# The Politics of the Anthropocene: Temporality, Ecology, and Indigeneity

ELISA RANDAZZO AND HANNAH RICHTER
School of Humanities, University of Hertfordshire, Hatfield, UK

The notion of the Anthropocene has become an instrumental backdrop against which post-foundational social theory and political research frame political action in a way that defies modern certainty and, somewhat paradoxically, anthropocentrism, under conditions of drastic ecological changes. But what exactly is the theoretical promise of the Anthropocene? This paper seeks to explore what the concept can offer to critical social science and, conversely, how these critical approaches define and locate the analytical and the political purchase of the Anthropocene, through the critical lens of Indigenous scholarship. The paper genealogically retraces the transition from a science-led, discontinuousdescriptive to a continuous-ontological conceptualization of the Anthropocene. It then unpacks how the notions of ecological relationality and non-human agency deployed in the latter closely parallel certain lines of argumentation in Indigenous thought and politics. Drawing on critical Indigenous studies, the paper formulates a critique of how relational perspectives enfold alternative ontologies and politics within an overarching Anthropocene ontology that is not only problematically universalizing, but also replaces the genuine engagement with differences and resistance.

La notion d'Anthropocène est devenue une toile de fond instrumentale sur laquelle la théorie sociale et les recherches politiques post-fondamentalistes encadrent les possibilités et perspectives de gouvernance pour défier la certitude et, quelque peu paradoxalement, l'anthropocentrisme de la modernité, dans des conditions de changements écologiques drastiques. Mais quelle est exactement la promesse théorique de l'Anthropocène? Cet article cherche à étudier ce que le concept peut apporter aux sciences sociales critiques et, à l'inverse, la manière dont ces approches critiques définissent et situent l'acquisition analytique et politique de l'Anthropocène. Il adopte un point de vue généalogique du concept d'Anthropocène tel qu'il est employé dans les sciences sociales pour retracer la transition d'une conceptualisation de l'Anthropocène qui était discontinue, descriptive et basée sur la science, vers une conceptualisation continue et ontologique. Il analyse ensuite la manière dont les notions de relationnalité écologique et d'agence non humaine déployées dans cette dernière sont étroitement en parallèle avec certaines lignes d'argumentation de la pensée et de la politique indigènes. Cet article s'appuie sur des études indigènes critiques pour formuler une critique de la façon dont les perspectives relationnelles intègrent des ontologies et politiques alternatives à une ontologie englobante de l'Anthropocène qui non seulement universalise de façon problématique, mais remplace également l'implication authentique des différences et de la résistance.

La noción del Antropoceno se ha convertido en un trasfondo instrumental en el que la teoría social y la investigación política posfundacionalista enmarcan las posibilidades y perspectivas de gobernabilidad para desafiar la certeza y, de alguna manera paradójica, el antropocentrismo de la modernidad, en condiciones de cambios ecológicos radicales. Pero ¿cuál es exactamente la promesa teórica del Antropoceno? Este artículo procura explorar lo que el concepto puede ofrecer a la ciencia social crítica y, por otro lado, cómo estos enfoques críticos definen y localizan la adquisición analítica y política del Antropoceno. Este artículo adopta una mirada genealógica del concepto del Antropoceno tal como se utiliza en las ciencias sociales y realiza un seguimiento de la transición de una conceptualización del Antropoceno orientada hacia la ciencia, descriptiva y discontinua, a una conceptualización ontológica continua. Luego, desentraña la manera en que las nociones de relacionalidad ecológica y agencia no humana que se despliegan en esta última guardan un estrecho paralelismo con ciertas líneas de argumentación en el pensamiento y la política indígenas. El artículo se basa en estudios críticos indígenas y cuestiona la manera en que las perspectivas relacionales engloban las ontologías y las políticas alternativas dentro de una ontología antropocena general que no solo es problemática a nivel universal, sino que también reemplaza el compromiso genuino con las diferencias y la resistencia.

## **Governing Multiple Anthropocenes**

In 1999, geoscientist Paul Crutzen, who had won the Nobel Prize in Chemistry for his research on the ozone layer, uttered the following words at a conference on earth system science: "Stop using the word Holocene ... We're not in the Holocene anymore. We're in the ... the ... the Anthropocene!" (quoted in Davies 2016, 42). Following Crutzen's declaration, the concept of the Anthropocene was used within geo- and environmental sciences to account for human-made changes in the ecological constitution of planet Earth so fundamental that they warrant classification as a new geological epoch. Over the past decade, a vast and increasingly convoluted body of social theory and empirical research has been assembled under the conceptual umbrella of "the Anthropocene." As Moore (2016, 3) notes in the introduction to Anthropocene or Capitalocene?, "the Anthropocene has become a buzzword that can mean all things to all people." Viewed from a distance, Anthropocene accounts are unified by their shared interest in the ongoing environmental degradation caused by anthropos as a geological force, its effects on resource attainment and redistribution, and its hastening impact on poverty and socio-economic development (Zalasiewicz et al. 2010; Moore 2015; Davies 2016; Dawson 2016; Hird 2017).

However, a closer look at this scholarship reveals multiple lines of division that disrupt and diversify the Anthropocene literature. Despite existing attempts at structuring overviews (Johnson and Morehouse 2014; Davies 2016; Wakefield 2017), this internal diversity makes it increasingly difficult to discern what exactly is at stake in the theoretical diagnosis of the Anthropocene. In this light, the first contribution of this paper is an ordering framework that makes it possible to classify different strands of the Anthropocene literature according to their theoretical underpinnings, their ontological implications, and their practical-political purchase. We will distinguish between a first, science-led, discontinuous-descriptive perspective on the Anthropocene and a second perspective, which we term continuous-ontological. It will be argued that discontinuous approaches, heavily informed by natural science research, seek to map Anthropocene phenomena to emphasize the catastrophic discontinuity of recent ecological changes. Motivated by the desire to mitigate and manage the effects of human-induced environmental degradation, they demand urgent responses from academics and economic as well as political actors.

We will show that this ecologically catastrophist, discontinuous perspective on the Anthropocene is increasingly criticized for its positivist-technocratic underpinnings and its continued anthropocentrism by a second set of continuous approaches rooted in post-foundational, and especially new materialist, theory. The paper will unpack how scholars within this second perspective use recent ecological changes as an opportunity to reconceptualize political communities with a focus on ecological relationality, non-human agency, and the need for resilience-based politics. Here, the significance of the Anthropocene lies not so much in the fact that it marks a new geological age; it rather highlights how agency and shaping power have always been diverse and multiple, producing ecological networks that are complex and fractured. As we will show, the key arguments of the continuous perspective on the Anthropocene align with some central cosmological principles and practical-political strategies of Indigenous communities faced with ecological as well as political crises.

Insights from Indigenous scholarship will then provide us with a critical mirror to make visible how in fact both strands of the Anthropocene literature are characterized by a problematic tendency to exclusive truth claims and universalization, and, as a consequence, conceal and depoliticize contestation, which is the second contribution of this paper. To be clear, we do not aim to evaluate the theoretical and political purchase of the Anthropocene concept to ascertain whether it should be discarded or recuperated by critical social theory. On the contrary, we seek to make visible the theoretical dynamics at work within current critical Anthropocene scholarship. Here, we identify an underlying drive toward depoliticizing ontological totalization that, we argue, a critical scholarship based on ontological relationality needs to resolve in favor of genuine political contestation, regardless of whether such resolution takes place within, or by turning away from, the Anthropocene concept.

Indigenous thought captures creative networks of human and non-human agency in a way that is closely resembled by the core arguments of the continuous Anthropocene scholarship, although the former long precede the latter. Rendering this parallelism productive, we will, however, show that the ecological relationality that is conceptualized by Indigenous thinkers and practiced within Indigenous communities in part ontologically differs from, and in part politically clashes with, the manner in which the continuous-ontological perspective frames the Anthropocene.

For reasons of aim and scope, the paper does not engage with the rich and ongoing debates on the differences among Indigenous experiences (for an interesting overview and analysis, see Aikau, Goodyear-Ka'Opua, and Silva 2016). Instead, the paper draws on what Moreton-Robinson (2016, 5) termed "critical Indigenous studies," understood as the wider effort to "operationalize Indigenous knowledge to develop theories" as well as to "challenge the power/knowledge structures and discourses through which Indigenous peoples have been framed and known." As Moreton-Robinson (2016, 4) reminds us, "non-indigenous scholars can engage with Indigenous analytics but not produce them." It is therefore necessary to acknowledge our positionality as non-Indigenous scholars and to clarify that we do not seek to produce an Indigenous analytic in this sense, but rather employ Indigenous analytics to create a critical mirror that makes visible certain theoretical undercurrents of those Anthropocene theories that parallel aspects of Indigenous thought. We are conscious of the fact that the analytical aim of this paper means that our engagement with Indigenous scholarship is selective, and as such we stress that it does not and cannot, alone, reflect the diversity of Indigenous experiences, selfdetermination claims, and struggles themselves, which do not form a homogeneous analytical ensemble of cosmologies and customs.

