley 2001; 2006; Giddens 1992). Rampant tendencies to elevate "nature" as a virtuous object of admiration in late-modernity, through consuming organic and whole foods, vegetarianism and veganism, green and ethical consumerism or veneration of landscapes (cf. Sun-Hee Park & Naguib Pellow 2019; Szerszynski 2005), also emanate from distinct lifestyles as "cultures of natures" (Macnagathen & Urry 2001). Not even an "incidental" character of nature, more intensely encountered

through disruptions in assumed environmental "cycles", ended this fashion. The ascending popularity of environmental issues certainly has highlighted the deep societal interference into ecological processes, as famously being expressed in *Risikogesellschaft* by Urlich Beck ([1986], 1992). Still, the major explanatory frames have hardly provided environment with performativity: rather, they predominantly involved addressing how the human-induced metabolic machinery "engulfs", manipulates and mishandles the outside world (cf. Doyle 2011; Hannigan 2006).

The emergence of the Anthropocene concept has strongly encouraged social theories to delve deeper into postnatural circumstances. Ironically, it has forged a new climate for the relationship between humans and nature. The acquisition of insights on the anthropogenic imprint has imposed a novel magnitude of complexity that delineates a new geological epoch characterized by unparalleled human interference in the Earth's ecosystems, climate, and biological systems; yet, it surpassed a somewhat patronizing ecological awareness. From a philosophical perspective, the Anthropocene has fundamentally altered the idea of *human exceptionalism*, endowed with reason and living above things (Palsson et al., 2013; Savransky, 2021; Szerzinski, 2012; Viveiros de Castro, 2019). The inclusion of the Anthropocene in the conceptual pantheon of the social sciences could therefore be understood as an unprecedented momentum for challenging the fixed boundaries of the Great Divide with its traditional division between naturally occurring phenomena and human-made creations. In what Jensen (2022: 33, original emphasis) describes as "a world of shifted and diminished human agency", there has been a significant push in the social sciences. On the one hand, understanding uncertain material processes that are beyond human control has now become both urgent and foundational for new materialist thinking and posthumanist developments. This also brings human social and political projects closer to planetary geophysical and biochemical processes, ultimately invalidating a conventional demarcation of evolution from physical nature as Homo sapiens and history as conscious beings. On the other hand, transcending the entrenched categories that have kept the two domains separate embodies a unique, epochal mood. This sentiment is endorsed by a growing number of scholars aiming not just to step outside the rigid anthropocentrism of the Western episteme but also to reimagine future ecopolitical relations within broader, more-than-human constellations (cf. Blaser, de la Cadena 2018; Charbonnier, Salmon, Skafish 2016; Delanty, Mota, 2017; Descola 2013a; Debaise, 2016; Escobar 2016; Grear 2020; Savransky 2012; Strathern 2018; Viveiros de Castro 2014).

While not placing human nature on the agenda – particularly without reverting to its traditional humanist meaning – the issues discussed previously emphasize the need to expand our theoretical and conceptual frameworks. This expansion helps us understand the evolving dynamics of the human-nature relationship in postnatural contexts. A central question this paper aims to answer is how does this postnatural state influence our perceptions and potentially come in place of the long-debated concept of human nature? Drawing

inspiration from Maria Kronfeldner's (2018) call for a post-essentialist, pluralistic, and interactive view of human nature, our paper delves into the challenges and nuances associated with this perspective. Even though the concept of human nature has become somewhat elusive and less explored in social theory, its enduring presence cannot be denied (Abbott 2016). This is particularly evident in what Kronfeldner describes as the "developmentalist challenge:" the question of how the intricate interplay between humans and biophysical materiality unfolds. By examining new materialist and posthumanist scholarship – which is largely a product of the Anthropocene era – we aim to discern how these perspectives can reframe the human-nature nexus and how this "developmentalist" approach might take the role the concept of human nature traditionally had.

The paper is organized as follows. The first section addresses issues recently highlighted by posthumanist and neomaterialist scholars concerning the marginalized status that "nature", life, and biology have acquired due to prevailing constructivist perspectives. A key point in this argument is that concepts like "denaturalization" and biopolitics bolster societal control over nature, pushing social theory towards an anthropocentric and potentially biologically indeterminate stance. Counteracting this perspective, the second section explores contemporary conceptualizations of the planet in social theory, an exploration sparked by the rise of the Anthropocene. Through this planetary lens, we assert the unveiling of a dynamic co-constitutive relationship, which leans less towards the unilateral dictates of "nature" and more towards the extended evolution of human life and societal structures within Earth's vast temporal and spatial dimensions. The third section delves deeper into these developmental perspectives by contrasting the theories of Bruno Latour and Tim Ingold. We contend that both these approaches aim to shed light on the intricate processes driving the progression of life forms, emphasizing the role of culture in these mechanisms. In conclusion, we argue that the postnatural intricacies of the Anthropocene demand a more unified human-nature nexus. Essentially, this involves not only expulsing the dehumanizing aspects of human nature, but also cultivating a new sensibility – a more profound mode of humanizing that recognizes and reveres our shared existence with other species and beings.

1. Denaturalizing What? A Life Beyond Biopolitics

The growing discontent that social constructivism has encountered over the last decade provides perhaps the most fitting reflection of the perplexing postnatural landscape. Once an omnipotent framework that played a notable historical role in science studies, social constructivism underwent a profound reassessment, closely aligned with the rise of posthuman neomaterialism and methodological innovations. This transformation brought forth a robust realist approach, a focus on expanded material contexts, and, above all, the elimination of the categorical distinction between human bios and non-human zoe (cf. Pellizzoni 2015; Ulmer 2017). While actor-network theory can be seen as the

birthplace of such efforts, especially for its groundbreaking departure from the social reductionism of the Strong program (e.g., Latour 1987; 1999; Law 1999; 2004; 2011; Stengers 2010),[1] constructivism's blind spots go beyond endowing language, representations, and signs with enormous agency, historicity, and power over reality. Whereas with constructivism "the only thing that does not seem to matter anymore is matter", as Barad (2018: 233) vividly recalls, it also endangers non-human performativity and ultimately leads to an *uncanny biological indeterminacy*. Writing about this ambiguous legacy that numerous political, social, and philosophical projects have uncritically adopted, Pellizzoni (2022: 159, original emphasis) rightly concludes that "[i]f the human is the animal with no predetermined task and milieu, then it *can* do everything but *has not* to do anything." On the other hand, this appears to be rather problematic in posthuman thought, which attempts to be fully *bio-affirmative* and oriented toward life itself – as being bound up in complex, more-than-human webs. It is precisely for this reason that entrenched constructivist tropes saturated with the ideas of suppressing nature, as has been done through *denaturalization* or the famous *biopolitics*, are reaching a dead-end.

But how did nature become such a contested subject, especially among the modern, secular and well-educated ones, as Bennet (2010) observes, in their impulsive cultural, linguistic and historical constructivism? Following the decline of biological determinism in mainstream theory and the rejection of ideas

1 It is noteworthy that a radical interpretivist course generated under the so-called Strong Programme (SP) was a backbone for many variants of constructivism. However, for actor-network theorists, this kind of "constructionist machinery" (Knorr-Cetina 1999) simply resurrected semiological idealism, relegated the alterity of other entities and epitomized an exaggerated "social reductionism." Substantially, it obscured the co-production of our world. At the turn of the millennium, Latour (1999) claimed that constructivism, once fruitful in identifying the social aspects of scientific production, has ossified and become a relativistic platform incapable of capturing the intricate relationships between scientists and the objects of inquiry. Constructivism has simply extended the dramatic assessment that access to reality is limited or even blocked by socially-conditioned framings. On the contrary, scientific work sets in motion the realities it describes (Law 2004) through *fabrication*. As an emergent practical endeavour, fabrication does not detach the production of scientific facts from their deep embeddedness in collectives, as constructivists have been claiming; however, it also involves tools and equipment, as well as a multitude of interpretations, negotiations, and indispensable controversies that precede the "stabilization" of scientific facts in the broad political, cultural, and technical environment in which science is situated. An additional layer of complexity arises from the exposure of the agency and historicity of non-human entities. Contrary to being seen as mere objects of inscription, scientific endeavour is deeply attached to unveiling of their performances, behaviour and careful noting of their agency. There is nothing mystical, Latour (1993; 2005) repeats, with scientific collectives "socializing", transforming and learning from non-human entities. It is why ANT scholars prefer a notion of *factishes* over facts: the former displays a prolonged intertwinement with non-humans, their deep attachment to a work of fabrication within scientific collectives, dedicated to a diligent discerning of their qualities (Latour 2010; Stengers 2010).

that likened humans to biologically "pre-socialized" animals – views which emerged from a prevalent critical stance among late-modern social scientists – it is understandable why there was a compelling call to move beyond the essentialisms tied to many concepts. In this regard, denaturalization served as the main technique and tool for identifying the deeply cultural basis of phenomena otherwise perceived and experienced as "natural." Denaturalization itself is a tricky concept. As Rita Felski (2015: 71) instructively notes, "such a bad rap" attached to nature, natural and naturalizing reflected a delicate ethic of critical theory in its overwhelming effort to be named as the only "progressive" method and to present itself as a means of uncovering the most buried aspect of social power, oppression and domination.[2] Obviously, nature was one of the most important allies on this axis and was "portrayed as the realm of the automatic and unthinking, the tyranny of coercion and compulsion, associated with whatever is mandated either by biology's laws or society's norms." Dentauralization thus became a tool for discerning these "delusional" aspects of social reality, where specifically the oppressive appeals to nature were seen as extensions of power and domination. Reasons to "deconstruct" it seemed so obvious. However, nurturing such a theoretically suspicious and antagonistic approach proved to be inefficient (cf. Anker, Felski 2017).

