



## INTRODUCTION: THE RISING TIDE OF CLIMATE CHANGE FICTION

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The call for papers for this collection on “The Rising Tide of Climate Change Fiction” arose from concerns about pessimistic assessments, in recent literary criticism, of the novel’s ability to meet the representational challenges posed by the pressing planetary problem of climate change. The contributions to this volume take issue with that pessimism and take stock of the novel’s capabilities.

From the wholesale condemnation of modern literature for the absence of climate change within its pages (Ghosh) to ambivalence about the scalar capacities of the novel (Clark), the pessimistic turn of literary (eco)criticism seems at odds not only with the increasing production of climate change literature itself but also with the expansion of a concomitant critical field. Recent, and much-needed, taxonomic studies of creative and critical practice have registered that proliferation (e.g., Irr; Johns-Putra; Trexler; Trexler and Johns-Putra). Perhaps such critical proclivities—pessimism over the ability of the novel to capture climatic change—stem from problems with the definition of climate change fiction. For example, in his exploration of the literary absence of climate change, Amitav Ghosh deploys a rather nebulous notion of “serious” modern literature to delimit the archive he finds lacking. The vagaries of this definition aside, he may be looking in the wrong places, and sometimes in the wrong times. We called for papers that sought climate change where it would not be expected in literature.

In looking for climate change in different textual places as well as times, we evoked and echoed recent critical calls to be wary of the emergence of a canon of climate change fiction—as a distinct and delimited genre—and to resist its hypostatization (Bracke; Kerridge). In that evocation, we hope to have contributed to a decanonization—or, at least, a widening of the definition—of climate change fiction by soliciting critical engagement across a variety of novelistic genres and modes (Bracke; Kerridge; Mehnert; Trexler).

As in those recent taxonomic studies (especially Trexler), the editors of and contributors to this collection do not and cannot see climate change outside of the larger context of the Anthropocene. The Anthropocene describes a new geological epoch characterized by the primacy of human impact on Earth system processes, including the climate system. The International Commission on Stratigraphy's Working Group on the Anthropocene voted in 2016 to identify the mid-twentieth century—the beginning of the nuclear age and the Great Acceleration in greenhouse gas emissions—as the official start of the Anthropocene. However, there is still a critical mass of academic research that synchronizes the Anthropocene with industrial capitalism and so points to the onset of the industrial revolution: the late eighteenth century's inauguration of the large-scale burning of fossil fuels and consequent atmospheric emissions, the cumulative effects of which make climate change the most pronounced Anthropogenic characteristic. Regardless of the epoch's precise start date, anthropogenic climatic change is representative of the Anthropocene and legible in the geological record that is being left by humanity's geophysical agency.

For Adam Trexler, the moment of the Anthropocene does not just designate chemical, physical, and biological planetary transformations but inaugurates cultural sea changes brought about by the possibility of contemporaneously seeing and representing (some of) those transformations as we bring them about. For Trexler, the novel lends itself to this cultural moment, given its multivocal and dialogical nature, which makes it approximately akin to the complex networking of ideas needed to make sense of our new epoch (5-7). Just as climate change can only be understood through the relation between disciplines of knowledge and their discourses, so it should not be confined to one particular novelistic genre or mode (Trexler; see also Bracke; Kerridge). For Trexler, the novel is not just an ideational and discursive but also a material assemblage. As a social and cultural formation, the novel has always been enabled by economic and industrial systems of modernity and their resources, from its origins to the present day (LeMenager, *Living Oil*; Sullivan; Woods; Yaeger). The product of energy regimes as much as intellectual labor, the novel is the materialization of the very environmental histories it represents (at least in climate change fiction). Animated by the energy regimes that brought it into being as well as by its work and usage as a cultural object, and with climate change as its subject, the novel bodies forth (implicitly and explicitly) entangled human and nonhuman dramas of people and things, and their agencies in shaping the planet, found within its pages or in the material emergence of those pages. Put otherwise, assembled as such, and participating in further assemblages of ideas, energies, structures, matter, and life, the novel strikes us and the contributors to this collection as potentially very capacious.

