Climate Apocalypticism and the Temporal Sublime

The prospect of climate collapse haunts contemporary culture and political debate today in a way that no environmental threat has before. Such concerns over what the future will bring are well-founded, given the global reach and profound impact of climate change's anticipated effects on human and natural systems, the political and economic challenges of an effective international response, and the escalating risks of deferred action. It is unsurprising, then, that our narratives for thinking about climate change have adopted an apocalyptic structure, by which they continue a defining trend of modern environmental rhetoric. Without implying any scepticism concerning the very real dangers that climate collapse represents, my aim here is to raise some critical concerns over environmentalism's endorsement of apocalyptic rhetoric, taking popular climate apocalypticism as the guiding example. More precisely, my concern is with the temporal structure of the climate collapse narrative and the conception of the sublime that it implies. It is a commonplace to call attention to the linear temporality and tragic telos of apocalypticism in general, and climate change disaster narratives in particular, but the stakes of this temporal framing have received relatively scant attention.[1] To clarify these stakes, I borrow political theorist Ben Jones's schema for ›cataclysmic apocalyptic thought‹, which highlights the role that crisis plays as transition from the corrupt state of the present to an ideal future. I draw from this the implication that climate apocalypticism, and secular apocalypticism more generally, aims to escape from the time of the present, with the weight of its specific history and the future horizon of its projected fears, into a new age and a new time, one symbolised by the counterfactual time of fiction and the incommensurable times of the deep geological past or indefinite future. I see this leap into another temporality as the culminating moment of a homogenisation of time that Jean-Luc Nancy has ascribed to ecotechnical globalization and that he characterises as a ›catastrophe‹ of ›gen-

eral equivalence‹ (Nancy 2015: 6). Drawing on Nancy's call to think the ›ever-renewed present‹ alongside Kyle Powys Whyte's proposal of ›time spiraling‹ as a living dialogue with our ancestors and descendants, I suggest an alternative figure of temporal justice that refuses the Judgment Day of apocalyptic narratives.

To understand the role that I am granting to the sublime in interpreting the temporal structure of climate narratives, it is first helpful to consider the historical context of our changing relationship with deep time. The fact that long expanses of time confront the human mind with a sublime dimension was recognised by both Hume and Kant, although neither devotes much attention to this experience.[2] Kant's entire treatment of this topic in his pre-critical *Observations on the Feeling of the Beautiful and the Sublime* (2007 [1764]), for instance, appears in the following few lines:

> A long duration is sublime. If it is of time past, it is noble; if it is projected forth into an unforeseeable future, then there is something terrifying in it. An edifice from the most distant antiquity is worthy of honor. Haller's description of the future eternity inspires a mild horror, and of the past, a transfixed admiration (Kant 2007: 26).

In the terms of the *Critique of Judgment* (1987[1790]), this suggests that the past confronts us with an experience of the mathematical sublime, and indeed Kant refers there to past time as an infinite magnitude (Kant 1987: 254), although this later text offers no further mention of time's sublime character. The unforeseeable future, on the other hand, although never mentioned in the *Critique of Judgment*, would be a species of the dynamically sublime, arousing fear in us in a way that is somehow parallel to the elemental examples that Kant favours: threatening rocks, thunderclouds, volcanoes, hurricanes, and the like (Kant 1987: 261).[3] The reference here to Albrecht von Haller's »Uncompleted Poem on Eternity« (2002) suggests that, for Kant, the future is not to be thought as an infinite magnitude since it is progressing towards its end. And, indeed, he returns to Haller in his 1794 text, »The End of All Things«—a rebuke of Prussian millenarian politics—where what is at stake is not a future proceeding to infinity but precisely eternity as the horrifying abyss that opens beyond the edge of time, beyond the Judgment Day that brings the sensible world to its conclusion. Eternity beyond time is unthinkable, and its »frighteningly sublime« character is due in part to its obscurity; yet according to Kant »in the end it must also be woven in

a wondrous way into universal human reason, because it is encountered among all reasoning peoples at all times, clothed in one way or another« (Kant 1996: 221). The caution of Kant's tale is to remember that the religious and cultural imagery with which we clothe this notion of eternity must be understood according to the moral order and not in literal or physical terms.