Using critical Indigenous scholarship as an analytical mirror in this sense, the paper first reveals how ontological relationality and openness do not necessarily imply the end of political steering and planned governmental action. In critical Indigenous scholarship, ecological relationality and non-human agency go hand in hand with the possibility for directed human agency and successful political

planning rather than necessarily eradicating all hope for the latter, as claimed by the continuous approaches.

Second, the mirror of Indigenous thought will allow us to make visible how the continuous perspective on the Anthropocene, which attempts to do away with modernist universalism in favor of ontological relationality and multiplicity, in fact itself performs a quasi-universalist gesture of theoretical enfolding. This enfolding problematically smooths over contrasting political claims and demands, including but not limited to those raised by Indigenous communities. It does so by incorporating them within a continuous Anthropocene ontology conceptualized to absorb and accommodate all differences.

We conclude that a critical scholarship that seeks to make sense of recent ecological changes and the political responses they require, in a way that truly leaves behind the limitations of modernism, must allow for strong tensions and accept irresolvable contestation between divergent ontological stances and practical-political demands. This must, we argue, include both the Indigenous rejection of belonging to the Anthropocene and the modernist desire to govern the former through scientific innovation. Regardless of whether such scholarship will keep or ditch the term Anthropocene, it must resist the temptation to theoretically enfold these differences in an overarching, always already present Anthropocene ontology that renders those divergent political demands innocuous.

# Thinking the Anthropocene: From Ecological Emergency to Post-Humanist Relationality

This section provides a structured overview of how discussions on the Anthropocene have evolved within the social science literature over the past decades. Several authors point at a certain dualism that marks the Anthropocene discourse. Loosely following a modern/non-modern distinction, Wakefield (2017, 5) differentiates between the Anthropocene's front loop "marked by the rise and spread of the modern liberal subject" whose "politics and metaphysics [are] carved in steel and brick" and a back loop, which dissolves this anthropocentrism by revealing the shaping power of non-human agency. In a similar vein, Raffnsøe (2016, xvii) notices how the "human turn" of the Anthropocene is increasingly superseded by a "posthuman turn," while Latour (2017) distinguishes between an old and a new climate regime fighting for hegemony in the Anthropocene. In the following, we will take those insights as a starting point to draw out the transition from a mainly science-led focus on the catastrophic emergency of recent ecological changes to a theoretical debate on the Anthropocene that increasingly amounts to an ontological rethinking of creativity, agency, and governance. In the following, we will refer to the first strand of Anthropocene scholarship as discontinuous-descriptive and to the second strand as continuous-ontological. It should be noted that our survey of the Anthropocene scholarship is certainly selective, incomplete, and painted in the broad brushstrokes of prominent theories in the field. However, we argue that it nevertheless provides an accurate and useful overview of how social science literature on the Anthropocene has evolved in its central lines of argumentation, and of the divergent political implications of these arguments.

The theoretical perspectives that we identify as *discontinuous-descriptive* emerged in the wake of geoscientific findings such as Crutzen's. Here, the Anthropocene is conceptualized as a set of drastic changes in the Earth's climate, geological makeup, and species population (Bonneuil and Fressoz 2013, 17–20; Davies 2016, 32–34), following "the human imprint on the global environment [which] has now become so large and active that it rivals some of the great forces of Nature in its impact on the functioning of the Earth system" (Steffen et al. 2011, 842). For humanity, the effects of the anthropocenic "shock" (Bonneuil and Fressoz 2013, 22), which implies a radical break with the Holocene, are still incalculable, but certainly

significant and potentially fatal. For this reason, discontinuous approaches describe current and impending ecological changes as an unprecedented catastrophe. While the diagnosis of a catastrophic Anthropocene rupture is typical of scholarship more directly influenced by geoscientific findings (Steffen et al. 2011; Hamilton 2013), it can also be found within critical and postcolonial scholarship. Chakrabarty (2008, 218), for instance, warns that "scientists' discovery of the fact that human beings have ... become a geological agent points to a shared catastrophe that we have all fallen into." In his book *Neganthropocene*, Stiegler (2018, 204) identifies the Anthropocene as a "permanent, universal and unpredictable state of emergency" affecting "the entire biosphere, threatening every form of life" since halfway "through the second decade of the twenty-first century."

While the challenges of the Anthropocene seem overwhelming in number and scale, and ready-made solutions are not available, the discontinuous-descriptive strand of Anthropocene scholarship leaves no doubt that joint political and scientific responses to alleviate the effects of recent ecological changes, such as systematic geoengineering (Hamilton 2013), are necessary. "What to do' after 'having done'" (Dillet 2018, 249) here becomes the question of the Anthropocene as a critical moment that affects all of humanity, not necessarily equally, but severely, as it "seems set to create substantially more losers, globally, than winners" (Zalasiewicz et al. 2010, 2231). In the discontinuous-descriptive approach, global socio-economic schisms and inequalities thus lose importance in the face of the fast and drastic changes of the anthropocenic Earth. As Chakrabarty (2008, 221) put it, "there are no lifeboats here for the rich and the privileged (witness the drought in Australia or recent fires in the wealthy neighborhoods of California)."

The discontinuous-descriptive approach to the Anthropocene has become widely accepted as a theoretical perspective to make sense of recent ecological changes within academic, and increasingly also public, discourse (Johnson and Morehouse 2014; Moore 2016). Yet, at the same time, it is challenged by a second strand of Anthropocene literature rooted in new materialist and post-foundational theory. We term this second strand of Anthropocene scholarship *continuous-ontological* because it maps out ecological relationality and agency in a way that precedes, and will outlive, the current ecological changes that characterize the Anthropocene of the first perspective. The continuous-ontological strand of the Anthropocene literature opposes positivist catastrophism and diagnostic universalism with an Anthropocene theory that unpacks material shaping power, ontological relationality, and the radical limitedness of human agency and human understanding (Clark and Yusoff 2017; Latour 2017; Chandler 2018).

The approaches we categorize as continuous-ontological start by calling into question whether recent environmental changes should be understood as an unprecedented and catastrophic rupture within an otherwise regular and precisely predictable temporality of the Earth. They draw attention to the fact that, viewed from the perspective of the planet, the emergence, life, and extinction of different species—including humanity—is a highly contingent event. What the deep time of Earth ages reveals, and what a catastrophic understanding of the Anthropocene misses out, is not so much the Earth's "vibrancy or its agency . . . as its tendency to remain indifferent" (Colebrook 2017, 3).

The continuous-ontological perspective thus highlights the processual continuity of the Anthropocene (Davies 2016; McQuillan 2017). Viewed from the perspective of geohistory, humanity's rise is recent, and its becoming is open, as the Earth itself is indifferent to its survival. This is illustrated by more than one thinker with Lars von Trier's film, *Melancholia*, where wedding festivities continue uninterrupted in the face of an impending asteroid impact (Evans and Reid 2014, 179; Raffnsøe 2016, 22; Latour 2017, 144).

Viewed in this sense, the Anthropocene is not a catastrophic end of history, but only one moment in a recurrent series of crises that, far from being a cultural construct of capitalism, have always formed part of the history of "human and extra-human nature" (Moore 2015, 27). The catastrophic framing of the Anthropocene, it is argued here, reveals a continuing anthropocentrism at the heart of Anthropocene debates. It presumes that the former can be accurately diagnosed and conceptualized by a human rationality that then also has the capacity to devise strategies to effectively manage anthropocenic changes, however drastic they turn out to be.

[W]hat appears to be a new recognition of our own and other species' vulnerability within invasion-ecology writing specifically, and Anthropocene writing generally, turns out to follow an Enlightenment script insofar as it is humans who have precipitated the movement of species and humans who are capable of controlling the continued spread of species through science, technology, and governance. Humans, in other words, have mastered nature to such extraordinary degrees as to have produced the mass global movement of species, with the implication that humans also have the capacity to alter this mass migration through more control, more governance, and further rationality. (Hird 2018, 284)

For this reason, it is suggested that those perspectives we identified as discontinuous fall short of providing understanding for what is actually at stake in the Anthropocene: not the scientific measurement and political management of a set of ecological shifts, but rather a seismic shift in our understanding of being. Understood in this sense, the Anthropocene marks a fundamental ontological turn comparable to that of the Copernican Revolution, and indeed complementary to the former (Saldanha 2018, 230; see also Raffnsøe 2016, 59–61). The Anthropocene reveals that humanity is not just *not* the center of the universe, but also not the driving force or even a necessary constituent of life on Earth. While it illustrates the devastating consequences of human-made ecological changes, the Anthropocene more importantly allows us to see how fundamentally human agency is, and has always been, intertwined with non-human agency, and positioned at the receiving end of creative ecological forces.