Interestingly enough, in spite of a strong presence in gender theory, a new meaning provided to denaturalization came from this field – traditionally the most susceptible to ideas such as cultural construction of nature and deessentialization. Once revolutionary, a canonical conceptual detachment of gender from biological sex, according to Alaimo (2010; 2016), appears inadequate for addressing the questions of embodiment, materiality and various relational assemblages which partake in making of gendered bodies. The salient constructivist basis of feminism, certainly has played an immense role in separating the gender from allegedly continuous and somewhat haunting biological "destiny." Yet, in doing so, many feminist theorists have adopted the prevalent binary views instead of opposing them, by assuming that certain aspects of biology are fixed or even essential features of human nature. As biology has been drafted to serve as the armory for racism, sexism and heteronormativity, Alaimo reminds that such failure in displacement of determinism has prevented considering the biological body as transformable. Braidotti (2016; 2018) also argues that moving beyond denaturalization means breaking with common signifiers for all organisms. Without downplaying the importance of

2 Braidotti (2013: 3) also masterfully discerns that, in dispelling humanist endorsement of human nature, a critical spirit of the post-1968 thinking has led equally to the "implosion" of anthropocentrism and anti-humanism. "It turned out that this Man, far from being the canon of perfect proportions, spelling out a universalistic ideal that by now had reached the status of a natural law, was in fact a historical construct and as such contingent as to values and locations. Individualism is not an intrinsic part of 'human nature', as liberal thinkers are prone to believe, but rather is a historically and culturally specific discursive formation – one which, moreover, is becoming increasingly problematic."

language and the largely popular methodology of (de)construction, encountering such unstable materiality propelled with environmental crises and divisive character of new technologies, calls for "epistemic acceleration" and profound rematerialization by expanding the horizon of relations taken into account. Accordingly, "posthuman feminism embraces the tensions of new materialism and repurposes them in a dynamic manner, by alternatively re- and de-naturalizing strategically all naturecultural matter. It thus produces a process ontology of cross-species relations that includes the inorganic and the technological apparatus" (Braidotti 2022: 112).

Unlike denaturalization and the consideration of gender or a body as a field for semiotic inscriptions, a neomaterialist course taken by posthuman feminists situated such classical themes of embodiment into a matrix of embedded becoming that encompasses heterogeneous assemblages – equally organic, technological and social (ibid.; Åsberg & Braidotti 2018; Grosz 2010; Grusin 2017). Following the radical epistemologies, posthumanist feminism represents an innovative way of thinking beyond anthropocentric and masculinist fashion, focusing on performativities and alliances that transcend the human species. However, the analytical emphasis on flows between permeable bodies, also known as transcorporeality, goes beyond purely ecological motives by proclaiming the interdependence of humans, animals, and the environment. Rather, the rejection of the notion of human exceptionalism and supremacy is equally crucial to understanding the survival of living organisms, but far beyond the otherwise obsolete notion of nature. The emphasis on the productive and inherent power of *life* in all its non-human forms in posthuman feminism thus unfolds as a relational and *renaturalizing* philosophy. Itself, it is centered around the concept of *zoe* - replacing the inherently anthropomorphic conception of *bios* with a dense, vital, and transactional conception of life (cf. Huffer 2017). However, the shift to a geocentric or zoe-centered approach requires a thorough reassessment to determine what should be considered a thing in the context of feminist materialist theory, argues Braidotti (2017: 34). It is a "dislocation of difference from binaries to rhizomatics, from sex-gender or nature-culture to processes of differing that take life itself, or the vitality of matter, as the main subject."

Prior inquiries reflect a much broader renewal of interest in life, which has nonetheless imposed scrutiny to some of the widely appreciated concepts from critical repertoire – most notably, *biopolitics*. The importance of life acquiring historicity and, as Foucault ([1966] 2005) famously debated in *The Order of Things*, is what provided a peculiar basis for differentiating life and death, but more substantially, as an "untamed ontology" and a general law of beings that might erode them from within. Exactly the latter had a capital role in the parallel designing of life and human sciences. During a specific historical period, life began to be viewed as an object that could be managed and administered, respectively, becoming subjected to distinct regimes of "governmentality", giving rise to two forms of power: anatomo-politics, which focuses on the individual human body as a machine to be measured, disciplined and optimized, and

biopolitics, which focuses on managing populations as a "species body." These forms of power were crucial for the development and expansion of capitalism, as they allowed for bodies and populations to be effectively incorporated into productive and economic processes. Law also shifted towards regulating and measuring life, rather than simply punishing transgressors of sovereign power. This marked a new era where life was both placed outside of history as a biological and natural phenomenon, and inside of it, subject to politics and control within society (Foucault [1979] 2008).

Biopolitics specifically appeared to be a double-edged sword. One of the most vocal critics of the concept, British political theorist David Chandler (2018a; 2018b) contends that biopolitics has become a catch-all phrase used by both ends of the political spectrum to describe subtle population control mechanisms employed by the powerful pharmaceutical industry and genetic modification technologies. While the Covid-19 pandemic has only reinforced its widespread and easy application (Chandler 2020), Chandler also underlines the flawed interpretation, observing that Foucault's original concept, designed to illustrate the emergence of a distinct rationality and governance technology aimed at improving population health, has devolved into a gullible critique founded on the unproven assumption that there is an inherent manipulation of biological processes. Controlling the latter seems a somewhat unattainable task, especially in the Anthropocene epoch. As both Chandler (2018b) and other authors assert (e.g., Matthews 2019; 2021; Wakefield et al. 2020), by epitomizing the modernist command and control logic, biopolitics proves to be unfit for climatic risks and uncertainty. Namely, keeping such a conviction that the vast landscapes of biophysical and geochemical entities can be completely subjected to "governmentality" by using epistemic systems and management technologies, as we will soon argue, seems rather naive.

However, biopolitics reflects a much broader conundrum held by these "denaturalizing" critical approaches: it operates insofar as the humans are promoted as principal living beings, both in performing or subjugating to power. By setting the figure of humans into the foreground, as Elizabeth Povinelli (2016; 2017a; 2017b) convincingly argues, it enters into a rather peculiar continuity of "life", involving birth, growth, vulnerability and precariousness, and death with variations in quality – being both expected and unexpected. Like other life forms, the Anthropos is subject to the possibility of extinction, which is a much larger form of death. The idea of mass extinction, which refers to the extinction of all life forms, not just humans, may be linked to the biopolitical concept of population. However, the concept of extinction intensifies the problematic of death, affecting not only life and extinction, but also non-life, including the inorganic and inanimate. Thus, the Anthropos is considered part of the life set only as long as the distinction between life, death/extinction, and non-life is maintained: non-human entities are deemed only as elements of human metabolic processes, a matter of deriving sufficient energy for survival. Povinelli therefore contends that common models of "life itself" remain entrenched in the notion of a self-contained entity and reinforce oppositions

such as nature and culture, biology and technology, human and machine. But, neither life can be separated from non-life, nor do valuable properties of life – such as birth, becoming, or actualization – can be contrasted with a terror of non-living existence. Organic life is rather incited by preindividuated, underlying, inhuman geological forces, other than "powers" attached to human-controlled technologies (Grosz, Yusoff & Clark 2017). As Bennet (2010: 61) masterfully underscores, "life draws attention not to a lifeworld of human designs or their accidental, accumulated effects, but to an interstitial field of nonpersonal, ahuman forces, flows, tendencies, and trajectories" (ibid.: 61).

Much of the Anthropocene post-biopolitics has already been deeply embedded in this emerging biophilosophy. In contrast to the anthropocentric ideals of the Enlightenment and its deliberative politics of autonomy, many authors protest the compartmentalization of a distinct human realm of independence and freedom from the natural world. The bifurcating character behind the acquisition of greater political, economic, and cultural freedoms, they argue, not only capitalizes on the abundant uses of the environment, but also detaches the human political project from complex global patterns such as weather systems, carbon cycles, and more generally from the multiple agencies and actants participating in planetary processes (Charbonnier 2017; 2020; Latour 2018; 2020a; 2020b; 2020c; Nelson & Braun 2017; Stengers 2017). Post-biopolitics, in this respect, becomes a distinct *ontopolitical* project – an attempt to discern how realities come together through socio-material becomings of somewhat gigantic spatio-temporal scale (cf. Savransky 2012). Nonetheless, it epitomizes an idea of deep "submersion" into more-than-human constellations. In what appears to be the probably most exotic and heavily misunderstood philosophy coming under the banner of speculative realism, this is a matter of unbroken gigantic formations of objects (Bryant, Srnicek, Harman 2011; Harman 2018). The very adjective "speculative" illustrates well the diagnosis of the postnatural age: the impossibility of qualifying the ultimate ontological instance – either people or things, since the vast parts of reality are largely undisclosed or "black-boxed." What is thus characteristic about these *symbioses* (Harman 2016), *hyperobjects* (Morton 2013; 2016; 2018) or *machines* (Bryant 2014) is that the reality they hold remains complex and only partially accessible due to a number of interactions performed among the objects.