For both Hume and Kant, the sublime past is revealed only through cultural antiquities, never through natural or elemental phenomena. But in the thirty years that separate these sparse references to the temporal sublime in Kant, developments in what would come to be known as geological science were setting the stage for a dramatic reorientation in our relationship with long durations of time. James Hutton's 1788 *Theory of the Earth* famously proposed a concept of geological time with »no vestige of a beginning,—no prospect of an end« (Hutton 1788: 304), and through the writings of his friend and populariser, John Playfair, this newly opened horizon of what would come to be known as ›deep‹ time was characterised from the outset in sublime terms.[4] This discovery of the deep past simultaneously opens the horizons of the far future and our contemporary cultural obsession with apocalypse.[5] Georges Cuvier's evidence for prehistoric extinctions laid the groundwork for Mary Shelley's exploration of human extinction in *The Last Man* (1826), generally recognised as the first secular apocalyptic novel. The genre of apocalyptic speculative fiction inaugurated by Shelley first gained popularity by imagining our demise from natural causes, but the First World War shifted our fantasies toward the prospect of self-annihilation by weapons of mass destruction. And Rachel Carson's *Silent Spring*, written during the lead up to the Cuban Missile Crisis, played a key role in transferring our nuclear anxieties to the emerging threat of ecological collapse.

Contemporary climate apocalypticism is therefore simply the latest phase in our cultural efforts to manage the sublime dimensions of the unforeseeable future. Just as the threat of total nuclear war—what Derrida in 1984 termed the »phantasm of a remainderless destruction« (Derrida 2007: 396)—framed human reality during the Cold War period, so the phantasm of future climate collapse constructs our present today. Ongoing debates over whether to name our contemporary geological period the ›Anthropocene‹ are symptomatic of this transfigured temporal perspective, which offers a vantage from which humanity can hold itself responsible—for the first time—for our long-term ecological transformations of the globe,

while raising—also for the first time—the question of our ethical obligations toward an unimaginably distant future. But insofar as contemporary environmentalism relies on an apocalyptic construction of time that represses the temporal sublime, as we will see below, it cannot do justice to these ethical intuitions. At stake is precisely the temporal framing of apocalypticism, which I investigate here through the example of climate apocalypticism in particular.

1 Climate Apocalypticism

During the final week of the 2009 United Nations Climate Change Conference, four Greenpeace activists paraded on horseback through the streets of Copenhagen dressed in costumes representing famine, pestilence, war, and death. Invoking the four horsemen of the apocalypse from the biblical Book of Revelations, their intent was to dramatise the stakes of climate change negotiations. In a press release from Greenpeace International, Sini Harkka of Greenpeace Nordic explained that »The spectre of the four horseman is looming over these climate negotiations. […] Yet world leaders are still failing to grasp the urgency of the crisis« (Greenpeace International 2009). This is but one dramatic example of the widespread use of apocalyptic rhetoric to describe climate change—by activists, the media, scientists, political actors, advertisers, and popular culture. Over the last decade, such rhetoric has been the subject of interdisciplinary scholarly debate, which has focused primarily on whether framing the narrative of climate change in apocalyptic terms helps or hinders efforts to mobilise individual and collective responses. This debate has generated a proliferation of ways of defining the key elements of apocalyptic narrative and a range of interpretations concerning how the climate change variation extends or remakes the earlier apocalyptic narratives that have framed U.S. environmental discourse since the 1960s (e.g., Rachel Carson's *Silent Spring*, Paul Ehrlich's *The Population Bomb*, and so on). It has also drawn new attention to environmentalism's relationship with the nuclear apocalypticism that preceded and engendered it and the long history of religious apocalypticism in Judaism and Christianity.[6]

My interest here is not with the psychological or political efficacy of apocalyptic rhetoric, but with the temporality that it enacts. Nevertheless, the existing debates shed some light on this, especially

as they begin to set climate apocalypticism into its broader historical context and to parse out its distinct variants. These debates tend to start from an understanding of ›apocalypse‹ as straightforwardly synonymous with catastrophe, with the end of the world ›as we know it‹, whether that means the end of ›our‹ current standard of living, or the end of human civilization in any historically recognizable form, or the literal extinction of the human species, and so on. And when apocalypse is read as synonymous with catastrophe, the rhetorical deployment of the narrative is understood to be in the service of galvanising individual action and political will through fear and horror at the likely consequences of inaction. This rhetorical strategy can then be criticised as ineffectual or counter-productive fear-mongering along the lines familiar from Nordhaus and Shellenberger (2007).

Representative of this approach is geographer Mike Hulme's frequently cited typology of four Biblically named climate change ›myths‹: Lamenting Eden, Constructing Babel, Celebrating Jubilee, and Presaging Apocalypse (Hulme 2010). While *Lamenting Eden* voices our misplaced nostalgia for pristine nature's lost autonomy, *Constructing Babel* expresses our hubristic desire for increased technoscientific control, most implicit in geoengineering schemes. *Celebrating Jubilee* serves our ›instinct‹ to do the right thing by taking the climate crisis as an opportunity to establish social and environmental justice. And finally, *Presaging Apocalypse* »lends a sense of danger, fear and urgency« to climate discourse by exhorting us to »save the planet« before it is too late (Hulme 2010: 44). But the »counter-intuitive outcome« of this framing, Hulme argues, is »disempowerment, apathy and scepticism among its intended audience« (Hulme 2010: 45) Now, as Hulme is aware, these four narratives rarely operate in isolation, since the apocalyptic mode is driven by a sense of nature's fragility borrowed from *Lamenting Eden*, and the crisis mentality that it engenders is precisely what drives *Constructing Babel* and *Celebrating Jubilee*. So, going beyond Hulme, we might conclude that *Presaging Apocalypse* is not merely one alongside the other myths, but rather the heart of our cultural response to climate change. This would follow from the recognition that environmentalism, at least in the United States, has always defined itself by apocalyptic narratives, and that climate change lends itself to appropriation as *the* paradigmatic apocalypse.[7]