In terms of widening the parameters of climate change fiction, seminal recent work has valorized the popular genres of science fiction and horror,

and, by extension, weird and speculative fiction, by taking seriously the “ludicrousness” of their “posthuman comedy”: their abilities to represent “the inhumanly large and long” (McGurl 539); that is, the vast scales of time and space commensurate with the planetary processes of climate change. Crossing the “threshold” of habitual humanist literary purviews to dwell in those times and spaces, such genre fiction also imagines other species, the potential demise of our own, and the collapse of the idea that we are exceptional (McGurl 550), and so projects an ecological vision of the consequences of climate change. In this collection, the essay by Courtney Traub not only recognizes the tonal modulations of climate change fiction through her analysis of satire in the work of Ian McEwan and Margaret Atwood, but also tracks satire’s workings from the former’s avowed humanism to the latter’s posthuman(ist) imaginary.

It is the issue of scale that has led some critics to lose faith in the novel. The work of Timothy Clark is representative in its initial and now oft-cited call for a “derangement” of the habitual scales of cognition and representation in literary creative and critical practice (“Derangements of Scale”), and in his subsequent ambivalent endorsement of the novel’s indexing of climate change, or at least in a cautious critical framing of the novel’s inherent limitations (*Ecocriticism on the Edge*). Clark’s ambivalence is worth reprising in some detail. For Clark, the cultural history of attempts to represent planetary processes has revealed the localizing nature of our customary representational and interpretive frameworks, delusory or “ecophobic” in their disavowal of the scalar discontinuities between self and planet. Deployed and found lacking, these frameworks lead to a cognitive disorder—a vertiginous unframing of cognition—in the face of the complexities with which climate changes. They fail to register the multi-scalar referents of climate change as it unfolds unevenly across time and space, its violent effects often dislocated temporally and spatially from their causes. This unfolding is convoluted by feedback loops that turn effects into causes of further climatic transformation. With atmospheric thresholds crossed and tipping points met, these transformations can be dramatic, sudden, not necessarily predictable or gradual. Human activity sets in motion a chain of action that exceeds human control and in which the environment itself is lent a catastrophic agency (Bennett).

In the face of this multi-materiality and multi-scalarity, Clark resists what he calls “Anthropocene disorder” (*Ecocriticism on the Edge* 140) by advocating reading simultaneously through multiple and contradictory interpretive frameworks: in essence, the cultural and the planetary. While the latter will always exceed the former, the abstractions of the latter will not make any sense, particularly given its dynamic and emergent nature, without the localizations of the former. Nor will, for that matter, the former make sense when read solely in contexts that do not explain conditions of textual production, circulation, reception, and immediate reference. Mark McGurl has described this approach as “a complex dialectical negotiation of competing drives toward expansion

and contraction” (540). Yet, Clark’s work is peppered with second thoughts: the novel cannot free itself from its habitual purview of human drama even when humanity has attained a collective, thing-like force and when that force reveals the imbrications of the human and more-than-human world (*Ecocriticism on the Edge* 103); the novel’s ability to generate empathy across cultural and social divisions does not easily extend to species boundaries or self-reflexive thinking as a species (*Ecocriticism on the Edge* 59, 182); narrative emplotment, symbolism, and imagery cannot contain environmental events, such as tipping points, which are not unitary by nature but “the contingent emergent sum of innumerable and probably incalculable processes happening across the Earth at divergent time scales” (*Ecocriticism on the Edge* 80); such dislocated and distributed events do not lend themselves easily as focal points for the dramatization of human community (*Ecocriticism on the Edge* 198); literary strategies are generally designed to provoke an emotional interest in human drama but are “at odds with the scale, complexity and the multiple and nonhuman contexts involved” in the Anthropocene (*Ecocriticism on the Edge* 181). This collection, however, holds faith with the capacities of the novel (at least in the textual dislocation of climate change). For example, Mahlu Mertens and Stef Craps’s essay explores and assesses the temporal schemes of the novel (in its graphic and science-fictional incarnations) and the literary imagination of deep geological times and far futures by which changes in climate can be measured.