Later, this would become precisely a matter of concern in the postnatural Anthropocene era. An obsessive attaching of the world and things to human comprehension – although nominally marked as existing independently – thus necessitates capital corrections, since it obfuscates *what performs*. As Bryant (2014: 141) underscores, "we must take great care not to confuse the thesis that flees, rats, malaria and bubonic plague bacteria, power lines, and Hurricane Katrina belong to the social, with the claim that they are socially constructed (...) The powers of Hurricane Katrina arise not from how we represent it, they are not derived from 'society' but belong to the hurricane itself." Yet, this is not merely about reducing human intentionality and symbolic dominance, or attributing more agency to non-human entities. It delves deeper into understanding

the reality constructed by diverse agents across varying temporal and spatial scales that influence human existence and evolution. This is where denaturalization becomes pivotal. While it toyed with humanistic ideals, it simultaneously fortified the narrative of a "good" human nature, which paradoxically is framed as wholly anthropocentric and biologically indeterminate. As ecological devastation escalates, and we witness a rise in instant revisionism and anti-realist politics, the urgency to re-evaluate and potentially reverse denaturalization intensifies, especially given its increasingly *dehumanizing* consequences.[3] Yet, this trend appears incongruent when juxtaposed with significant shifts in our postnatural context, where numerous processes now eclipse human influence. The Anthropocene era has spurred calls for a reimagined macro-conceptual framework to evaluate human-nature relations, highlighted by efforts to expand social theory to a planetary scale.

2. Unfolding Planet: The Anthropocene Event in Social Theory

Undoubtedly, the Anthropocene is a very controversial concept (cf. Lorimer 2017; Sklair 2017). Recently, British cultural theorist Mark Bould (2021) listed more than 30 possible variants for naming the new geological epoch, among which the most notable contenders might be Jason Moore's (2016) *Capitalocene* and Donna Haraway's (2016) *Chthulucene*. Each of these variants describes quite different landscapes of climate change, involves different protagonists, but most importantly, how they can be distinguished in ethical terms, as the scales and scope of responsibility are quite different when we speak, for example, of London's urbanites or the inhabitants of the Bangladesh coast. The notion of Anthropos as the backbone of the Anthropocene therefore carries potentially dangerous connotations. According to postcolonial and Marxist authors, the greatest error is a hasty standardization of "humanity in peril" (Barry & Maslin 2014; Malm & Hornborg 2014; Swyngedouw & Ernston 2018). With such an overgeneralized category of species, they contend, the extractive machinery of political economy – as the primary cause of climate change – is invalidated. Moreover, the very convention inscribed in the conception of the human species deeply reflects colonial habits: under a universalist appeal now wrapped in a unified biological and geological agency, the species thesis smuggles an inequitable distribution of "common fate" while diluting genuine responsibility for climate change (see Boscov-Ellen 2020). Add to this the debates about officialization, which are still ongoing because of the (in)sufficient amount of stratigraphic evidence needed to clearly delineate the extent and scope of an

3 Postcritical authors specifically point out that the most gullible contemporary forms of instant revisionism, often too close to conspiratory thinking, have their origin in hard-line constructivist thinking. Deeming that "deeper" realities brought through language and meanings have to be deconstructed, such claims lead to a belief in artificial creation of reality, clandestinely performed by those who hold social power. Ultimately, this ends in somewhat radical antibiologism and flattening out any non-human entity from performativity (Anker, Felski 2017; Felski 2015).

ecological imprint on the environment (Zalasiewicz et al. 2019), and the Anthropocene seems even less enticing.

Despite the controversies surrounding it, there are valid reasons for adopting the concept of the Anthropocene, beyond the fact that it is the most popular trope in the current ecological vocabulary. Writing about the multifaceted character of the Anthropocene, Timothy Morton (2016) argues that the absurd teleologism and accompanying metaphysics regarding species is diminishing in this case. For the human species, he claims, can now be thought of in a completely *anti-anthropocentric* way – that is, outside being ontically given and distinct from all other beings. The Anthropocene, therefore, cannot be merely seen as a tool for delimiting human geological agency or as the backbone of current ecological consciousness: instead, it catalyzes a sense that "the human is decisively deracinated from its pampered, ostensibly privileged place set apart from all other beings" (ibid.: 24). Nonetheless, this interpretation depicts an uncanny immersion in processes of an Earth magnitude, a deep involvement in sometimes gigantic processes that nevertheless appear local. A figure of the Earth is particularly salient here: as the growing body of findings from the Earth systems sciences simply "stampedes" into social sciences, it imposes a deep engagement with the planetary processes – bonded into patterns, exhibiting a tendency to rearrange its constituent elements and undergoing sudden shifts or transformations in its functioning.

The planet has already become topical in social sciences and humanities, but the work of historian Dipesh Chakrabarty (2009; 2014; 2015; 2016; 2017a; 2017b; 2017c; 2019; 2021) stands out in this regard, because of its attempt of making such a concept a principal humanistic category. In contrast to a rather dogmatic way of thinking that prevails in most of the humanities, Chakrabarty's idiosyncratic attempt to juxtapose social and natural history has far-reaching implications. As he repeatedly argues, the habitual separation of the two historical streams overlooks a much broader level of "deep history" – related to a profoundly emergentist history of life on the planet. Chakrabarty's work is interesting not only in terms of the converging temporalities that are usually considered separately. Taking advantage of realism, his positions strongly oppose any variant of parallelism – particularly those that elegantly assert the autonomy of social history – as they each move away from mutually interacting physical, chemical, and biological processes (Chakrabarty 2017b). Above all, a pariah status for natural history eliminates any consideration of how social and economic systems are deeply embedded in those of the earth in a long-term coevolutionary matrix. By embedding human life in a network of reciprocal relationships with various other life forms – many of which precede humans, Chakrabarty seeks to revive a vital perspective that breaks away from a homocentric view. Many of the terms commonly used in social theory, such as empires, globalization, capitalism, socialism, Enlightenment, civilization etc., reduce the interactivity to human agency. Our historically recent awareness on climate change follows a similar fashion:

> By introducing new questions of scale – astronomical scales for space, geological scales for time, and scales of evolutionary time for the history of life - all in search of understanding the relationship between the history of the planet's atmosphere and its life-carrying capacity, and thus promoting what may be called a life, or zoecentric, view of the history of the planet, the literature on global warming works at a tangent to the completely homocentric narrative of globalization (Chakrabarty 2015: 154).

Engagement with the deep history encompassing the intertwined temporalities of evolution and geology, therefore, calls to uncover the web of complicated interdependencies that make human life possible, among other things (Chakrabarty 2016; 2020). Highlighting this *zoecentric* perspective, thus, neither ends with conclusions on recent dramatic environmental shifts due to climate change nor could it be simply reduced to twofold and disentangled regimes of history. Surely, the effects of the so-called Great Acceleration are indisputable (cf. Asher & Wainwright 2018): a remarkable increase in both human population and average life expectancy after the Second World War, which stand at a base of current cataclysmic events, such as global deforestation, desertification, accumulation of industrial wastes, and acceleration of extinction, can be attributed largely to the widespread use of fossil fuels for creating artificial fertilizers, pesticides, and irrigation pumps, along with petrochemicals used for pharmaceutical products. Still, none of this resulted from a "sudden" conjunction of detached, parallel histories; rather, a Great Acceleration as a birthplace of current climate change marked a shift in interactive patterns: "this species–technology complex has flourished at the expense of many other species and now threatens to push the Earth system into another phase altogether" (Chakrabarty 2018: 25). Throughout their history, humans have been a part of biochemical cycles where waste from one organism served as a resource for another. Whereas this recycling process sustained life, significantly larger amounts of waste that cannot be broken down or reused now are being generated due to heavy reliance on cheap and abundant sources of energy, such as fossil fuels. A planet on its own was a key "supplier" and a vital basis on which human life-forms evolved. It is exactly what Chakrabarty (2021) names the *otherness of the planet*: its relative self-sustenance, which operates on gigantic spatial and temporal scales.