There are several interesting points to note about Hulme's treatment of the *Presaging Apocalypse* ›myth‹. First, he intentionally lim-

its his use of ›apocalypse‹ to its »popular sense«, which he understands as »impending large-scale disaster or destruction« in contrast with the concept's original Greek—and Biblical—usage, meaning simply »disclosure or revelation« (Hulme 2010: 55n7). With this decision, Hulme participates in the trend noted by Stefan Skrimshire of stripping references to apocalypse of their »theological nuances« in favour of their »sensationalist elements«, and particularly of treating such discourses as reducible to fear of the future. What is whitewashed here, as Skrimshire reminds us, is precisely the »complex dramatic structure« of the religious apocalyptic narrative, which includes »the creation of tension between the corruption that is endured in the present age and the hope in the new age that is yet to come« (Skrimshire 2014: 237). The temporal, eschatological element of apocalyptic thinking is precisely to be found in this productive tension ignored by Hulme, and to which we will return.

Furthermore, like others who evaluate the apocalyptic narrative in terms of its rhetorical efficacy, Hulme seems to suggest that such narrative framings are something that we can consciously pick and choose according to our political aims, rather than—at least in part—historical structures that frame our very experience. Obviously, there are those activists, reporters, politicians, and authors who seize on an apocalyptic description as a tactic; but their tactics resonate precisely because of the ways we have come to experience the world through an essentially apocalyptic mode. That this mode is more complex than simple fear-mongering is already suggested by the deep cathartic pleasure that we take in imagining world-wide cataclysmic destruction, repeatedly and in endless variation, as demonstrated by our insatiable appetite for apocalyptic films and novels and the new genre of cli-fi.[8] I do not believe that we can explain this away as disaster capitalism's effort to »transform apocalypse into exciting entertainment for the multitudes«, as Frederick Buell suggests (Buell 2010: 31). Our appetite for world-ending fiction long predates the disaster capitalism that Naomi Klein (2007) describes, which must itself be understood through our deep cultural identification with the apocalyptic mode.

Finally, it is notable that both Hulme and Buell point to the introduction of new scientific language, especially that of systems theory, as influencing the specific forms of apocalyptic discourse in the environmental movement and climate change in particular. Prophetic revelation is a key feature of the Judeo-Christian apocalyptic tradi-

tion, and today's augers are the scientists who have introduced us to non-linearity, tipping points, feedback loops, and other chaotic disruptions of our received models for change. That such models inform our cosmic—that is, spatial—understanding of the possibility of catastrophe is clear, but they also have eschatological—that is, temporal—implications.[9] If we now live the world in an apocalyptic mode informed by non-linearity, has this not also complicated our experience of time?

2 Apocalyptic Temporalities

Turning now explicitly to apocalyptic temporality, we find that one of its defining features is said to be its linear directionality, either guided by divine providence or driven by natural forces, toward a catastrophic end-point, a ›Judgment Day‹, beyond which all individual human judgment is irrelevant (Foust and Murphy 2009: 154). Alongside the spectacular destruction of the current world, the narrative »prophecies (directly or indirectly) a new world order«, and Judgment Day marks the passage into this new age, which is therefore also a new time.[10] Nevertheless, finer-grained distinctions are possible within this broad characterization, as Christina Foust and William Murphy have shown through their examination of climate press coverage. Foust and Murphy take up Stephen O'Leary's distinction between ›tragic‹ and ›comic‹ variations of the apocalyptic narrative and show that these correspond to distinct temporalities. The tragic narrative is fatalistic, marching unstoppably toward pre-ordained or necessary destruction regardless of human actions. The tragic therefore »promotes a view of time and human action as closed«.[11] When this narrative is adopted, time is shortened or accelerated in its rush toward an unambiguous end-point, and this unalterable plunge is often characterised in terms of feedback loops, tipping points, and the destabilization of phenological cycles. Such tragic narratives are often supported by analogies with examples from fiction or from the deep geological past, such as a volcanic extinction event 250 million years ago (Foust and Murphy 2009: 159). In other words, they are modelled on temporalities that are either counterfactual or incommensurable with our mundane linear conceptions of time. The tragic narrative is reassuring in its own way precisely because there is nothing to be done, and we can resign ourselves to letting the course of things un-

fold—nothing to be done, that is, except to repent for our role in the corruption of the present (Foust and Murphy 2009: 161–162). The new world that succeeds final judgment will be purified of all corruption because it will continue on in its own pristine eternity, without us.