Humankind is consubstantial to the world or, rather, objectively "co-relational" with the world, relational as the world. There is no "correlation" between epistemology and ontology, thought and Being, but real immanence between existence and experience in the constitution of a relational multiverse. (Danowski and Viveiros de Castro 2017, 75–76)

In the Anthropocene, the modern dualisms between a creative rationality and a passive-receptive matter, culture and nature, can finally no longer be upheld (Latour 2017, 13-19; Chandler 2018, 4-5). Importantly, continuous-ontological approaches identify the relationality of agency, which always operates through human/non-human networks, not as a new phenomenon caused by anthropocenic changes. Rather, "we have never been modern," as Latour suggests (1993), precisely because post-human agency is continuous; networks of human and non-human agency stretch back millennia and have always and profoundly shaped human societies (Moore 2016, 37-38; Protevi 2018). As a theoretical concept, the Anthropocene forces into view precisely this deep, continuous relationality of ontological forces. In this sense, continuous approaches show how the Anthropocene does not constitute a catastrophic event to be prevented, ameliorated, or effectively governed. Instead, it is here a theoretical opportunity to adopt a broader and more complex understanding of the shaping power that constitutes both human life and its environment as necessarily intertwined, and does not primarily reside in human reason and the socio-epistemic relations of human communities.

<sup>&</sup>lt;sup>1</sup>In this sense, the approaches subsumed under the label of the continuous perspective on the Anthropocene can be understood to form part of the "ontological turn" within social theory. However, due to its ambiguity and internal diversity, we chose not to use this term in our discussion (Mihai et al. 2017).

Continuous-ontological approaches further seek to problematize the underlying universalism of an Anthropocene theory that identifies the former as a shared, collectively experienced catastrophe. They instead propose to think the Anthropocene as radically fractured, diverse, and multiple with regard to its effects, its consequences, and the way it is experienced. This multiplicity is partially rooted in the "complexity, interconnectedness and sub-structural coupling of the earth system" that constitutes an anthropocenic Earth that is necessarily "fractured, multiple, non-unitary" (Clark and Yusoff 2017, 18). Partially, it is also the path-dependent consequences of human-made, socio-economic and political inequalities and power imbalances that persist in the Anthropocene.

Against Chakrabarty's lifeboat analogy, Davies points out that both the responsibility for and the costs of human-made ecological changes are distributed unequally: the "militarization of disaster areas like Katrina-struck New Orleans, and the financialization of catastrophe through disaster reinsurance, have already proved capable of preserving—indeed reinforcing—capitalist hierarchies in zones of ecological emergency" (Davies 2016, 51). While Western industrialized societies bear a significant responsibility for recent ecological changes, their wealthy members especially are left with a considerable scope of action to avoid their most devastating consequences (Moore 2016; Saldanha 2018, 240–42). On the contrary, the position of marginalized or colonized communities within the Anthropocene is radically different:

The Indian nations deep in the Amazonian forest have nothing to do with the "anthropic origin" of climate change ... The same can be said of the poor residents in Bombay's shantytowns, who can only dream of having a carbon footprint more significant than the one left by the soot from their makeshift stoves. ... The Anthropos of the Anthropocene? It is Babel after the fall of the huge tower. Finally, humans are not universifiable. (Latour 2017, 121–22)

Against the supposed universality of the Anthropocene threat, the continuous-ontological perspective reveals that there is precisely no such thing as *the* Anthropocene that is caused, experienced, and demands concern from everyone in the same way, or at all (Chandler 2013, 2018; Latour 2017). Here, the Anthropocene is instead an analytical lens that reveals that such a unity can never do justice to the constitutive multiplicity of human and non-human forces that produces the world as we can make sense of it.

The radically non-anthropocentric claim of the continuous perspective then limits the possibilities for human actors to understand, intentionally act in, and thus govern the Anthropocene: Latour (2017, 108) identifies management and governance as "pathetic resources" in the face of the geohistorical event of the Anthropocene. The limitations that the Anthropocene draws for anthropos are both epistemological and political. The complexity of the Anthropocene and its intricate, dispersed networks of creative agency exceed the realm of human understanding; the anthropocenic Earth cannot be fully known in its workings and potentialities (Moore 2016, 74). This does not amount to an Anthropocene relativism, because the thinkers forming part of the continuous strand of the scholarship insist that meaningful knowledge of the Anthropocene condition can and should be assembled. However, this knowledge will always be produced in conjunction with, and thus be shaped by, a multiplicity of non-human forces rather than being generated by an autarchic, detached human rationality. Here, knowledge implies a constant process of grasping without absolute certainty (Chandler 2013, 144–46; Danowski and Viveiros de Castro 2017, 92–112; Latour 2017, 136).

Framed as anthropocenic counter-religion (Latour 2017, 156) or agnosticism (Evans and Reid 2014, 173) by continuous approaches, knowing in the Anthropocene here necessitates a turn away from secure metaphysical foundations to an exploratory "questioning how we might live differently" (Evans and Reid 2014).

Because the Anthropocene cannot be known in a complete and objectively detached manner, it cannot be governed in a way that effectively steers the productivity of its ecological relations. Here, the ecological challenge that humanity faces is not a dooming, apocalyptic end of history, as is the case for the discontinuous-descriptive perspective, but lies in nature's ungovernable shaping-power without beginning or end, which is inescapable and potentially catastrophic, but not terminal. The human condition of "remaining in the end time" (Latour 2017, 217), drawn out by continuous approaches, thus necessitates a rethinking of politics toward a governance that is affective and responsive and "integrative and mediating" (Tønder 2017, 134) because it acknowledges its ecological situatedness.

Notably, the framing of this alternative Anthropocene governance within the continuous perspective is diverse. Some approaches employ the concept of resilience to emphasize how ecological situatedness requires a politics that allows humanity to survive in the face of drastic environmental changes by responding to emergent demands in a flexible and ad-hoc manner (Chandler 2013; O'Brien 2017; Wakefield 2017). Here, the idea of resilience is not used to describe an effectively steering form of political governance. Rather, it is presented as a tool to generate the epistemological self-reflexivity that allows political communities to orient themselves under the conditions of an ecological shaping power that brings the modernist politics characterized by private/public or subject/object distinctions to a certain end.

Disasters which occur domestically can help in the revelation of a domestic public, not through the immediate collective response or resilience of communities to danger, but through the event as revealing something deeper about the nature of community interconnection. (Chandler 2013, 156)

Other thinkers reject the concept of resilience for embodying precisely the modernist idea of effective political management that lies at the heart of the discontinuous Anthropocene scholarship (Walker and Cooper 2011; Evans and Reid 2014). These thinkers instead call for an explicitly affirmative understanding of Anthropocene changes, even if these potentially imply the end of human life on Earth, because they allow for a profound transformation in the way we understand political subjectivity and agency beyond liberal individualism. Evans and Reid (2014, 178) describe a politics for the Anthropocene in this sense as a "learning to die ... which celebrates the end of the possible as a condition for the beginning of the new. Beyond the possible, it posits the question of absolute freedom." Chandler (2018) conceptualizes such a non-subjective politics, which affirms rather than seeking to prevent anthropocenic changes, as mapping, sensing, and hacking.<sup>2</sup> However, regardless of their framing, all conceptualizations of governance within the continuous-ontological strand of the scholarship share a commitment to accepting and embracing the Anthropocene. Beyond catastrophism, they view even drastic ecological changes as an opportunity to rethink the ontological foundations of creativity on Earth, and the place of political communities within networks of planetary agency, beyond reductionist modern dualisms.

Having outlined the shift from discontinuous-descriptive to continuous-ontological arguments within the Anthropocene scholarship, we will show how the rethinking of key theoretical concepts such as creativity, agency, and political power in the latter parallels certain notions of ontological relationality, ecological adaptiveness, and political resilience that can be found in the "lived knowledge kept and created by indigenous peoples across the earth and over millennia" (Mitchell 2017,

<sup>&</sup>lt;sup>2</sup> Chandler recognizes the acute danger that such a reconceptualization of governance leads to depoliticization and the end of all human agency so that "the critique of our hubristic belief in human freedom would lead us merely to humble ourselves before the altar of life as complexity" (Chandler 2013, 184). While Chandler emphasizes the necessity to rethink and recover rather than do away with human agency in the face of an anthropocenic ontology, we suggest that his epistemologically exploratory, resilient Anthropocene governance still falls victim to the criticism we will outline below.