As much as Chakrabarty is interested in discerning the temporalities of Earth magnitude, planetary sociologists provide an additional emphasis to entanglements of the human and non-human, specifically by accentuating how the collectives adapt to *planetary physics* – flows, motions and mobilities that are occurring on various spatial scales (e.g. Clark & Szerszynski 2021; Clark & Yusoff 2017; Palsson & Swanson 2016; Szerszynski 2016, 2018, 2019). Planetary sociology has originated from indeed enviable attempt to capitally redefine the otherwise (physically) static ontology of social sciences through a "mobility paradigm" (cf. Büscher Sheller & Tyfield 2016; Sheller & Urry 2006; 2016; Tyfeld & Blok 2016). A key difference inserted with the planetary turn in this regard opposes usual methods deployed in the sociology of globalization. Unlike an

interest in discerning the vivid interconnectedness of social processes that occur *across the surface* of the planet, according to Szerszynski (2019: 224), "the foundational task of any planetary turn must be the interdisciplinary task of investigating the planet as a category of being in its own right" – that is, an engagement with the deep and dynamic space of Earth. Usually marked as a stable backdrop for human activities, planetary dynamics is commonly omitted from any social analysis, even though each collective engages in a quite distinct manner with the physics of motion and vertical mobilities occurring both within and in-between various strata of the Earth: atmosphere, biosphere, hydrosphere, magnetosphere etc.

Potentially the most innovative assumption put forward by the planetary sociologists is an inversion of the somewhat stereotypical depiction of collective life as simply adapting to a relatively stable environment. As particularly Clark and Szerszynski (2021: 10) underscore, this is "never simply a matter of inscribing a social or cultural power on a waiting landscape, but always an active conjoining of powers from across the different parts of the Earth." Multifarious means through which social formations achieve their distinct self-making by cultivating land, mobilizing fossil fuels or manipulating the forces of water-flows, never exceed the very dynamism of the Earth. An ontogenetic formula thus should rather be postulated by providing primacy to different *innovations in mobility*, based on stabilizing material flows such as food and energy sources, roads, infrastructure, etc., than simply "engrafting" human life to a finite and static environment. As Clark and Szerszynski convincingly show, long-term cycles of sedentary life result primarily from coalescing with *dynamic exchanges* between the layers of the Earth, such as the transfer of biomass like fuel, food, livestock, and even geomass like building materials. Different temporalities and forms that these materials gain are largely a part of "drifting" not only across the planetary surface, but due to mobilities between the strata. The notion of *Terra mobilis* indicates precisely this dynamic ensemble, which largely helps such discrete entities as human collectives to take shape, but also gain strength by harnessing energy and establishing the mechanics of movement. "[T]o geologize the social", Clark and Szerszynski point out, "is to prise open the question of how certain social actors acquired previously unthinkable powers or agencies, it is to ask what else might have been or might yet be done with the geopower they sought to make their own" (ibid: 49).

Albeit the planetary timescales often go beyond the scope of political and even emotional reach, creating a peculiar experiential puzzle on how to contemplate over extended periods beyond human comprehension, the concepts and ideas derived from the nonlinear Earth sciences impose accommodating social and cultural becoming into a context of rather dynamic ensemble of material entities. Yet, this can hardly be confined to a simple-minded theoretical syncretism. Due to somewhat critical entanglement of human life with "geo-biochemical" processes of the planet, there is an urge for equally genealogical, epistemic and fundamentally ontological redefining of human. According to Chakrabarty (2021), a notion of force, that has been traditionally reserved for

natural sciences, is equally applicable in social sciences and humanities as the notion of power was, since collectives "negotiate" with the Earth's surface and depths and are embedded in its extensive duration with other beings – living and non-living. As humans cannot be detached from the vast planetary timescales of geobiology, therefore they cannot be classified and thus detached from other species, whose role is of capital importance for sustaining the planetary life. The placement of humans in a novel topology gives an impetus to explain the overall problem of species development by bringing it closer to *environmental epigenetics*, while it also necessitates attention to the intertwining and co-evolving aspects of the human/nature interface. It is where the projects of Bruno Latour and Tim Ingold, that is, ontologies of *networks* and *meshworks* (un)surprisingly converge.

3. Lines of Biosocial Becomings: Life, Sustenance and Interactive Account

In spite of minor frictions that occurred a decade and a half ago (see Ingold 2007), there are many affinities which the recently deceased French anthropologist, sociologist and philosopher and British anthropologist had in common – especially, *a conception of life forms being profoundly entangled*. This is what also largely resonated in Latour's reinterpretation of the famous Gaia hypothesis by James Lovelock which, *inter alia*, served as a principal inspiration for much of the planetary thinking discussed above. Latour's quite voluminous study *Facing Gaia: Eight Lectures on the New Climatic Regime* (Latour 2017a) along with a series of other papers written in the past several years (e.g., Arenes, Latour & Gaillardet 2018; Latour 2017b, 2020b; Latour & Lenton 2019; Lenton, Dutreuil & Latour 2020), center around the inability of classical conceptions of nature(s) to account for indeed unprecedentedly complex interactions of humans and the planet. Latour's ambition to offer a new image of the Earth engenders several important theoretical breaks, leading to a distinct *anti-holistic reformulation* of the Gaia hypothesis. Namely, Latour abandons the previous focus on maintaining or self-adjusting connections between Earth's components such as organisms that have been widely held in the Earth system sciences, thus aligning with a growing awareness of the potential for interconnectivity within complex systems to exacerbate disruptions and lead to uncontrolled destabilization. A climate regime under the Anthropocene, certainly serves as an important platform for such theoretical turn, especially because it presents a "golden spike" for abandoning the modern ontology and accepting a more symmetrical treatment for already distorted (concept of) nature (cf. Latour 2004). Yet, Latour adds an additional layer to such an encompassing task: producing a new image of the Earth as a non-coherent assemblage of *networked* entities, profoundly enabling a *permanent sustenance of life*.

There are several important points to be underlined here. First, since it could hardly be pictured as a homogenous entity, Gaia escapes from being confined in fixed and pre-defined spatial and temporal frames. As Latour & Lenton (2019:

664) warn, such an approach escapes from situating life-forms within larger frames. "Whatever the name given to such a frame – God's providential dispensation, neo-Darwinist natural selection, strictly mechanistic laws of nature, ecological systems, biosphere – it was from this larger frame that life forms found their limits and their definitions." Instead, a "bewildering heterogeneity" of life forms generates a multiplicity of possible frames and mechanisms: temporal scales and spatial boundaries are fluctuating and highly dependent on interactions performed among the life forms. In such delicate webs of organic transactions, life forms coevolve and their spatial extensions are an offspring of "deep history." Secondly, complex occurrences that result from the interactions of various biological agents and abiotic factors ultimately create a heterarchy, not a hierarchy. Latour is at pains to abolish images, particularly the anthropocentric one, which potentiate either the idea of dominant species or vacuous referring to natural selection: as he continually repeats, the importance of each agency in these concatenated formations could not be undermined, nor they could be reduced purely to intermediaries. Rather, life forms are coherent entities which, while not possessing any intrinsic features or following strict teleology, modulate their immediate environments. As much as Latour dismisses holistic thinking and refuses to align Gaia to a self-regulating superorganism, he nonetheless decisively refutes an atomistic imagery where organisms are equated to diligent, entrepreneurial-like entities (see particularly: Latour 2017b; 2020). A renewed Gaia theory rather requires seeing each life form as relationally located into delicate biochemical feedback loops and retroaction. Overall, this makes Gaia more or less a dynamic feedback arrangement, established through a long history of evolvement between the life forms and abiotic conditions of habitability, that is situated in a delicate envelope, "a few kilometers thick" (Latour 2017a: 140). A concept of *critical zone*, which Bruno Latour borrows from biochemistry, illustrates well these earthly processes: biochemical evolution and geophysical emergence of reciprocal connections between organisms in a thin "biofilm."

Ultimately, these interventions epitomize Latour's ambition to apply the rigid findings of geology, climatology and biology and develop a broad research protocol (cf. Latour 2013) which would make the fragile Gaia loops more visible, sensible and – politically relevant. Such endorsement does not simply mean to transpose the methods of natural sciences into the realm of social sciences; rather, it means to produce localized inquiries on climate, soil or cities and to display interactive sequences that enable human life forms, as some research on metabolic processes has already shown (e.g., Brenner & Katsikis 2020). In order to trace these relational territorialities of organic flows and exchanges Latour and his associates were extensively developing a *geotracing*, as a method with a strong visual component, which enables precise inquiries on three fundamental principles of Gaia mechanisms: *autotrophy*, *networks* and *heterarchy*. Autotrophy plays a vital role in the Anthropocene era, as it provides a means of deriving energy from metabolic by-products. In order to establish proper circular economies and move away from extractivism, it is important

to further explore these processes. Additionally, life within the critical zone involves tracing global biogeochemical networks of micro-actors exchanging materials, electrons, and information. It is also essential to recognize the importance of heterarchy in sustaining life on Earth. Despite the various feedback mechanisms that operate within Gaia being dependent on the scale and duration observed, they are crucial for maintaining the habitability of the planet. Therefore, by emphasizing the links, webs, and mechanisms that sustain life, we can strive towards a better coupling of life forms and ensure the long-term viability of our planet (Lenton & Latour 2018).