By contrast with this tragic narrative, although often mixed with it, the comic perspective is more optimistic about the prospects for human agency to influence the course of events. Things are headed badly due to our mistakes, and these can be righted. While we may not avoid disaster entirely, we might avoid the worst. The temporality of the comic, then, is open, and the point toward which it aims is less determinate. Rather than rushing toward a tipping point beyond which all human intervention is impossible, the comic mode slows things down long enough to give us time to think and to act. Within this narrative structure, then, we can hold on to the distinction between crisis and catastrophe (Foust and Murphy 2009: 160). Since Foust and Murphy approach the issue of apocalyptic rhetoric through the lens of its communicative and political efficacy, their proposal is for »communication scholars and climate scientists« to work together »on the difficult task of providing appropriate perspectives toward time«, perspectives that will encourage audiences to see climate change as urgent but manageable (Foust and Murphy 2009: 163). For them, this means promoting the »comic« perspective.

Nevertheless, this sorting into tragic and comic modes remains superficial until we contextualise it within the temporal structure of the full apocalyptic narrative. Whereas the tragic mode destabilises and accelerates time toward the definite moment when duration gives way to eternity, the comic mode aims to maintain a regular pace, a continuity with lived time, long enough to prepare us for judgment. But judgment still comes, in the sense that we must pass through a crisis for which we are as yet unprepared, and that maintains its full catastrophic potential depending on what we do next. On the comic mode, the world still passes into a new age and a new time, even if this is a new age in which we might still have a place. But this new age, this new time, and this new place are as yet unimaginable.

In insisting on the moment of crisis as a temporal hinge, as the turning point between ›our‹ time and a time to come, I am borrowing an insight from political theorist Ben Jones, who examines the appeal of Christian apocalyptic thinking for secular political theorists. Jones focuses on the strand of Christian thinking that he terms »cataclys-

mic apocalyptic thought«, exemplified by the Book of Revelation among other texts, that »identifies crisis as the path to the ideal society« (Jones 2017: 2). On this view, crisis is not to be avoided but rather welcomed since it is the only path that can wipe away the current state of corruption and replace it with lasting utopia (Jones 2017: 3). The truly apocalyptic crisis, then, is the final crisis, the one that installs us in a time beyond all crises. And this leavens our everyday struggles, here and now, with transcendent significance, insofar as they are moments of the larger progression toward final purification; we may be losing the local struggle, but we are still on the winning side of the cosmic battle (Jones 2017: 5; Skrimshire 2014: 239). My suggestion is that *our cultural fascination with fictional apocalyptic narratives is less a manifestation of our desire for our own destruction than our yearning for this transcendent significance; we are ready, in our heart of hearts, to wipe the world away and start again, even at the risk that we might be wiped away with it*. In the Christian version of this narrative, of course, the crisis and its aftermath unfold under the guidance of divine providence, and we need only have faith in this. Secular versions proceed without this safety net or try, like Marxism, to replace it by other mechanisms. In any case, the way that we live the apocalyptic narrative today is through our deep pleasure at the prospect of leaping into an unimaginable world and a new age without any guarantees of survival—and, importantly, without any unpaid debts to the past.

The radicality of this image of time follows from the unique moment of judgment, which is precisely a singular break where time folds, dehiscing into the old that is washed away and the ideal future to come. This returns us to Kant's late essay, »The End of All Things«, where he calls attention to the strange temporality of Judgment Day as the hinge between time and eternity, which both horrifies and attracts us with the full force of the sublime (Kant 1996). But for Kant this is a transition between the happening of events under the conditions of time, on the one hand, and an eternity in which nothing can come to pass, on the other, a situation that cannot be rationally comprehended but is to be understood according to the moral order of ends. Even if the new age postulated by climate apocalypticism does not altogether escape from time, as an incorruptible ideal it nevertheless retains a certain aura of the eternal or at least the indefinite openness of ›future generations‹. Judgment Day is always a selection, a differentiation of the corrupt from the pure, whether, along with

Kant, we place time on the side of corruption or instead allow for the possibility of a utopian time, whatever this might mean. Consequently, apocalyptic thinking relies on a linear sorting into two incommensurable but internally homogenous series of time, with the moment of judgment as their transition. As with Kant, it is the eternal or the utopian moment that remains sublime, unthinkable—and transcendent. But perhaps the sublime element of the unthinkable future is not a Judgment Day that opens onto eternity. In fact, does not the opening of the horizons of deep time, both past and future, transform our very experience of lived time? This new temporal sublime is neither a mathematical infinity of uncountable moments, nor a Judgment Day that closes time, but instead the anachronistic interruption of lived time by inconceivable durations that outstrip the imagination. This elemental sublime is covered over when the past is levelled into equivalent and interchangeable moments by which we extrapolate a manageable future.