15).<sup>3</sup> In the following, we will make this parallelism productive. We will employ Indigenous scholarship as a critical mirror that renders visible certain reductionisms and tendencies toward universalization and ontological totalization persisting in the continuous perspective on the Anthropocene, even though the former is rooted in critical scholarship and driven by a skeptical attitude toward Enlightenment modernism. The consequence, as we will show, is a problematic tendency to conceal and flatten political divisions and contestation through ontological enfolding.

To be clear, the aim here is not to emphasize that Indigenous conceptualizations of ontological relationality and plurality have long preceded Western Anthropocene literature, nor is it to draw out how both the failure to acknowledge this parallelism with Indigenous thought and scholarship on the part of Anthropocene theory and the uncritical employment of Indigenous ideas and concepts by some approaches bear the marks of colonial exploitation and continue its patterns, as this has already been importantly and convincingly pointed out by Indigenous thinkers (Todd 2015; Whyte 2017a, 2017b). Instead, in the following we will draw out concepts and arguments from Indigenous thought and scholarship that are closely aligned with the key ideas of the continuous perspective on the Anthropocene. These theoretical parallels then allow us to reveal something about the theoretical make-up of the approaches that form part of the continuous perspective—about the particularity of the ideas developed within this second strand of the Anthropocene scholarship, the extent to which this particularity is acknowledged, or rather not acknowledged, and its political implications. It will be shown how, within Indigenous scholarship, ecological shaping power and ontological relationality are coupled with a politics that diverges from, and in some instances actively clashes with, the continuous Anthropocene of the second perspective. This will allow us to interrogate the way in which continuous approaches frame, present, and, as we will argue, generalize their findings, concealing political contestation through ontological enveloping in an internally multiple, but ultimately totalized, continuous Anthropocene.

# Interrogating Anthropocenic Enfolding through the Mirror of Critical Indigenous Studies

The first argument that the continuous perspective on the Anthropocene shares with Indigenous worldviews is the idea of an ontological relatedness to non-human actors. Indigenous ways of knowing are respectful of the agency of non-humans and promote radically different ways of thinking about nature, culture, and humanity at the cross section of the three (Agrawal 1995; Johnson and Murton 2007). As in the continuous perspective, reflecting on ecological situatedness here does not begin or end with acknowledging the "individual or cumulative effects of environmental change" (Harrington 2016, 481), which are scientifically measurable and manageable, but implies a fundamentally different way of knowing and thinking about the world. Indigenous communities "express protocols that often represent humans as respectful partners or younger siblings in relationships of reciprocal responsibilities within interconnected communities of relatives inclusive of humans, non-human beings, entities and collectives" (Whyte, Brewer, and Johnson 2016, 2).

Second, Indigenous thought, like the continuous-ontological perspective, operates against the background of a nonlinear and relationally dispersed understanding of shaping power, which extends indefinitely and beyond a certain end of history. In part, a nonlinear order of time is constitutive of the way Indigenous communities have always viewed present actions and interactions as taking place in a

<sup>&</sup>lt;sup>3</sup>Some approaches within the continuous perspective on the Anthropocene explicitly point out this parallelism and discuss the productive junction between Anthropocene scholarship and Indigenous thought, acknowledging that the latter is always related to the political struggles of Indigenous communities that continue in the Anthropocene (Danowski and Viveiros de Castro 2017; Latour 2017).

productive dialogue with ancestral pasts to collaboratively establish futures. Indigenous understandings of time are intergenerational and fold back on themselves (Whyte 2018). "Spiralling time," as Whyte, Brewer, and Johnson (2016, 7) describe it, is an Indigenous conception of time that is characterized by a continued "dialogical unfolding" of "questions about how ancestral and future generations would interpret the situations we find ourselves in today." However, in addition, this nonlinear Indigenous experience of shaping power is also intrinsically linked to the experience of colonial extinction. Because they have been surviving beyond the, still unfolding, catastrophe of colonialism, Indigenous communities have been living in a continuously extending end of time that operates at different speeds, through loops, with peaks and periods of relative calm. Describing the effects of colonialism, Davis and Todd (2017, 771–72) point to the "slinky-like" quality of disaster that compacts and expands time, destroying languages and legal orders by moving in "a seismic sense." For Indigenous communities, similar to what is argued by the continuous perspective, the Anthropocene is thus simply another challenge to adapt to. As Gross (2014) suggests, Indigenous communities "have seen the end of their respective worlds" and have already "survived the apocalypse" (see also Danowski and Viveiros de Castro 2017, 75).

Third, because of the culturally established acknowledgment of an ontological connectivity to an environment with autonomous shaping power, Indigenous communities have developed a form of resilient politics that affectively responds to, rather than seeking to tame, the non-human and human forces that affect them. On the one hand, Indigenous communities have built cultural practices around a sustainable engagement with their immediate environment, which provides them with the means to sustain communal life in a relationship of mutual shaping and adaption. On the other hand, they have long had to contend with actions of colonial powers that fundamentally disempower them or destroy cultural value, sometimes in the very name of sustainability for all, as can be seen in the case of the banning of fire in burning ceremonies in North America (Whyte 2017a). Because of this, Indigenous communities have developed strategies to maintain their cultural integrity under changing conditions shaped by the political and ontological hegemony of the settler state, which are akin to the adaptive resilience called for by the continuous perspective.

The above three parallels reveal that the arguments put forward by the continuous-ontological perspective closely correspond to certain lines of Indigenous thought and praxis. However, we suggest that the above presented parallelisms only tell part of the story and in fact paint a reductionist picture of the possibilities for ecological knowledge and politics opened up by Indigenous thought. Instead, we suggest that critical Indigenous scholarship can illustrate how the "non-modern" qualifiers of ecological connectivity, non-human shaping power, and adaptiveness, which the continuous perspective embraces, sit together and are interwoven with an insistence on planned human agency that may in fact be closer to discontinuous approaches. The continuous perspective believes in the fundamental intractability of human-made climate change and is therefore skeptical of the capacity to govern or plan for the future under anthropocenic conditions, in part also because of concerns about the "modern" ethos driving governmental planning (Evans and Reid 2014, 72–81). Here, Indigenous perspectives present a different attitude toward intentional steering, futurity, and planning, which does not reject the notion of planned action altogether, but which highlights the need to acknowledge the power dynamics inherent in the co-management (between Indigenous groups and non-Indigenous scientists, nongovernmental organizations, and governments) of environmental relations (Watson 2013).

Within Indigenous scholarship, Indigenous planning refers to "practical activities whereby a collective . . . envisions different futures that are more or less desirable for itself and its members" (Whyte, Caldwell, and Schaefer 2018, 155). Planning here

"'unsettles' 'Western' planning theory and in particular its globalising/totalising tendencies," providing "an intellectual and political space for indigenous peoples to define themselves, to spatialize indigeneity and, most importantly, mark out their future" (Porter et al. 2017, 640). It is, therefore, "planning by/with (not for) indigenous peoples" (Porter et al. 2017, 641). Planning, however, does not merely serve the function of resistance. Indigenous communities have developed materially grounded regimes to govern in the Anthropocene, based on "protocols," that is, collectively established regimes sketching out various ways in which "a group ought to proceed or behave in any given situation" (Whyte, Brewer, and Johnson 2016, 2). For instance, in the territories of the Ngarrindjeri nation, located along the Murray River in the Coorong and Encounter Bay region in South Australia, Indigenous methodologies have been deployed to "resist, negotiate with, and transform NRM [Settler natural resource management]" in order to "develop a sustainable economy and healthy community" (Hemming, Rigney, and Berg 2011, 99). The methodology in use here, known as Kungun Ngarrindjeri Yunnan, is employed to guide "significant interactions with government and other non-Indigenous interests impacting on Ngarrindjeri Ruwe/Ruwar [country/body/spirit, encapsulating the inner-connection of people, their lands, waters and all living things including the spirits of Ngarrindjeri Ancestors]" (Hemming, Rigney, and Berg 2011). Likewise, land regeneration projects, such as those exemplified by Menominee forest management, represent a wider reassertion of sovereignty and self-determination as well as a form of ecological management (Grignon and Wall Kimmerer 2017). Though the principles underpinning Indigenous ecological management remain "illegible to the state engineers and hydrologists," these different examples of Indigenous planning in the Anthropocene highlight that the relationship between governmental steering and ontological "pluriversality" (Peña 2017, 91) and relationality is complex and heterogeneous, and does not exhaust itself in the simple opposition foregrounded by continuous approaches.