Since such complex, life-sustaining webs depend on "wayfaring" for their diachronic and synchronic modes, the construction of life into a horizontal, entangled "meshwork" eventually produces the idea of *biosocial becomings*: intertwined trajectories of "social" and "biological." The motif of biosocial becomings has been echoed repeatedly in the work of anthropologist Tim Ingold. However, while it was derived from his broader *thesis of complementarity*, which accounts for the organic and cultural nurture of humans through distinct interaction with the environment, his recent writings have even further been pushed towards genuine relational ontology guided by an idea of cumulative organic entanglements between the two domains. A culmination of such a break from the notion of organisms as discrete, delimited entities, might be found in his most recent writings. As Ingold and his collaborators argue, contemporary environmental crises make it necessary to abandon rigid distinctions – especially the one between solidity and fluidity. A common partition of reality into blocks, consisting of solid material objects on the one hand and fluid and subjectively interpretable ones on the other, simply cannot help in grasping the *flowing materiality* – especially the one involving climate change (Simonetti & Ingold, 2018; see also: Clark et al. 2022). With an aim of elucidating a continuum of human-environment interactions, it is necessary to break away from the entrenched assumptions that prevent thinking on materiality as characterized concurrently with plasticity, viscosity, and elasticity, as well as from keeping the culture as a realm where "fluidity" originates. Likewise, against theses on occasional overlapping, Ingold underscores that a complex metabolic exchange intertwines equivalently *microscopically and macroscopically*.

Nonetheless, this line of argumentation imposes a novel glimpse into evolution. Much of Ingold's claims have been developed through a direct encounter with mainstream evolutionary and environmental biology. In his widely noted study, *The Perception of Environment: Essays on Livelihood, Dwelling and Skill* (Ingold, 2000), Ingold develops a quite complex project that opposes viewing organisms in terms of self-contained and relatively detached entities confronting a virtual world "out there." By opting for a relational thinking – rather than a "populational" one – Ingold accompanies the criticism from developmental biology towards the dominance of neo-Darwinian theory and instead, intends to understand the intricate processes that shape the growth and maturation of organisms, leading to their unique forms and abilities. With no predetermined designs or by simply being a blueprint determined by natural selection

and genetic composition, characteristics of organisms are emergent properties generated throughout its development, which are indissolubly a resultant of interactions and performative engagement with matter, flows and other life forms in an immediate "environment." Besides underlining that the conception of firm spatial and temporal boundaries between life forms poorly describes vivid organic transactions, Ingold also holds that flows allowing *growth* and *development* cannot be detached from what is thought under "culture." Namely, standard evolutionary scenarios effectively narrow down the scope of biology by reducing it to the innate, in opposition to cultural forms that are purportedly obtained through non-genetic methods. As a result, the diverse ontogenetic and developmental processes that enable humans and other animals to acquire expertise in various ways of life, are neglected. Instead, a strong relational model which Ingold suggests, imposes detecting overlapping trajectories or *lines* of cultural and organic growth. The quote below, taken from his *Lines* might serve as a nice illustration for this idea:

> As inhabitants of the world, creatures of all kinds, human and non-human, are wayfarers, and that wayfaring is a movement of self-renewal or becoming rather than the transport of already constituted beings from one location to another. Making their ways through the tangle of the world, wayfarers grow into its fabric and contribute through their movements to its ever-evolving weave. This is to think of evolution, however, in a way that contrasts radically with the genealogical conception implied by conventional models of biological and cultural transmission (Ingold 2007: 116).

Implying quite a different ontological scenario from the one inscribed into conventional theories, lines play an immense epistemic role for comprehending evolution. The very language that accompanies the concept of lines is a good marker of such a shift: instead of finite entities, Ingold rather deploys a term of *tangles* or *knots*. The environment is similarly understood as a zone of interpenetration, composed as a current assembly of life forms attached one to another, with each adopting their distinctive shapes by assimilating the life trajectories of other organisms along the way. Furthermore, lines appear as a convenient substitute for the concept of development. Specifically, Ingold finds that the traditional separation of ontogenesis and phylogenesis, which distinguishes the changes that occur during growth and maturation within a generation from those in the heritable characteristics across generations, is no longer valid. Assuming that the evolution process *unfolds* through the life histories of the organisms themselves as they transform along their developmental trajectories, standard models of transaction also surface as problematic. What is at stake is not an explanation itself. As Ingold (2011; 2013; 2015) underscores, contrary to what traditionally has been assumed, elucidating why forms transform should not be a principal point of interest. Despite being linked to a fixed genetic pattern whose components are duplicated with impressive precision across generations, the genuine question is how forms *remain constant* from one generation to another in the absence of such fixed anchors.

Ingold finds this a part of a bigger problem brought about by the genealogical model – the one, reliant upon the metaphor of transmission, commonly used to denote both biological and cultural reproduction. According to this genealogical model, cultural knowledge is imported into practical situations without being influenced by its surroundings. However, organizing knowledge in a context-independent way can only be achieved through classification, and claiming that all knowledge is classified is simply a result of this model's initial assumptions. Moreover, this notion is contradicted by numerous anthropological studies that show how people acquire knowledge by interacting with their environment. They do not learn by following a hierarchical classification system, but rather by moving through a network of connections and gradually integrating the knowledge *along the way*. In a similar vein, Ingold underlines that acquiring a particular culture is neither a universal trait of human nature nor that culture presents a reservoir of already given knowledge and skills that are simply transmitted. Rather differently, in Ingold's model, physiology and phenomenology come together: a developing human organism incorporates skills needed for performing particular tasks, through training and experience, and gains a specific modus operandi as its vital feature brought up in a relational manner. All human life is caught, Ingold (2015: 145) reminds, in "a never-ending process of attention and response." But could this post-Darwinist, non-genealogical model of human life, entangled in diverse relationalities, resonate further to become a more inclusive form of humanizing the human/nature nexus?

4. A Non-Hierarchical Academic Regime or...? On Perspectives Beyond Human Nature

While the aforementioned approaches represent a sustained effort to re-naturalize social theory, offering a pathway towards a genuinely integrated perspective of the human/nature nexus in light of pressing climatic challenges, they still present their own set of ethical, epistemic, and ontological dilemmas. Clearly, moving beyond the dehumanizing connotations of human nature – whether it refers to inborn instincts, genetically-based temperaments, socially-driven facets of human organization and collective experience, or inherent tendencies as suggested in concepts like Homo Economicus – *is unquestionable*. Kronfeldner (2018) thus convincingly argues that even "sanitizing" this soiled concept might not fully neutralize and expel its essentialist baggage and accompanying dehumanizing effects, such as revocations of racism, for example. The concept of human nature belongs in the dustbin of history: as Sahlins (2008: 98) famously stated, "nothing in nature [is] as perverse as our idea of human nature." This highlights the deeply ethnocentric foundations of the concept, which either rejects "nature" by considering it a source of bestiality or elevating it as a basis for the ethical grounding of society. But, even after diverting from various remnants of essentialist leanings that were inscribed into human nature as a concept, particularly with risky conceptions of pre-social

and anti-social animals, the challenge remains intricate: how to move beyond dehumanization and foreground the rich fabric of life and interspecies relationships? In this planetary landscape of the Anthropocene, there is a yearn for alternatives that would allow for postnatural understanding of dynamic assemblages that encompass the former realms of human and nature.

The approaches presented in this paper basically advocate for a non-hierarchical academic regime that would allow for evolving of a novel conceptual landscape. In this sense, the Anthropocene has ultimately been depicted as the ground where the division of academic labor, firmly established at the *fin de siècle*, evaporates. Still, these partitions are far from over. In his enticing paper on the concomitant metamorphosis of the Anthropocene into a tool for ecopolitical action and its ponderous scientific formalization, Simonetti (2019) unveils persistent differences in how the academic regime operates. A highly conservative process of validation, on the one hand, is dictated by a slow-paced accumulation of evidence by geologists who attempt to solidify the stratigraphic sequences before they can be considered as potential markers for the start of the Anthropocene. The focus on solidification stems from a rigid understanding of change, where time is perceived as an accumulation of solid surfaces that are only accessible in hindsight. A fossilized perspective of change, on the other hand, certainly confronts the widely held ambitions of many scholars in the humanities to highlight the moral and political dimensions of environmental degradation that surfaces in "fluid" changes in atmospheric composition. To challenge this symptomatic tendency, which mirrors the traditional intellectual separation of matter and meaning, Simonetti argues that it is necessary to expand our understanding of Earth's history and focus on fluid flows beyond what is commonly thought as solid surfaces. Some rightfully fear this would further impose a hierarchical division between academic work and once again enforce a neglect of social issues and especially divisive character the ecological risks bear (e.g., Lövbrand et al. 2015). According to Meloni et al. (2022: 487), "related local and collaborative practices across disciplines, communities, and human and nonhuman agents", give a unique opportunity to acquire knowledge along the way; however, the rift between the disciplines remains and disables creating a major "geo-bio-social" synthesis.