3 The Singular Present and Spiralling Time

The suggestion I have been developing here is that our contemporary apocalypticism remains fundamentally eschatological, that it embraces crisis as a Judgment Day that marks the hinge between our corrupt present world and a new dawn, even or especially when this eschatological frame is not consciously or explicitly theological. It is this basic narrative that has underwritten environmentalism since at least *Silent Spring*, despite the modifications that it has undergone in the light of new technologies and shifting political contexts.[12] This narrative justifies itself in terms of our ethical obligations toward the future, and yet it assumes a figure of time that conceals our ethical obligations—not only toward the future, but also toward the past and present. To see why this is so, we must first recognise that the apocalyptic figure of time participates in what Jean-Luc Nancy (2015) has termed the »equivalence of catastrophes«. Nancy describes our global ecotechnical situation as an ever-expanding entanglement of interdependencies between innumerable systems—political, military, industrial, financial, logical, natural, and so on. Because of these interdependencies, catastrophes such as the 2011 disaster at the Fukushima Daiichi Nuclear Power Plant are uncontainable in their effects. But the deeper catastrophe, as Nancy argues, is the general equiva-

lence that makes the interdependence of systems possible in the first place, namely, the levelling of all measures into a common denominator that facilitates translation across domains. This general equivalence inspires a proliferation of means and ends without orientation toward any final end or ultimate goal other than their own continued expansion and proliferation. It is this loss of any ultimate sense or direction that Nancy has called the »end of the world«.[13] Our constant awareness of the possibility of our own self-destruction stands in place of any final end as the secret fulfilment of the levelling of time into a homogenous continuum.[14] The operations of this catastrophe of equivalence can be traced in those approaches to sustainability that extrapolate from deep-past trends to predict and manage far-future scenarios, thereby tacitly assuming that our obligation toward the future is to ›sustain‹ the world in a state that resembles as closely as possible our present.[15]

Nancy points out that the absence of any end or goal for our ecotechnical interdependencies apart from their own self-perpetuation traps us in a cycle of planning and management of the future in general, and the extrapolation of the past to calculate the future demonstrates the sway of this general equivalence in our understanding of time, since each chronological present moment is substitutable and exchangeable for every other. Apocalyptic thinking presupposes and reaffirms this equivalence, since the only decisive interruption of the linear and calculable equivalence of ›nows‹ is by a Judgment Day that ends time as we know it, and precisely a Judgment Day that is itself the consequence of the proliferation of catastrophic equivalence—that is, one we have brought upon ourselves.

To break with this levelling of time requires recognising the *non-equivalence* of the unique and non-substitutable events and moments that compose our lives, moments that cannot be exchanged precisely because of their entanglement in the plexities of the past and future. To recognise this singularity of every moment deepens our respect for the present, understood not as an immediate or ephemeral ›now‹, but rather as the time of manifestation in which someone or something, always singular and incommensurable, presents itself. In Nancy's words, »What would be decisive, then, would be to think in the present and to think the present. No longer the end of ends to come, or even a felicitous dispersion of ends, but the present as the element of the near-at-hand«.[16] The singularity of what appears in the non-substitutable present demands from us an attention and respect, an es-

teem for the inestimable (Nancy 2015: 39–40). Wendell Berry, the leading proponent of agrarian ideals in the United States, expresses what may be a parallel sentiment when he writes that »We are always ready to set aside our present life, even our present happiness, to peruse the menu of future exterminations. If the future is threatened by the present, which it undoubtedly is, then the present is more threatened, and often is annihilated, by the future« (Berry 2015: 174).

Nancy's perspective allows us to glimpse the ethical implications of our figure of time. Yet, for a genuine encounter with the deep temporal sublime, it is necessary to extend Nancy's insights concerning the inestimable present. I suggest here two directions that this extension might take. First, the explosion of our temporal horizons far beyond the limits of human history, considered by Hume or Kant, and the parallel opening of a deep temporal future that continues beyond human extinction, confront us with the fact that our personal and historical temporalities are entangled and shot through with anachronistic and incompossible durations—those of our evolutionary history, for example, and, further still, of our own elemental materiality. The experience of the deep temporal sublime is characterised precisely by its incommensurability with the narrative structures of personal and cultural history, by the vertigo of losing all common markers and measures. This testifies to our entanglement in a past that was never our own possibility, never our own memory—an impossible and immemorial past. We live the abyssal unfathomability of deep time affectively and viscerally, in our heart of hearts, like a wedge driven through our lived experience of daily rhythms, our personal memories and anticipations, and the historical fabric of cultural events. Indeed, the very ›depth‹ of geological time is the bottomless free-fall into which it throws all markers and touchstones by which we orient ourselves within the temporal horizons of our world.[17] The schema of general equivalence is our unsuccessful attempt to repress this abyssal vertigo.