While seemingly aligning with the continuous perspective's demand for a relational ontology, critical Indigenous scholars clarify that these protocols are at the same time driven by the desire and the possibility to achieve some form of anticipated future "success," even under uncertain conditions. An example of such successful, ecologically relational planning is the reintroduction of sturgeon to the Manistee River in Anishinaabe territory (Whyte, Brewer, and Johnson 2016, 4). While making it clear that Indigenous protocols are produced by collectives that are not only human (Whyte, Brewer, and Johnson 2016), this type of governance remains thus unapologetically insistent that directed human agency is possible: "Indigenous ecologies physically manifest Indigenous governance systems through origin, religious and cultural narratives, ways of life, political structures, and economies" (Whyte, Caldwell, and Schaefer 2018, 159). The ecologies that emerge are "systematic arrangements" where human agency is acknowledged to have "shaped the lands and waters" (Whyte, Caldwell, and Schaefer 2018, 158) of ancestral territories. Through a combination of planning and intentional governmental action, Indigenous knowledge places communities in a position to not just react passively to disastrous changing circumstances, but also actively promote 'practices that secure human benefits from" (Whyte 2017b, 157) relations between humans and non-humans. Far from being merely the expression of survivance in the face of apocalyptic changes, intentional human action is here situated within a framework that recognizes knowledge gathering, planning, and policymaking for the environment as a ground where Indigenous struggles over land ownership and sovereignty play out (Porter et al. 2017).

The Indigenous insistence on the possibility of political planning and steering through directed human agency, even under conditions that are ontologically relational, complex, and fundamentally shaped by non-human actors, reveals the lessons that the continuous perspective draws from ecological shaping power as

perspectivist, particular, and not without alternative. As shown above, the different iterations of Anthropocene politics in the continuous perspective are underpinned by the assumption that overcoming ontological anthropocentrism must mean the end of rational political planning, steering, and governing, because the former is fundamentally modernist. This leaves no room for a politics where successful planning and directed human action coexist with a creative ecological relationality, which the examples of Indigenous planning however revealed as possible. While these cases suggest that the relationship between ontological relationality, rational steering, and political action is irresolvably complex, within the continuous perspective relational continuity instead becomes a singular ontological Anthropocene metanarrative. As a consequence, we argue that it falls victim to exactly the modern universalism that the critical approaches of the continuous perspective had initially sought to overcome. As shown above, the continuous-ontological perspective criticizes a positivist engagement with ecological change that draws a clear, absolute line of distinction between Holocene and Anthropocene. Through the emphasis on relational connectivity and productivity, it importantly dissolves Anthropocene scholarship from the modernist nature/culture and nature/scientific rationality binaries that the discontinuous approaches hold on to.

However, in undoing modernist binaries in favor of a relationally continuous Anthropocene, the former is at risk of becoming a realm of absolute immanence that swallows and thereby does away with all lines of division. While it is acknowledged that the Anthropocene is no homogeneous whole, it remains framed as a relational totality that does not leave room for disconnected, genuinely resistant "outsides." As shown, the practical-political implications of ontological relationality remain multiple and open-ended in Indigenous scholarship and praxis. On the contrary, the continuous perspective leaves no doubt about the suitability of the one, particular Anthropocene theorized to account for all epistemological and political consequences, precisely because of its in-built capacity to flexibly accommodate an indefinite number of actors, productive forces, and relations. Employing a related criticism, which Walker and Cooper have levelled against resilience-based governance approaches, it is the central achievement of the continuous perspective to "internalize and neutralize all external challenges ... to metabolize all countervailing forces and inoculate itself against critique" (Walker and Cooper 2011, 157). Again, as in the discontinuous perspective, we find ourselves "embarked in the same boat" (Walker and Cooper 2011). This time, it is the Anthropocene as a theoretical perspective with the analytical pretense to accommodate not just all life on Earth, but the productive capacity of the Earth itself in its totality.

The continuous-ontological perspective thus performs an all-encompassing theoretical "hugging" that replaces the scientific discovery of a catastrophic discontinuity with the ontological claim of an Anthropocene that has no outside because its multiple productive relations are always already and indefinitely unfolding. "If there is something like 'Anthropos' unified by way of its capacity to generate planetary destruction, then it is this world that becomes the only horizon and only end. There is no 'planet B' and no other world ... ends are no longer the sweeping away of deadened worlds for the sake of a future" (Colebrook 2019, 271). Because the continuous Anthropocene incorporates different speeds, feedback loops, and multiple experiences and networks of agency, there is no outside to its ecological continuity that predates and will outlive human societies. The Anthropocene's ontological force of "geopower has no outside, no 'place' or 'time' before or beyond it: it is the force, the forces, of the earth itself: forces which we as technical humans have tried to organize, render consistent and predictable, but which we can never fully accomplish insofar as the earth remains the literal ground and condition for every human, and non-human, action" (Grosz, Yusoff, and Clark 2017, 135). Because of this totalization of anthropocenic immanence, the continuous-ontological perspective falls short of the demands that it formulates against the discontinuous Anthropocene

diagnosis—to overcome the universalism of modern Western thought and acknowledge a genuine ontological multiplicity.

But more importantly, we further argue that the theoretical hugging, which the Anthropocene performs as an ontological-political metanarrative, problematically renders innocuous alternative and resistant political claims that are informed by the different theoretical and ontological positions that it enfolds. This is especially problematic where these differences amount to a fundamental challenge to the metanarrative of the continuous Anthropocene "as a complex set of overlapping emerging processes in which all subject-objects are embedded" (Chandler 2013, 12). The example of critical Indigenous scholarship and its engagement with the Western Anthropocene literature pointedly illustrates how a shared ecological-relational ontology can coexist with multiple and partially clashing political claims, which the continuous Anthropocene risks to obscure through the ontological totalization specified above. As a body of scholarship, critical Indigenous studies is held together by its locally specific, activist approach. As argued by Justice (2016, 20), it is "an interventionist analytic of transformation committed to and dependent on local specificity within a broader network of relationships." Epistemologically, critical Indigenous studies provide not only an alternative perspective to Western modernism, but a way to "contravene in, respond to, and redirect European philosophies [in order to offer crucial new ways of conceptualising an after to empire that does not reside within the obliteration of indigenous lives, resources and lands" (Byrd 2011, 229). Practical-politically, critical Indigenous studies "arise from memories, knowledges, and experiences of oppression that differ from many of the non-indigenous scientists, environmentalist, and politicians" (Whyte 2017b, 153) and are rooted in a common and ongoing struggle against colonialism and its legacy of structural inequality.

Within this shared ontopolitical framework, some scholars emphasize the common, trans-Indigenous commitment to practices of resistance, which bring together multiple Indigenous experiences without losing the multiplicity, diversity, and specificity of history, culture, time, and location (Allen 2012). However, others caution against unduly homogenizing and totalizing Indigenous scholarship and experience (Smith 1999, 6) and warn against the dangers of the "assimilative assaults" (Justice 2016, 28) enacted by settler colonial states in the pursuit of pan-Nativism over localized specificity. Indigenous scholars have captured this ongoing tension by articulating an Indigenous studies-led debate on the position and function of Indigenous studies as a discipline vis-à-vis the representation of Indigenous thought and experiences. In responding to Champagne's attempt to situate Indigenous studies as distinct from the epistemologically limited and rigid Western traditions, which are unable to explicate "what makes Indigenous peoples truly Indigenous" (Andersen 2009, 84), Andersen has, for instance, warned of the danger of oversimplifying Indigeneity by framing it as a distinct, disciplinary form of knowledge sitting outside the academy (Andersen 2009, 81). This brief glimpse into a much more complex debate shows that, while Indigenous studies, its role and its disciplinary boundaries, are very much a continued subject of debate, the density and multiplicity of Indigenous experiences lie at the heart of all of its disciplinary and paradigmatic expressions (Champagne 2007a, 2007b). Rowe, Baldry, and Earles (2015) thus suggest that, while Indigenous studies is a research paradigm underpinned by common fundamental principles pertaining to ontology, epistemology, axiology, and methodology, these should not be understood as representing the heterogeneity of Indigenous experiences and cosmologies in absolute terms.