In this context, the need for further supplementing such optimistic scenarios with ethical considerations and ontological reflections becomes apparent. Contemporary discussions in the humanities (e.g., Citton 2016; Chakrabarty 2016; Muecke 2016) assert that their traditional emancipatory universalism faces a unique challenge today: the inability to address moral and political questions without accounting for the interplay of biological and geological forces. Here, the response transcends the realm of mere epistemic tools, regardless of their indisputable role, and instead ushers in a new era of sensibility. In this light, the recognition of our co-evolving trajectories with the environment, coupled with the emerging concept of postnatural uncertainty as a novel ontological process, emphasizes the paramount importance of mapping and sensing Earth processes. This reimagining entails a shift in attention

towards the flows of energy and matter, equipping us to discern the intricate planetary patterns and movements. However, this shift does not downplay the socio-ecological dimension; it transforms into an ethical imperative to address the inequalities stemming from climate vulnerabilities, environmental degradation, and health disparities. As explored throughout this paper, the emerging human-nature nexus prompts us to shift our focus towards intricate layers and interwoven relationships, thereby drawing us closer to an ethics that extends beyond human-centric considerations. Navigating this multi-species world prompts a new sensibility – a deeper, nuanced form of humanizing that acknowledges and responds to our interconnected destinies. Devising alternative conceptual frameworks becomes imperative for future ecopolitics. While the concept of human nature may not be on the agenda again, the Anthropocene urges a paradigm shift, encouraging humanity to reposition itself: not as a dominant force, but as an integral part of a multifaceted tapestry interwoven with diverse non-human agencies.

References

Abbott, Andrew. 2016. *Processual Sociology*. Chicago, IL: University of Chicago Press.

Alaimo, Stacy. 2010. *Bodily Natures: Science, Environment, and the Material Self*. Indianapolis, IN: Indiana University Press.

Alaimo, Stacy. 2016. "Nature." In: Disch, Lisa, and Mary Hawkesworth, eds. *The Oxford Handbook on Feminist Theory*. Oxford: Oxford University Press, pp.: 530–550.

Anker, Elizabeth, and Rita Felski. 2017. "Introduction." In: Anker, Elizabeth, and Rita Felski, eds. *Critique and Postcritique*. Durham, NC: Duke University Press, pp.: 1–29.

Arènes, Alexandra, Bruno Latour, and Jerome Gaillardet. 2018. "Giving Depth to the Surface: An Exercise in the Gaia-graphy of Critical Zones." *The Anthropocene Review* 5 (2): 120–135.

Åsberg, Cecilia, and Rosi Braidotti. 2018. "Feminist Posthumanities: An Introduction." In: Åsberg, Cecilia, and Rosi Braidotti, eds. *A Feminist Companion to the Posthumanities*. Cham: Springer, pp.: 1–22.

Asher, Kiran, and Joel Wainwright. 2018. "After Post-Development: On Capitalism, Difference, and Representation." *Antipode* 51 (1): 25–44.

Baldwin, Andrew. 2017. "Climate Change, Migration, and the Crisis of Humanism." *WIREs Climate Change* 8: e460. doi:10.1002/wcc.460.

Barad, Karen. 2018. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." In: Åsberg, Cecilia, and Rosi Braidotti, eds. *A Feminist Companion to the Posthumanities*. Cham: Springer, pp.: 1–22.

Barry, Andrew, and Mark Maslin. 2016. "The Politics of the Anthropocene: A Dialogue." *Geo: Geography and Environment* 3 (2): 1–12.

Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London: Sage.

Bennet, Jane. 2010. *Vibrant Matter: A Political Ecology of Things*. Durham, NC: Duke University Press.

Bennet, Tony et al. 2009. *Culture, Class, Distinction*. London: Routledge.

Bettini, Giovanni. 2017. "Where Next? Climate Change, Migration, and the (Bio) politics of Adaptation." *Global Policy* 8 (1): 33–39.

Blaser, Mario, and Marisol de la Cadena. 2018. "Introduction: Pluriverse Proposals for a World of Many Worlds." In: Blaser, Mario, and Marisol de la Cadena, eds. *A World of Many Worlds*. Durham, NC: Duke University Press, pp.: 1–22.
Blok, Anders, and Casper Bruun Jensen. 2019. "The Anthropocene Event in Social Theory: On Ways of Problematizing Nonhuman Materiality Differently." *The Sociological Review* 67 (6): 1195–1211.
Boscov-Ellen, Dan. 2020. "Whose Universalism? Dipesh Chakrabarty and the Anthropocene." *Capitalism Nature Socialism* 31 (1): 70–83.
Bould, Mark. 2021. *The Anthropocene Unconscious: Climate Catastrophe Culture*. London: Verso.
Bourdieu, Pierre. 1990. *In Other Words: Essays Toward a Reflective Sociology*. Stanford, CA: Stanford University Press.
_____. 1992. *The Logic of Practice*. Stanford, CA: Stanford University Press.
_____. 2000. *Pascalian Meditations*. Stanford, CA: Stanford University Press.
Braidotti, Rosi. 2013. "Posthuman Humanities." *European Educational Research Journal* 12 (1): 1–19.
_____. 2016. "Posthuman Feminist Theory." In: Disch, Lisa, and Mary Hawkesworth, eds. *The Oxford Handbook of Feminist Theory*. Oxford: Oxford University Press, pp.: 673–698.
_____. 2017a. "Critical Posthuman Knowledges." *South Atlantic Quarterly* 116 (1): 83–96.
_____. 2017b. "Four Theses on Posthuman Feminism." In: Grusin, Richard, ed. *Anthropocene Feminism*. Minneapolis, MN: University of Minnesota Press, pp.: 21–48.
_____. 2021. *Posthuman Feminism*. Cambridge: Polity Press.
Brenner, Neil, and Nikos Katsikis. 2020. "Operational Landscapes: Hinterlands of the Capitalocene." *Architectural Design* / AD 90 (1): 22–31.
Bryant, Levi. 2014. *Onto-Cartography: An Ontology of Machines and Media*. Edinburgh: University of Edinburgh Press.
Büscher, Monika, Mimi Sheller, and David Tyfield. 2016. "Mobility Intersections: Social Research, Social Futures." *Mobilities* 11 (4): 485–497.
Callon, Michel. 1987. "Society in the Making: the Study of Technology as a Tool for Sociological Analysis." In: Bijker, Wiebe, Thomas Hughes, and Trevor Pinch, eds. *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge, MA: MIT Press, pp.: 83–103
Chakrabarty, Dipesh. 2009. "The Climate of History: Four Theses." *Critical Inquiry* 35 (2): 197–222.
_____. 2014. "Climate and Capital: On Conjoined Histories." *Critical Inquiry* 41(1): 1–23.
_____. 2015. "The Human Condition in the Anthropocene." *The Tanner Lectures in Human Values*, delivered at Yale University, February 18-19, 2015: 139–188.
_____. 2016. "Humanities in the Anthropocene: The Crisis of an Enduring Kantian Fable." *New Literary History* 47 (2-3): 377–397.
_____. 2017a. "The Future of the Human Sciences in the Age of Humans: A Note." *European Journal of Social Theory* 20 (1): 39–43.
_____. 2017b. "The Politics of Climate Change Is More Than the Politics of Capitalism." *Theory, Culture & Society* 34 (2-3): 25–37.
_____. 2017c. "Afterword." *The South Atlantic Quarterly* 116 (1): 163-168.
_____. 2018. "*The Seventh History and Theory Lecture*: Anthropocene Time." *History and Theory* 57 (1): 5–32.
_____. 2019. "The Planet: An Emergent Humanist Category." *Critical Inquiry* 46: 1–31.