If we give up the effort to regiment time within general equivalence, then it becomes possible to consider our involvement, both material and symbolic, in incommensurable vectors of deep time: cosmic, geological, elemental, organic, evolutionary. From this perspective, our own corporeal materiality is liable to the immemorial past of the elements, while our organic lives enact the anonymous memories formed through diacritical evolutionary exchange with other species.[18] The encounter with the vertigo of deep time is thus the echo

within us of evolutionary memory and the asubjective time of matter, which anachronistically interrupt our lived experiences of time from within. Insofar as these registers of time exceed the framing of human time and human worlds, the durations that precede our world cannot be disentangled from those that succeed it. A full accounting of the temporal sublime would therefore recognise the confluence of the immemorial past and future in its cosmic, geological, evolutionary, and organic trajectories, each with its own rhythms and durations.

Nancy sometimes speaks about the moment of presence as an interruption or suspension of continuity, a deferral of time's self-presentation, in favour of a relationship that demands a gesture or a response (Nancy 2017: 119, 121). Yet we see that what presents itself to us, here and now demanding our esteem and our response, may itself be of the past, or of the future. So we must recognise, as a second aspect of the deep temporal sublime, that a recovery of the present outside the calculable general equivalence of time also places us in an entirely different relationship to a past that is constitutive of our present possibilities and to futures that we do not plan or project.[19] Responsibility to the present therefore already involves us in the demands of justice for the past and the future. A profound example of how such temporal justice might be enacted is presented in the work of Potawatomi scholar Kyle Powys Whyte. Following on his critique of apocalyptic narratives of the Anthropocene, Whyte (2018) describes an experience of ›spiralling time‹ that expresses responsibility to the past and future within the present. Whyte notes that settler apocalyptic narratives, proposed as the effort of stopping »a dreaded future movement from stability to crisis« (Whyte 2018: 227), erase the legacies of colonial violence that have been experienced by many Indigenous people as repeated and ongoing apocalypses.[20] Furthermore, by seeking to liquidate the past and the present in a new beginning, the settler apocalyptic narrative imagines for itself an innocent future, one in which all obligations and debts for past and present colonial violence are assumed to be discharged. In contrast with such narratives of »finality and last-ness« (Whyte 2018: 236), Whyte describes Indigenous experiences of ›spiralling time‹ that maintain a continuous dialogue with one's ancestors and descendants. Whyte's account situates these experiences of time within a specific cultural context, yet he also invites non-Indigenous allies to engage in »counterfactual dialogue« and critical reflection on how the world that we

inhabit today—that is, the world of colonial violence as well as climate change—is the dream and the gift of our settler ancestors, designed and constructed to »fulfill their fantasies of the future« and to »provide privileges to their descendants« (Whyte 2018: 237). Acknowledging that we are living the fantasy of our ancestors simultaneously opens a dialogue with our descendants, who pose to us the question of what kind of ancestors we ourselves will be, and what kind of world we will leave to those who follow. Counterfactual or fictional dialogue operates here not as an escape from our responsibilities to past and future, as we have seen in apocalyptic narratives, but rather as active affirmation of a spiralling of time that binds the manifestive present to the past that conditions it and the futures that it makes possible. In contrast with the calculative management of the future on the basis of the substitutability of homogenous times, and the linear finality of a Judgment Day that liquidates both past and future, such time spiralling interrupts and thickens the event of the present, in its inestimable singularity, with an anti-apocalyptic figure of temporal justice.

My aim here has been to reflect critically on the temporal framing of climate collapse narratives, taken here as paradigmatic of the environmentalism's apocalyptic rhetoric. I have argued that these narratives are structured by a moment of crisis, a Judgment Day, that grants transcendent significance to our present struggles through the promise of redemption in a new age. Although such narratives claim to be motivated by a sense of justice for the future, instead they conveniently serve to obscure legacies of past violence by levelling all moments of time into interchangeable and substitutable units. Temporal justice instead demands recognition of the non-equivalence of the present and its entanglement in incommensurable vectors of deep time, both past and future. As an alternative to apocalyptic narratives, I conclude with Kyle Whyte's example of temporal justice in the form of dialogue with our ancestors and descendants. Such ›time spiraling‹ affirms the temporal sublime while demanding critical reflection on our inescapable implication in the legacies of violence and fantasies of the future that constitute our singular present.