For the context of this paper, this first means that we acknowledge this underlying complexity and contestation even where we draw on Indigenous studies to understand the framing of Indigenous political goals and agendas. Second, here again the critical mirror of Indigenous scholarship highlights how shared—relational—ontological paradigms can and do go hand in hand with an irresolvable

practical-political complexity. Turning to the way critical Indigenous thinkers respond to the Western Anthropocene debate, we can see this combination of shared relational-ontological paradigms and practical-political complexity working in practice. Critical Indigenous scholarship draws attention to manifest political inequalities, and divergent political claims resulting from it, to which the simple acknowledgment of diverse experiences within a relationally continuous Anthropocene does not do justice. Observing the alignment with some of their ontological and political claims from the side of the Anthropocene scholarship, several Indigenous scholars caution against a politically sanitized manner of incorporating Indigenous ideas within the canon of Western thought, which leaves out the continuous catastrophe of colonization that contextualizes Indigenous thought and politics, and the systemic inequalities it produces. DeLoughrey suggests that "the lack of engagement with postcolonial and Indigenous perspectives has shaped the Anthropocene discourse to claim the *novelty* of crisis rather than being attentive to the historical continuity of dispossession and disaster caused by the empire" (DeLoughrey 2019, 2; emphasis in original). As Métis scholar, Todd (2015, 244) asks,

[w]hat "modernist mess," as Fortun eloquently describes it, characterizes this moment of "common cosmopolitical concern"—Latour's term to describe the fact that the climate is a shared heritage, cross-roads, site, or milieu that we all inhabit, and one which deserves our deep attention as a commons and context for engaged involvement in the crises of climate change—that is the Anthropocene? And, finally, who is dominating the conversations about how to change the state of things?

As it stands, the theoretical enfolding of elements of their cosmology in a continuous ontology places Indigenous critiques side by side with settler states by virtue of a continued universalist narrative of crisis (and survival) that is deployed to make sense of the Anthropocene and its effects on human communities. Against this background, what the Indigenous critique calls for epistemologically is not just a "better recognition of complex situations" but a fundamental "renovation in discursive assumptions and attitudes" (Carter 2018, 36) that harvests the emancipatory potential of Indigenous relationality and of ecopolitics in order to "develop a new kind of historical consciousness ... 'a general history of life'" (Carter 2018, 225). As DeLoughrey (2019, 2) points out, Indigenous studies call for "provincializing" the Anthropocene, "much as postcolonial studies 'provincialized' the universalizing discourse of Europe." The continuous Anthropocene discourse, which ultimately smooths over political antagonism and alterity by emphasizing the generalized and universally held futility of any directed human action under anthropocenic conditions, is therefore problematic in that it closely resembles the absolutist search for certainty typical of Western modernity (Hokowhitu 2016, 93). By contrast, critical Indigenous studies situates itself as a challenger of "absolute knowing," though not in the essentialized "otherness" imagined by Western civilization, but rather as a site to "raise the spectre of knowledge unintelligible to Western rationalism" (Hokowhitu 2016, 93). Here, experiences of the Anthropocene relate back to "a cultural geologic that is not reducible to a universalized climate science of the Anthropocene. As such, culture, climate, experience, knowledge and the Anthropocene are all placed in disjunctive relation" (DeLoughrey 2019, 4). This problematization of a modern tendency toward universalization, which makes "the relations between the Anthropocene and colonialism explicit" (2017, 763), leads Davis and Todd to reject the concept of the Anthropocene altogether. They argue that turning away from the Anthropocene is necessary not just to unveil the link between the current ecological crisis and its extractivist origins, but also to frame a form of alternative affirmative action that is not merely based on including the voices of "others" within an otherwise modern-Western paradigm. Moving beyond the Anthropocene allows for the necessary openness to learn from communities, such as Indigenous ones, as a means to open up to "new forms of humanities" (Murphy 2018, 116). On the

other hand, Simmons (2019, 175) argues that the Anthropocene could bolster critical projects by making the violence of imperialism visible, even if this decolonial call must be considered carefully and with heterogeneity in mind, for, as Simmons also suggests, "the distinct vulnerabilities many beings have faced up to this point cannot be effaced" (Simmons 2019, 177; see also Watts 2013). The question of whether or not de-universalizing ecological relational thought in a way that eradicates its colonial roots and complicity necessarily requires abandoning the concept of the Anthropocene deserves, we believe, a careful examination that goes beyond the scope of this paper. The argument we would like to make here is simply that such a de-universalization is necessary in order to take seriously the political implications of arguments such as those of Davis and Todd.

In addition to depoliticizing Indigenous critique, we suggest that the continuous perspective is also incapable of convincingly alleviating the urgent political concerns raised by the discontinuous side of the scholarship, which outlive the deconstruction of their ontological underpinnings. The continuous critique primarily aims at the modernist epistemology and ontology that grounds the discontinuous diagnosis of the Anthropocene as a catastrophic threat to human societies. However, we argue that this critique is poorly targeted. The discontinuous perspective acknowledges its modern legacy openly and deliberately—what we need, it is argued, is scientific, economic, and political progress that will ameliorate the ecological crisis and allow us to live in the Anthropocene. As Chakrabarty (2008, 211) remarked in "The Climate of History," "[i]n the era of the Anthropocene, we need the Enlightenment (that is, reason) even more than in the past." The discontinuous perspective on the Anthropocene remains modern, but explicitly so, and it offers a practical-political justification that is not easily dismissed.

While we do not deny that the ontological framework of the continuous perspective provides a more adequate and more powerful tool to understand the impact of anthropocenic changes, precisely because it traces their genesis and affectivity beyond the human realm, this ontological flexibilization does not do away with the fact that the already devastating effects of recent ecological changes, including rising sea levels, droughts, and floods, constitute a political and normative demand for human action and political mitigation. Rejecting the ontological ground on which insights to the Anthropocene condition and appropriate governmental responses are formulated, purely for its modern remnants, is an inadequate reason for turning a blind eye to manifest destruction and suffering in favor of thinking the Anthropocene as ontologically transformative.

In different ways, critical Indigenous scholarship and the discontinuous perspective both formulate political challenges that outlive the enfolding of their theoretical underpinnings in the complex but continuous ontology of the Anthropocene. Where does this leave critical Anthropocene scholarship? Far from suggesting that the answer lay in modernist, techno-scientific, linear, and positivist responses to "fix" climate change, we suggest that critical Anthropocene scholarship must resist its own tendency to assimilate alterity, both conceptually and practical-politically, in order for the Anthropocene to be thought of as radically plural "all the way down." Resisting a continued universalization and scalar enfolding of a totalizing and globalizing discourse of the Anthropocene would allow scholars to engage not just with "localized" or "provincialized" politics on their own, but also with the overlapping, diachronic and dialectic relationship between part and whole (DeLoughrey 2019).

As such, political planning and steering and affirmative transformation, catastrophism, and continuity can be seen as coexisting in tension without a theoretical or political metanarrative to ease the former or key to unlock the unsettling unintelligibility of the Anthropocene world. This requires acknowledging the "gap between Indigenous and modern ways of knowing" (Randerson and Yates 2017, 27) as a meaningful site for creative "ontological slippage ... between mainstream and Indigenous cosmogonies, where performative modes of creative practice offer

alterior experiences of familiar places and the common framing of environmental issues" (Randerson and Yates 2017, 40). At the same time, the ontological complexity and diversity of political claims goes beyond any simple Western/non-Western or modern/non-modern binary and can thus not easily be streamlined by overcoming the former.

Theoretically, we suggest that a claim to relational continuity and ecological shaping power, which does not seek to theoretically eradicate the possibility of intentional action, genuine knowledge, or successful planning, dissent, and slippage, appears more suitable for a critical scholarship that seeks to dismantle clear boundaries and ontological certainties than the strong, radical insistence on a nonmodern ontology that not only appears reductionist but also risks posing yet another truth claim and thus, as Carter suggests, to "impose their discursive rules-ofthe game on all negotiations with other" (Carter 2018, 224). Politically, reflecting on the narratives of radical resistance brought forward by Indigenous scholars, Anthropocene perspectives may need to accept the possibility that opening to alternative worldviews can elicit a friction that is profoundly uncomfortable, making the possibility for reconciliation or even dialogue uncertain, undesirable for some, and thus potentially even impossible. In this sense, critical thought for the Anthropocene might need to become comfortable with uncomfortable ontological and political ambiguities and challenges, with no easy resolution in sight, in order to avoid silencing or at least unduly mitigating challenging claims and demands by theoretically situating them in an overarching Anthropocene framework. Whether such a becoming comfortable with deep and messy multiplicity, ambiguity, and contestation takes place as a reconfiguration of the Anthropocene concept or by theoretically moving beyond the Anthropocene is, for this paper, secondary.