_____. 2021. *The Climate of History in a Planetary Age*. Chicago, IL: Chicago University Press.
Chandler, David, and Julian Reid. 2020. "Becoming Indigenous: The 'Speculative Turn' in Anthropology and the (Re)colonization of Indigeneity." *Postcolonial Studies* 23 (4): 485–504.
Chandler, David. 2018a. "Biopolitics 2.0: Reclaiming the Power of Life in the Anthropocene." *Contemporary Political Theory* 19: 14–20.
_____. 2018b. *Ontopolitics in the Anthropocene. An Introduction to Mapping, Sensing and Hacking*. London: Routledge.
Charbonnier, Pierre, Salmon Gidas, and Peter Skafish. 2016. "Introduction." In: Charbonnier, Pierre, Gidas Salmon, and Peter Skafish, eds. *Comparative Metaphysics: Ontology After Anthropology*. London: Rowman & Littlefield International, pp.: 1–24.
Charbonnier, Pierre. 2017. "A Genealogy of the Anthropocene: The End of Risk and Limits." *Annales HSS (English Edition)* 72 (2): 199–224.
_____. 2020. "'Where Is Your Freedom Now?' How the Moderns Became Ubiquitous." In: Bruno Latour, and Peter Weibel, eds. *Critical Zones: The Science and Politics of Landing on Earth*. Cambridge, MA: MIT Press, pp.: 76–79.
Citton, Yvess. 2016. "Fictional Attachments and Literary Weavings in the Anthropocene." *New Literary History* 47 (2/3): 309–329.
Clark Nigel, and Katerin Yusoff. 2017. "Geosocial Formations and the Anthropocene." *Theory, Culture & Society* 34 (2.3): 3–23.
Clark, Nigel et al. 2022. "A Solid Fluids Lexicon." *Theory, Culture & Society* 39 (2): 197–210.
Clark, Nigel, and Bronislaw Szerszynski. 2021. *Planetary Social Thought: The Anthropocene Challenge to the Social Sciences*. Cambridge: Polity Press.
Crossley, Nick. 2001. *The Social Body: Habit, Identity and Desire*. London: Sage Publications.
_____. 2006. *Reflexive Embodiment in Contemporary Society: The Body in Late Modern Society*. Buckingham: Open University Press.
Delanty, Gerard, and Aurea Mota. 2017. "Governing the Anthropocene: Agency, Governance, Knowledge." *European Journal of Social Theory* 20 (1): 9–38.
Descola, Philippe. 2013a. *Beyond Nature and Culture*. Chicago, IL: University of Chicago Press.
_____. 2013b. *Ecology of Others*. Chicago, IL: Prickly Paradigm Press.
Downey, Greg. 2014. "'Habitus in Extremis': From Embodied Culture to Bio-Cultural Development." *Body & Society* 20: 113–117.
Doyle, Julie. 2011. *Mediating Climate Change*. Farnham: Ashgate Publishing.
Durkheim, Emile. 2005. "The Dualism of Human Nature and its Social Conditions." *Durkheimian Studies* 11: 35–45.
Escobar, Arthuro. 2016. "Thinking-feeling with the Earth: Territorial Struggles and the Ontological Dimension of the Epistemologies of the South." *Revista de Antropología Iberoamericana* 11 (1): 11–32.
Felski, Rita. 2015. *The Limits of Critique*. Chicago, IL: University of Chicago Press.
Foucault, Michele. 2005. *The Order of Things: An archaeology of the Human Sciences*. London: Routledge.
_____. 2008. *The Birth of Biopolitics. Lectures at the College de France 1978–79*. Basingstoke: Palgrave Macmillan.
Giddens, Anthony. 1992. *The Transformation of Intimacy. Sexuality, Love, and Eroticism in Modern Societies*. Stanford, CA: Stanford University Press.

Grear, Anna. 2020. "Legal Imaginaries and the Anthropocene: 'Of' and 'For'." *Law and Critique* 31 (2020): 351–366.
Grosz, Elizabeth, Katerin Yusoff, and Nigel Clark. 2017. "An Interview with Elizabeth Grosz: Geopower, Inhumanism and the Biopolitical." *Theory, Culture & Society* 34 (2-3): 129–146.
Grosz, Elizabeth. 2010. "The Untimeliness of Feminist Theory." *NORA - Nordic Journal of Feminist and Gender Research* 18 (1): 48–51.
Grusin, Richard. 2017. "Introduction. Anthropocene Feminism: An Experiment in Collaborative Theorizing." In: Grusin, Richard, ed. *Anthropocene Feminism*. Minneapolis, MN: University of Minnesota Press, pp.: vii-xix.
Hannigan, John. 2006. *Environmental Sociology*. London: Routledge.
Haraway, Donna. 1991. *Simians, Cyborgs and Women: The Reinvention of Nature*. New York, NY: Routledge.
_____. 2016. "Staying with the Trouble: Anthropocene, Capitalocene, Chthulucene." In: Moore, Jason, ed. *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*. Oakland: PM Press-Kairos, pp.: 34–76.
Harman, Graham. 2016. *Immaterialism: Objects and Social Theory*. Oxford: Wiley-Blackwell.
_____. 2018. *Speculative Realism: An Introduction*. London: Wiley.
Huffer, Lynne. 2017. "Foucault's Fossils: Life Itself and the Return to Nature in Feminist Philosophy." In: Grusin, Richard, ed. *Anthropocene Feminism*. Minneapolis, MN: University of Minnesota Press, pp.: 65–88.
Ingold, Tim, and Gisli Palsson, eds. 2013. *Biosocial Becomings: Integrating Social and Biological Anthropology*. Cambridge: Cambridge University Press.
Ingold, Tim. 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London: Routledge.
_____. 2007. *Lines: A Brief History*. London: Routledge.
_____. 2015. *The Life of Lines*. London: Routledge.
Jensen, Casper Brunn. 2022. "Thinking the New Earth: Cosmoecology and New Alliances in the Anthropocene." *Darshika: Journal of Integrative and Innovative Humanities* 2 (1): 26–43.
Knorr-Cetina, Karin. 1999. *Epistemic Cultures: How do Sciences Make Knowledge*. Cambridge, MA: Harvard University Press.
Kronfeldner, Maria. 2018. *What's Left of Human Nature? A Post-Essentialist, Pluralist, and Interactive Account of a Contested Concept*. Cambridge, MA: MIT Press.
Lancaster, Roger. 2003. *The Trouble with Nature: Sex in Science and Popular Culture*. Berkeley, CA: University of California Press.
Latour, Bruno, and Timothy Lenton. 2019. "Extending the Domain of Freedom, or Why Gaia Is So Hard to Understand." *Critical Inquiry* 45 (3): 659–680.
Latour, Bruno. 1987. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge, MA: Harvard University Press.
_____. 1993. *We Have Never Been Modern*. Cambridge, MA: Harvard University Press.
_____. 1999. *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press.
_____. 2004. *Politics of Nature: How to Bring the Sciences into Democracy*. Cambridge, MA: Harvard University Press.
_____. 2005. *Reassembling the Social: An Introduction to Actor-Network Theory*. Oxford: Oxford University Press.
_____. 2010. *On the Modern Cult of Factish Gods*. Durham, NC: Duke University Press.

_____. 2013. *An Inquiry Into Modes of Existence*. Cambridge, MA: Harvard University Press.
_____. 2017a. *Facing Gaia: Eight Lectures on the New Climatic Regime*. Cambridge: Polity Press.
_____. 2017b. "Why Gaia is not a God of Totality." *Theory, Culture & Society* 34 (2-3): 61–81.
_____. 2018. *Down to Earth: Politics in the New Climatic Regime*. Cambridge: Polity Press.
_____. 2020a. "Composing the New Body Politic from Bits and Pieces." In: Latour, Bruno, Simon Schaffer, and Pasquale Gagliardi, eds. *A Book of the Body Politic: Connecting Biology, Politics and Social Theory*. Venice: Fondazione Giorgio Cini, pp.: 19–38.
_____. 2020b. "Seven objections against landing on Earth." In: Latour, Bruno, and Peter Weibel, eds. *Critical Zones: The Science and Politics of Landing on Earth*. Cambridge, MA: MIT Press, pp.: 1–18.
_____. 2020c. ""We Don't Seem to Live on the Same Planet" – A Fictional Planetarium." In: Latour, Bruno, and Peter Weibel, eds. *Critical Zones: The Science and Politics of Landing on Earth*. Cambridge, MA: MIT Press, pp.: 193–199.
Law, John. 1999. "After Ant: Complexity, Naming and Topology." *The Sociological Review* (47): 1–14.
_____. 2004. *After Method. Mess in Social Science Research*. London: Routledge.
_____. 2011. "Knowledge places." In: *Linking STS and the Social Sciences: Transforming 'the Social'?* 28-29th October at Kookmin University, Seoul, South Korea.
Lenton Timothy, Sebastian Dutreuil, and Bruno Latour. 2020. "Life on Earth is Hard to Spot." *The Anthropocene Review* 7 (3): 248–272.
Lenton, Timothy, and Bruno Latour. 2018. "Gaia 2.0 Could Humans Add Some Level of Self-awareness to Earth's Self-regulation?." *Science* 361 (6407): 1066–1068.
Lewontin, Richard. 1996. *Biology as Ideology: The Doctrine of DNA*. Toronto: House of Anansi Press.
Lock, Margareth, and Gisli Palsson. 2016. *Can Science Resolve the Nature-Nurture Debate?* Cambridge: Polity Press.
Lorimer, Jamie. 2017. "The Anthropo-scene: A Guide for the Perplexed." *Social Studies of Science* 47 (1): 117–142.
Lövbrand, Eva, et al. 2015. "Who Speaks for the Future of Earth? How Critical Social science can Extend the Conversation on the Anthropocene." *Global Environmental Change* 32: 211–218.
Macnaghten, Phil, and John Urry. 2001. "Introduction." In: Macnaghten, Phil, and John Urry, eds. *Bodies of Nature*. London: Sage Publications, pp.: 1–11.
Malm, Anders, and Alf Hornborg. 2014. "The Geology of Mankind? A Critique of the Anthropocene Narrative." *The Anthropocene Review* 1 (1): 62–69.
Marx, Karl, and Freidrich Engels. 1998. *The German Ideology*. Buffalo, NY: Prometheus.
Matthews, Daniel. 2019. "Law and Aesthetics in the Anthropocene: From the Rights of Nature to the Aesthesis of Obligations." *Law, Culture and the Humanities* 19 (2): 227-247.
_____. 2021. "Reframing Sovereignty for the Anthropocene." *Transnational Legal Theory* 12 (1): 44–77.
Meloni, Maurizio, Rachael Wakefield-Rann, and Becky Mansfield. 2022. "Bodies of the Anthropocene: On the Interactive Plasticity of Earth Systems and Biological Organisms." *The Anthropocene Review* 9 (3): 473–493.