—Ted Toadvine, Penn State University, USA

References

W. Berry, Wendell, *Our Only World: Ten Essays*, Berkeley, 2015.
Brady, Emily, *The Sublime in Modern Philosophy: Aesthetics, Ethics, Nature*, Cambridge, 2013.
Brummett, Barry, »Premillenial Apocalyptic as a Rhetorical Genre«, *Central States Speech Journal*, Vol. 35, 1984, pp. 84–93.
Buell, Frederick, »A Short History of Environmental Apocalypse«, in: *Future Ethics: Climate Change and Apocalyptic Imagination*, ed. Stefan Skrimshire, London, 2010, pp. 13–36.
Clingerman, Forrest, and Kevin J. O'Brien, »Is Climate Change a New Kind of Problem? The Role of Theology and Imagination in Climate Ethics«, *WIREs Climate Change*, Vol. 8, 2017, pp. 1–10.
Derrida, Jacques, »No Apocalypse, Not Now: Full Speed Ahead, Seven Missiles, Seven Missives«, in: Jacques Derrida, *Psyche: Inventions of the Other*, Vol. 1, ed. Peggy Kamuf and Elizabeth Rottenberg, Stanford, 2007, pp. 387–409.
Fagan, Madeleine, »Who's Afraid of the Ecological Apocalypse? Climate Change and the Production of the Ethical Subject«, *The British Journal of Politics and International Relations*, Vol. 19, No. 2, 2017, pp. 225–244.
Fiskio, Janet, »Apocalypse and Ecotopia: Narratives in Global Climate Change Discourse«, *Race, Gender & Class*, Vol. 19, No. 1, 2012, pp. 12–36.
Foust, Christina and William O'Shannon Murphy, »Revealing and Reframing Apocalyptic Tragedy in Global Warming Discourse«, *Environmental Communication*, Vol. 3, No. 2, 2009, pp. 151–67.
Greenpeace International, »Horsemen of the Apocalypse Descend on Copenhagen«, *Scoop Independent News*, 16 December 2009, http://www.scoop.co.nz/stories/WO0912/S00466.htm (accessed 11/16/2018).
Gross, Lawrence, *Anishinaabe Ways of Knowing and Being*, New York, 2014.
Hulme, Mike, *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity*, Cambridge, 2009.
Hulme, Mike, »Four Meanings of Climate Change«, in: *Future Ethics: Climate Change and Apocalyptic Imagination*, ed. Stefan Skrimshire, London, 2010, pp. 37–58.
Haller, Albrecht von, »Unvollkommenes Gedicht über die Ewigkeit / Uncompleted Poem on Eternity«, trans. Arnulf Zweig, *The Philosophical Forum*, Vol. 33, No. 3, 2002, pp. 304–311.
Hume, David, *A Treatise of Human Nature*, Vol. 1, ed. David F. Norton and Mary J. Norton, Oxford, 2007.
Hutton, James, *Theory of the Earth*, Edinburgh, 1788.
Jones, Ben, »The Challenges of Ideal Theory and the Appeal of Secular Apocalyptic Thought«, *European Journal of Political Theory* (OnlineFirst), 2017, pp. 1–24.
Kant, Immanuel, *The Critique of Judgment*, trans. Werner S. Pluhar, Indianapolis, 1987.