#### Conclusion

This paper has shown how contemporary social theory on the Anthropocene can be divided into two distinct strands, which we termed discontinuous-descriptive and continuous-ontological. We have argued that the discontinuous-descriptive perspective on the Anthropocene reflects on geoscientific findings to diagnose the Anthropocene as subject to radical ecological changes that threaten human life on Earth and must be addressed through the combined effort of researchers and political actors on an international level. As the paper has shown, the catastrophism of the discontinuous perspective has received criticism from a second strand of critical Anthropocene literature, which problematizes its positivist and universalizing underpinnings. This critical scholarship develops an alternative, continuous-ontological perspective on the Anthropocene, which draws out how agency and shaping power have always been relational and ecological, radically reducing the scope for human knowledge and directed political steering, so that Anthropocene governance can only be affirmative, adaptive, and ad hoc. We have shown how the continuous perspective shares this insistence on ecological relationality, temporal plurality, and adaptive governance with some arguments developed within Indigenous thought. Yet, where the potential for planning has been dismissed as an unsustainable modernist relic by the continuous perspective, critical Indigenous scholarship has pointed to the fact that relationality, temporal plurality, and adaptive governance have long coexisted with the possibility for successful political planning and steering. Employing insights from critical Indigenous studies as a critical mirror, this paper has revealed how the continuous perspective generalizes what is in fact a very particular reading of ontological relationality and its political consequences. We have argued that the continuous Anthropocene here becomes a totalizing master narrative that is not only ontologically universalized in a way that positions the continuous perspective parallel to the discontinuous scholarship it rejects for its modern remnants, but also renders innocuous the deep political contestation and

divergent political demands that persist, even within a continuously relational Anthropocene, through enfolding in precisely this ontological master narrative.

The zooming out that the Anthropocene perspective allows for seems to provide, if not a secure ground, then at least a comforting order in the form of a perpetually unfolding continuity that ontologically locates creativity. While the Anthropocene can be neither fully understood nor effectively governed, the argument is that we at least have the theoretical tools available to accurately conceptualize the limits of human reason and action. Critical thought, we believe, should be weary of this comfort. At best, the continuous perspective depoliticizes the Anthropocene by framing it as an aesthetic event to be embraced to free humanity from the constraints of modern subjectivity. As Swyngedouw and Ernstson (2018, 10) note, the risk implicit in Anthropocene approaches, "in spite of their internal differences, is the off-staging of the politics of dissensus that animated the historical-geographical dynamics of modernity." At worst, the meta-theoretical enfolding that the continuous perspective performs risks delegitimizing the political struggles and claims, such as those to Indigenous self-determination, made by those enfolded in the totalizing Anthropocene framework. To avoid both risks, we argue that a critical scholarship that embraces ontological relationality and non-human agency must bid farewell to an overarching perspective that seeks to situate and catalogue what we cannot understand or change. It must, instead, become comfortable with clashing political demands and be genuinely open to alterity.

### Acknowledgments

The authors would like to thank the Critical Humanities and International Politics Group at the University of Hertfordshire, as well as the anonymous reviewers and editors. This paper was first presented at the workshop "Politics beyond the Anthropocene: Ecological Issues in European Political Practice and Thought" and the authors would like to thank all participants for their valuable feedback and suggestions as well as UACES and the University of Hertfordshire for the financial support that made this event possible.

#### Conflict of interest

No potential conflict of interest was reported by the author(s).

### References

AGRAWAL, ARUN. 1995. "Dismantling the Divide between Indigenous and Scientific Knowledge." *Development and Change* 26 (3): 413–39.

AIKAU, HŌKŪLANI K., NOELANI GOODYEAR-KA'OPUA, AND NOENOE K. SILVA. 2016. "The Practice of Kuleana: Reflections on Critical Indigenous Studies through Trans-Indigenous Exchange." In *Critical Indigenous Studies*, edited by Aileen Moreton-Robinson, 157–75. Tucson, AZ: University of Arizona Press.

ALLEN, CHADWICK. 2012. Trans-Indigenous Methodologies for Global Native Literary Studies. Minneapolis, MN: University of Minnesota Press.

Andersen, Chris. 2009. "Critical Indigenous Studies: From Difference to Density." *Cultural Studies Review* 15 (2): 80–100.

 $Bonneuil, Christophe, and Jean-Baptiste\ Fressoz.\ 2013.\ {\it The\ Shock\ of\ the\ Anthropocene}.\ London: Verso.$ 

Byrd, Jodi A. 2011. The Transit of Empire: Indigenous Critiques of Colonialism. Minneapolis, MN: University of Minnesota Press.

Carter, Paul. 2018. Decolonising Governance: Archipelagic Thinking. London: Routledge.

Chakrabarty, Dipesh. 2008. "The Climate of History: Four Theses." Critical Inquiry 35 (2): 197–222.

<sup>&</sup>lt;sup>4</sup>However, while Swyngedouw and Ernstson view relational ontologies as the key to depoliticizing Anthropocene thought, we have shown how relational ontologies can, on the contrary, condition this depoliticization.

- CHAMPAGNE, DUANE. 2007a. "In Search of Theory and Method in American Indian Studies." American Indian Quarterly 31 (3): 353–72.
- Champagne, Duane. 2007b. "The Rise and Fall of Native American Studies in the United States." In *American Indian Nations: Yesterday, Today and Tomorrow*, edited by George Horse Capture, Duane Champagne, and Chandler Jackson, 129–47. New York: Alta Mira Press.
- CHANDLER, DAVID. 2013. Resilience. The Governance of Complexity. London: Routledge.
- ———. 2018. Ontopolitics in the Anthropocene. An Introduction to Mapping, Sensing and Hacking. London: Routledge.
- CLARK, NIGEL, AND KATHRYN YUSOFF. 2017. "Geosocial Formations and the Anthropocene." *Theory, Culture & Society* 34 (2–3): 3–23.
- COLEBROOK, CLAIRE. 2017. "We Have Always Been Post-Anthropocene: The Anthropocene Counterfactual." In *Anthropocene Feminism*, edited by Richard Grusin, 1–20. Minneapolis, MN: University of Minnesota Press.
- ———. 2019. "The Future in the Anthropocene: Extinction and the Imagination." In *Climate and Literature*, edited by Adeline Johns-Putra, 263–80. Cambridge: Cambridge University Press.
- DANOWSKI, DÉBORAH, AND EDUARDO VIVEIROS DE CASTRO. 2017. The Ends of the World. Cambridge: Polity.
- DAVIES, JEREMY. 2016. The Birth of the Anthropocene. Oakland, CA: University of California Press.
- Davis, Heather, and Zoe Todd. 2017. "On the Importance of a Date, or, Decolonizing the Anthropocene." ACME: An International Journal for Critical Geographies 16 (4): 761–80.
- Dawson, Ashley. 2016. Extinction. A Radical History. New York: OR Books.
- DeLoughrey, Elizabeth. 2019. Allegories of the Anthropocene. Durham, NC: Duke University Press.
- DILLET, BENOÎT. 2018. "Suffocation and the Logic of Immunopolitics." In Biopolitical Governance. Race, Gender, Economy, edited by Hannah Richter, 235–54. London: Rowman & Littlefield.
- EVANS, BRAD, AND JULIAN REID. 2014. Resilient Life. The Art of Living Dangerously. Cambridge: Polity.
- Grignon, Jeff, and Robin Wall Kimmerer. 2017. "Listening to the Forest." In Wildness: Relations of People & Place, edited by Gavin Van Horn and John Hausdoerffer, 67–74. Chicago, IL: University of Chicago
- GROSS, LAWRENCE W. 2014. Anishinaabe Ways of Knowing and Being. Farnham: Ashgate.
- Grosz, Elizabeth, Kathryn Yusoff, and Nigel Clark. 2017. "An Interview with Elizabeth Grosz: Geopower, Inhumanism and the Biopolitical." *Theory, Culture & Society* 34 (2–3): 129–46.
- Hamilton, Clive. 2013. Earthmasters. The Dawn of the Age of Climate Engineering. New Haven, CT: Yale University Press.
- HARRINGTON, CAMERON. 2016. "The Ends of the World: International Relations and the Anthropocene." Millennium 44 (3): 478–98.
- Hemming, Steve, Daryle Rigney, and Shaun Berg. 2011. "Ngarrindjeri Futures: Negotiation, Governance and Environmental Management." In *Unsettling the Settler State: Creativity and Resistance in Indigenous Settler-State Governance*, edited by Sarah Maddison and Morgan Brigg. Sydney: The Federation Press.
- HIRD, MYRA J. 2017. "Waste, Environmental Politics and Dis/engaged Publics." Theory, Culture & Society 34 (2-3): 187-209.
- 2018. "Proliferation, Extinction and an Anthropocene Aesthetic." In *Posthumous Life. Theorizing beyond the Posthuman*, edited by Jamie Weinstein and Claire Colebrook, 251–70. New York: Columbia University Press.
- HOKOWHITU, BRENDAN. 2016. "Monster: Post-Indigenous Studies." In Critical Indigenous Studies: Engagement in First World Locations, edited by Aileen Moreton-Robinson. Tucson, AZ: The University of Arizona Press.
- JOHNSON, ELIZABETH, AND HARLAN MOREHOUSE. 2014. "After the Anthropocene: Politics and Geographic Inquiry for a New Epoch." Progress in Human Geography 38 (3): 1–18.
- JOHNSON, JAY T., AND BRIAN MURTON. 2007. "Re/placing Native Science: Indigenous Voices in Contemporary Constructions of Nature." Geographical Research 45 (2): 121–29.
- JUSTICE, AND DANIEL HEALTH. 2016. "A Better World Becoming: Placing Critical Indigenous Studies." In *Critical Indigenous Studies: Engagement in First World Locations*, edited by Aileen Moreton-Robinson. Tucson, AZ: The University of Arizona Press.
- LATOUR, BRUNO. 1993. We Have Never Been Modern. Cambridge, MA: Harvard University Press.
- ———. 2017. Facing Gaia Eight Lectures on the New Climatic Regime. Cambridge: Polity.
- McQuillan, Dan. 2017. "The Anthropocene, Resilience and Post-Colonial Computation." *Resilience: International Policies, Practices and Discourses* 5 (2): 92–109.
- Mihai, Mihaela, Lois McNay, Oliver Marchart, Aletta Norval, Vasillos Papais, Sergei Prozorov, and Mathias Thaler. 2017. "Democracy, Critique and the Ontological Turn." *Contemporary Political Theory* 16 (4): 501–31.
- MITCHELL, AUDRA. 2017. "'Posthuman Security': Reflections from an Open-ended Conversation." In Reflections on the Posthuman in International Relations: The Anthropocene, Security and Ecology, edited by Clara Eroukhmanoff and Matt Harker. Bristol: E-International Relations Publishing.