Moore, Jason. 2016. “Introduction: Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism.” In: Moore, Jason, ed. *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*. Oakland: Kairos, pp.: 1–13.
Morton, Timothy. 2013. *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis: University of Minnesota Press.
_____. 2016. *Dark Ecology For a Logic of Future Coexistence*. New York, NY: Columbia University Press.
_____. 2018. *Being Ecological*. Boston MA: MIT Press.
Muecke, Stephen. 2016. “An Ecology of Institutions: Recomposing the Humanities.” *New Literary History* 47 (2/3): 231–248.
Nelson, Sara, and Bruce Braun. 2017. “Autonomia in the Anthropocene: New Challenges to Radical Politics.” *South Atlantic Quarterly* 116 (2): 223–235.
Newton, Tim. 2007. *Nature and Sociology.* London: Routledge.
Palsson, Gisli, and Heather Swanson. 2016. “Down to Earth: Geosocialities and Geopolitics.” *Environmental Humanities* 8 (2): 149–171.
Pellizzoni, Luigi. 2015. *Ontological Politics in a Disposable World: The New Mastery of Nature*. Farnham: Ashgate.
_____. 2022. “A different Kind of Emancipation? From Lifestyle to Form-of-Life.” *European Journal of Social Theory* 25 (1): 155–171.
Povinelli, Elizabeth. 2016. *Geontologies: A Requiem to Late Liberalism.* Durham, NC: Duke University Press.
_____. 2017a. “The Ends of Humans: Anthropocene, Autonomism, Antagonism, and the Illusions of Our Epoch.” *South Atlantic Quarterly* 116 (2): 293–310.
_____. 2017b. “The Three Figures of Geontology.” In: Grusin, Richard, ed. *Anthropocene Feminism*. Minneapolis, MN: University of Minnesota Press, pp.: 49–64.
Prinz, Jessie. 2012. *Beyond Human Nature: How Culture and Experience Shape the Human Mind*. New York, NY: W. W. Norton & Company.
Sahlins, Marshall. 2008. *The Western Illusion of Human Nature*. Chicago, IL: Prickly Paradigm Press.
Savransky, Martin. 2012. “Worlds in the Making: Social Sciences and the Ontopolitics of Knowledge.” *Postcolonial Studies* 15 (3): 351–368.
_____. 2021. “After Progress: Notes for an Ecology of Perhaps.” *Ephemera: Theory & Politics in Organization* 21 (1): 267–281.
Sheller, Mimi, and John Urry. 2006. “The New Mobilities Paradigm.” *Environment and Planning A*. 38 (2): 207–226.
_____. 2016. “Mobilizing the New Mobilities Paradigm.” *Applied Mobilities*. doi: 10.1080/23800127.2016.1151216.
Simonetti, Christian, and Tim Ingold. 2018. “Ice and Concrete: Solid Fluids of Environmental Change.” *Journal of Contemporary Archaeology* 5 (1): 19–31.
Simonetti, Christian. 2019. “The Petrified Anthropocene.” *Theory, Culture & Society* 36 (7-8): 45–66.
Sklair, Leslie. 2017. “Sleepwalking through the Anthropocene.” *The British Journal of Sociology* 68 (4): 775–784.
Stengers, Isabelle. 2010. *Cosmopolitics I*. Minneapolis, MN: University of Minnesota Press.
_____. 2017. “Autonomy and the Intrusion of Gaia.” *South Atlantic Quarterly* 116 (2): 381–400.
Strathern, Marilyn. 2018. “Opening up Relations.” In: de la Cadena, Marisol, and Mario Blaser, eds. *A World of Many Worlds*. New York, NY: Duke University Press, pp.: 23–52.

Sun-Hee Park, Lisa, and David Naguib Pellow. 2019. "Forum 4: the Environmental Privilege of Borders in the Anthropocene." *Mobilities* 14 (3): 395–400.
Swyngedouw, Eric, and Henrik Ernstson. 2018. "Interrupting the Anthropo-obScene: Immuno-biopolitics and Depoliticizing Ontologies in the Anthropocene." *Theory, Culture & Society* 35 (6): 3–30.
Szerszynski, Bronislaw. 2005. *Nature Technology and the Sacred*. London: Wiley.
_____. 2012. "The End of the End of Nature: The Anthropocene and the Fate of the Human." *Oxford Literary Review* 34 (2): 165–184.
_____. 2016. "Planetary Mobilities: Movement, Memory and Emergence in the Body of the Earth." *Mobilities* 11 (4): 614–628.
_____. 2018. "Drift as a Planetary Phenomenon." *Performance Research* 23 (7): 136–144.
_____. 2019. "A Planetary Turn for the Social Sciences?." In: Jensen, Ole, Sven Kesselring, and Mimi Sheller, eds. *Mobilities and Complexities*. London: Routledge, pp.: 223–227.
Tyfield, David, and Anders Blok. 2016. "Doing Methodological Cosmopolitanism in a Mobile World." *Mobilities* 11:4: 629–641.
Ulmer, Jasmine. 2017. "Posthumanism as Research Methodology: Inquiry in the Anthropocene", *International Journal of Qualitative Studies in Education* 30 (9): 832–848.
Viveiros de Castro, Eduardo. 2014. *Cannibal Metaphysics: For a Post-structural Anthropology*. Minneapolis, MN: Univocal Publishing.
_____. 2015. "Who is Afraid of the Ontological Wolf? Some Comments on an Ongoing Anthropological Debate." *The Cambridge Journal of Anthropology* 33 (1): 2–17.
_____. 2019. "On Models and Examples. Engineers and Bricoleurs in the Anthropocene." *Current Anthropology* 60 (20): 296–308.
Wacquant, Loïc. 2014. "Putting Habitus in its Place: Rejoinder to the Symposium." *Body & Society* 20: 118–139.
Wakefield, Stephanie, Kevine Grove, and David Chandler. 2020. "Introduction: The Power of Life." In: Wakefield, Stephanie, Kevine Grove, and David Chandler, eds. *Resilience in the Anthropocene. Governance and Politics at the End of the World*. London: Routledge, pp.: 1–22.
Zalasiewicz, Jan et al. 2019. "A General Introduction to the Anthropocene." In: Zalasiewicz, Jan, Colin Waters, Mark Williams, and Colin Summerhayes, eds. *The Anthropocene as a Geological Time Unit: A Guide to the Scientific Evidence and Current Debate*. Cambridge: Cambridge University Press, pp.: 2–4.

Stefan Janković

Nova klima za ljudsku prirodu? Proučavanje društvene teorije kroz postprirodu, antropocen i posthumanizam

Apstrakt

Proučavajući rasprave o antropocenskoj eri pokrenute od strane novih materijalističkih i posthumanističkih pristupa, ovaj rad nastoji da prepozna kako ove perspektive mogu preoblikovati vezu između čoveka i prirode. Takođe, u radu se razmatra kako različiti „razvojni" pristupi mogu preuzeti ulogu koju je tradicionalno imao pojam ljudske prirode. Prvi deo ističe probleme koje posthumanistički i neomaterijalistički uočavaju povodom marginalizovanog statusa „prirode", života i biologije unutar dominantnih konstruktivističkih gledišta. Centralni argument tvrdi da pojmovi poput „denaturalizacije" i biopolitike pospešuju društvenu

dominaciju nad prirodom, gurajući socijalnu teoriju prema antropocentričnom i potencijalno biološki neodređenom stavu. Nasuprot tome, drugi deo se bavi modernim tumačenjima planete u socijalnoj teoriji, inspirisanim pojavom antropocena. Kroz ovu perspektivu otkriva se dinamična, ko-konstitutivna veza, koja manje naginje jednostranom diktatu „prirode“ a više ka razumevanju evolucije ljudskog života i društvenih struktura unutar prostranih vremenskih i prostornih domena Zemlje. Treći deo dalje razrađuje ove razvojne ideje upoređujući teorije Bruna Latura i Tima Ingolda. Rad tvrdi da oba pristupa teže osvetljavanju složenih procesa koji stoje u osnovi evolucije životnih oblika, naglašavajući značaj kulture. Zaključno, složeni postprirodni pejzaž antropocena zahteva integrisaniji odnos čoveka i prirode. To zahteva ne samo odbacivanje dehumanizirajućih aspekata ljudske prirode, već i podsticanje obnovljenog senzibiliteta – dublje forme humanizacije koja priznaje i slavi naše zajedničko postojanje s drugim vrstama i entitetima.

Ključne reči: antropocen, postpriroda, ljudska priroda, posthumanizam, planeta.