Kant, Immanuel, »The End of All Things«, in: Immanuel Kant, *Religion and Rational Theology*, trans. and ed. by Allen Wood and George di Giovanni, Cambridge, 1996, pp. 219–31.
Kant, Immanuel, »Observations on the Sublime and the Beautiful«, in: Immanuel Kant, *Anthropology, History, and Education*, ed. Robert B. Louden and Günter Zöller, Cambridge, 2007.
Killingsworth, M. Jimmie and Jacqueline Palmer, »Millenial Ecology: The Apocalyptic Narrative from *Silent Spring* to Global Warming«, in: *Green Culture: Environmental Rhetoric in Contemporary America*, ed. Carl Herndl and Stuart Brown, Madison, 1996, pp. 21–45.
Klein, Naomi, *The Shock Doctrine: The Rise of Disaster Capitalism*, New York, 2007.
Moo, Jonathan, »Climate Change and the Apocalyptic Imagination: Science, Faith, and Ecological Responsibility«, *Zygon*, Vol. 50, No. 4, 2015, pp. 937–48.
Nancy, Jean-Luc, *The Sense of the World*, trans. Jeffrey Librett, Minneapolis, 1997.
Nancy, Jean-Luc, *After Fukushima: The Equivalence of Catastrophes*, trans. Charlotte Mandell, New York, 2015.
Nancy, Jean-Luc, *The Possibility of a World*, trans. Travis Holloway and Flor Méchain, New York, 2017.
Nordhaus, Ted, and Michael Shellenberger, *Break Through: From the Death of Environmentalism to the Politics of Possibility*, Boston, 2007.
O'Leary, Stephen D, »A Dramatistic Theory of Apocalyptic Rhetoric«, *Quarterly Journal of Speech*, Vol. 79, 1993, pp. 385–426.
Playfair, John, »Biographical Account of the Late James Hutton, M.D.«, in: John Playfair, *The Works of John Playfair*, Vol. 4, Edinburgh, 1822, pp. 33–118.
ed. Skrimshire, Stefan, *Future Ethics: Climate Change and Apocalyptic Imagination*, London, 2010.
Skrimshire, Stefan, »The End of the Future: Hegel and the Political Ecology of Deep Time«, *International Social Science Journal*, Vol. 62, Nos. 205–206, 2011, pp. 325–338.
Skrimshire, Stefan, »Climate Change and Apocalyptic Faith«, *WIREs Climate Change*, Vol. 5, 2014, pp. 233–246.
Skrimshire, Stefan, »Deep Time and Secular Time: A Critique of the Environmental ›Long View‹«, *Theory, Culture, and Society* (OnlineFirst), 2018, 1–19.
Toadvine, Ted, »The Elemental Past«, *Research in Phenomenology*, Vol. 44, No 2, 2014, pp. 262–279.
Toadvine, Ted, »Biodiversity and the Diacritics of Life«, in: *Carnal Hermeneutics*, ed. Richard Kearney and Brian Treanor, New York, 2015, pp. 235–248.
Toadvine, Ted, »Our Monstrous Futures: Global Sustainability and Eco-Eschatology«, *Symposium*, Vol. 21, No. 1, 2017, pp. 219–230.
Toadvine, Ted, »Thinking After the World: Deconstruction and Last Things«, in: *Eco-Deconstruction: Derrida and Environmental Philosophy*, ed. Matthias Fritsch, Philippe Lynes, and David Wood, New York, 2018, pp. 50–80.
Whyte, Kyle Powys, »Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises«, *Environment and Planning E: Nature and Space*, Vol. 1, No. 1–2, 2018, pp. 224–242.

Wood, David, »On Being Haunted by the Future«, *Research in Phenomenology*, Vol. 36, 2006, pp. 274–298.
Wood, David, »Temporal Phronesis in the Anthropocene«, *Research in Phenomenology*, Vol. 47, 2017, pp. 220–227.
Wood, David, *Deep Time, Dark Times: On Being Geologically Human*, New York, 2018.

Notes

[1] Notable exceptions include Skrimshire (2011, 2018); Wood (2006, 2017, 2018); Whyte (2018).
[2] Hume (2007: 274–280); Kant (2007). Brady (2013) traces some of the early history of the temporal sublime.
[3] Such elemental examples of the dynamically sublime are also among the omens for Judgment Day (Kant 1996: 225).
[4] See in particular Playfair's description of his 1788 trip with Hutton to Siccar Point (1822: 80–81).
[5] See Toadvine (2017, 2018), where I develop in more detail the account summarily sketched here.
[6] Representative examples include Clingerman and O'Brien (2017), Fagan (2017), Fiskio (2012), Foust and Murphy (2009), Moo (2015), Skrimshire (2010, 2014).
[7] See Killingsworth and Palmer (1996); Fiskio (2012).
[8] See Toadvine (2017).
[9] See, for example, David Wood's brief remarks on ›tipping points‹ in Wood (2017: 223).
[10] Foust and Murphy (2009: 154; citing Brummett 1984).
[11] O'Leary (1993: 392; quoted in Foust and Murphy 2009: 154).
[12] See Killingsworth and Palmer (1996); Buell (2010).
[13] See Nancy (1997: 4–5).
[14] See Nancy (2015: 17–20).
[15] See Toadvine (2017, 2018).
[16] Nancy (2015: 37); see also Nancy (2017: 119–121, 122–126.
[17] See Toadvine (2014).
[18] I argue for these points, drawing on Merleau-Ponty, in Toadvine (2014, 2015).
[19] On the need to break from finality itself, i. e., ›from aiming, from planning, and projecting a future in general‹ and instead to work with ›other futures‹, see Nancy (2015: 37). On our ongoing responsibility to ›watch out‹ for the future, see Nancy (2015: 64n4). On the past that is constitutive of our present possibilities, see Wood on ›Constitutive Time‹ (2017: 7) and Toadvine (2014).
[20] As Anishinaabe scholar Lawrence Gross writes, »Native Americans have seen the ends of their respective worlds. […] Indians survived the apocalypse« (Gross 2014: 33; cited in Whyte 2018: 227).