- Moore, Jason W. 2015. Capitalism in the Web of Life. Ecology and the Accumulation of Capital. London: Verso.

  ————. 2016. "Introduction: Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism." In Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism, edited by Jason W. Moore, 1–14. Oakland, CA: PM Press.
- Moreton-Robinson, Alleen. 2016. "Introduction: Locations of Engagement in the First World." In *Critical Indigenous Studies: Engagement in First World Locations*, edited by Aileen Moreton-Robinson. Tucson, AZ: The University of Arizona Press.
- Murphy, Michelle. 2018. "Against Population, towards Alterlife." In *Making Kin Not Population*, edited by Adele E. Clarke and Donna Haraway, 101–24. Chicago, IL: Prickly Paradigm Press.
- O'Brien, Susie. 2017. "Resilience Stories. Narratives of Adaptation, Refusal, and Compromise." Resilience 4 (2–3): 43–65.
- Peña, Devon G. 2017. "The Hummingbird and the Redcap." In Wildness: Relations of People & Place, edited by Gavin Van Horn and John Housdoerffer, 89–99. Chicago, IL: University of Chicago Press.
- PORTER, LIBBY, HIRINI MATUNGA, LEELA VISWANATHAN, LYANA PATRICK, RYAN WALKER, LEONIE SANDERCOCK, AND DANA MORAES et al. 2017. "Indigenous Planning: From Principles to Practice/A Revolutionary Pedagogy of/for Indigenous Planning/Settler–Indigenous Relationships as Liminal Spaces in Planning Education and Practice/Indigenist Planning/What Is the Work of Non-Indigenous People in the Service of a Decolonizing Agenda?/Supporting Indigenous Planning in the City/Film as a Catalyst for Indigenous Community Development/Being Ourselves and Seeing Ourselves in the City: Enabling the Conceptual Space for Indigenous Urban Planning/Universities Can Empower the Next Generation of Architects, Planners, and Landscape Architects in Indigenous Design and Planning." Planning Theory & Practice 18 (4): 639–66.
- Protevi, John. 2018. "Supra- and Subpersonal Registers of Political Physiology." In *Posthumous Life. Theorizing beyond the Posthuman*, edited by Jami Weinstein and Claire Colebrook, 211–24. New York: Columbia University Press.
- RAFFNSØE, SVERRE. 2016. Philosophy of the Anthropocene: The Human Turn. Houndmills: Palgrave Macmillan. RANDERSON, JANINE, AND AMANDA YATES. 2017. "Negotiating the Ontological Gap: Place, Performance, and Media Art Practices in Aotearoa/New Zealand." In Ecocriticism and Indigenous Studies: Conversations from Earth to Cosmos, edited by Salma Monani and Joni Adamson. New York: Routledge.
- ROWE, SIMONE, EILEEN BALDRY, AND WENDY EARLES. 2015. "Decolonising Social Work Research: Learning from Critical Indigenous Approaches." Australian Social Work 68 (3): 296–308.
- Saldanha, Arun. 2018. "Geophilosophy, Geocommunism: Is There Life after Man?" In *Posthumous Life. Theorizing beyond the Posthuman*, edited by Jami Weinstein and Clair Colebrook, 225–50. New York: Columbia University Press.
- SIMMONS, Kall. 2019. "Reorientations; or, an Indigenous Feminist Reflection on the Anthropocene." *Journal of Cinema and Media Studies* 58 (2): 174–79.
- Smith, Linda Tuhiwai. 1999. Decolonizing Methodologies. London: Zed Books.
- STEFFEN, WILL, ÅSA PERSSON, LISA DEUTSCH, JAN ZALASIEWICZ, MARK WILLIAMS, KATHERINE RICHARDSON, AND CAROLE CRUMLEY et al. 2011. "The Anthropocene: From Global Change to Planetary Stewardship." *Ambio* 40 (7): 739–61.
- STIEGLER, BERNARD. 2018. The Neganthropocene. London: Open Humanities Press.
- Swyngedouw, Erik, and Henrik Ernstson. 2018. "Interrupting the Anthropo-obScene: Immuno-biopolitics and Depoliticizing Ontologies in the Anthropocene." *Theory, Culture & Society* 35 (6): 3–30.
- Todd, Zoe. 2015. "Indigenizing the Anthropocene." In *Art in the Anthropocene: Encounters among Aesthetics, Politics, Environment and Epistemology*, edited by Heather Davis and Etienne Turpin, 241–54. London: Open Humanities Press.
- TØNDER, LARS. 2017. "Five Theses for Political Theory in the Anthropocene." Theory & Event 20 (1): 129–36
- WAKEFIELD, STEPHANIE. 2017. "Inhabiting the Anthropocene Back Loop." Resilience 6 (2): 1–18.
- Walker, Jeremy, and Melinda Cooper. 2011. "Genealogies of Resilience: From Systems Ecology to the Political Economy of Crisis Adaptation." Security Dialogue 42 (2): 143–60.
- Watson, Annette. 2013. "Misunderstanding the 'Nature' of Co-Management: A Geography of Regulatory Science and Indigenous Knowledges (IK)." *Environmental Management* 52 (5): 1085–1102.
- Watts, Vanessa. 2013. "Indigenous Place-Thought and Agency amongst Humans and Non-Humans (First Woman and Sky Woman Go on a European World Tour!)." *Decolonization: Indigeneity, Education & Society* 2 (1): 20–34.
- WHYTE, KYLE P. 2017a. "What Do Indigenous Knowledges Do for Indigenous Peoples?" In Traditional Ecological Knowledge and Sustainability, edited by Melissa K. Nelson and Dan Shilling, 4–57. Cambridge: Cambridge University Press.
- 2017b. "Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene." English Language Notes 55 (1–2): 153–62.

- WHYTE, KYLE P. 2018. "Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of the Climate Change Crises." *Environment and Planning E: Nature and Space* 1 (1–2): 224–42.
- WHYTE, KYLE P., JOSEPH P. BREWER, AND JAY T. JOHNSON. 2016. "Weaving Indigenous Science, Protocols and Sustainability Science." Sustainability Science 11 (1): 25–32.
- Whyte, Kyle P., Chris Caldwell, and Marie Schaefer. 2018. "Indigenous Lessons about Sustainability Are Not Just for 'All Humanity'." In *Sustainability: Approaches to Environmental Justice and Social Power*, edited by Julie Sze, 149–79. New York: New York University Press.
- Zalasiewicz, Jan, Mark Williams, Will Steffen, and Paul Crutzen. 2010. "The New World of the Anthropocene." Environmental Science and Technology Viewpoint 44 (7): 2228–31.