Perhaps, though, the critical emphasis placed on the scaling up of the literary, and interpretive, imagination risks distracting from issues of mediation (Crownshaw, “Speculative Memory”). As Mike Hulme has argued, climate has always been culturally reconstructed. So, accordingly, in this special issue, Pieter Vermeulen’s essay investigates the relationship between (biological) life forms and (social, cultural, and symbolic) forms of life as well as the biopolitical implications of that relationship, through the imagination of post-apocalyptic, post-epidemic scenarios. Jesse Oak Taylor’s contribution, on late-nineteenth-century romance fiction, not only continues his widening of the historical parameters of climate change fiction beyond the contemporary (Menely and Taylor; Taylor), but also reflects on the convergence of the rise of the novel and the industrial revolution, and so on the implications of literary forms (and their formation) in the birth of the carbon economy and its climatic repercussions. It thus resonates with Ben De Bruyn’s essay, which explores the literary registration of the co-option of climate change as a fundamental part of state security apparatuses, central to security imaginaries, and subject to militarized environmentalisms and scenario planning. In these fictions of security, De Bruyn discovers that the literary imagination of the climate as threat is not entirely free from the logics of (financialized and militarized) scenario planning. In a similar vein, River Ramuglia finds in science fiction that climate and environmental crisis and politics are only accessible through

the media ecologies of the future imagined by this literature. Here media ecologies (the environment as visual spectacle), which, by implication, extend to the novel form itself, subsume environmental ecologies (the interrelation of the human and nonhuman).

The ways in which climate is mediated are often more visible in hindsight, and the majority of our contributors have dealt with novels that project future climate-changed worlds from which retrospection on and cultural remembrance of the changing climate and its causes is staged (see also Craps; Crownshaw, “Cultural Memory Studies”; Vermeulen). Indeed, in the fiction of climate change there has been a conspicuous turn toward the future anterior—the dramatization of that which will have been—in the literary imagination of near-future scenarios of catastrophe and post-catastrophe. Whether the future emplotted is a (post-)apocalyptic one characterized by socio-economic and ecological collapse and species extinction, or one of resilience, adaptability, and sustainability, or somewhere in between, these fictions stage cultural remembrance and so an aetiology of the conditions that are imagined as tangible in the future but which, unfolding in the present of this literature’s production and consumption, are subject to cognitive dissonance. Remembrance from an imagined future reveals the way in which memory is mediated by libidinal attachments to carbon economies (and the life they fuel): attachments that, whether unconsciously or consciously, determine the way futural memory is written and, at the diegetic level, shape the remembrance of the ecologies of the past as well as the structures of feeling toward the energy regimes of the future (this literature’s present).

The literary imagination of near, mid, and far futures might afford cognitive and representational opportunities to apprehend a more fully realized and visibilized climate-changed planet, otherwise subject to dissociation in the present, or often deemed incommensurate with the scalar capacities of the novel. However, the imagination of future climates might distract from present-day environmental catastrophes and their impact on the precariat of those historically and habitually subject to the environmental injustice of the fast and slow violence (Nixon) of climate change. To dwell in the future suggests the imaginative freedoms of those (cultural producers) materially and geographically advantaged enough to not be already living dangerously in these times (LeMenager, “Climate Change” 226).

Revisiting and extending her arguments in an interview in this collection, Stephanie LeMenager has elsewhere defined climate change fiction as a novelistic mode that is oriented toward a “way of living in the world” (“Climate Change” 223); that is, in a climate-changed world. As such, this “novelistic mode offers a method for making social worlds by modeling individual consciousness in relationship with imaginary but possible worlds” (LeMenager, “Climate Change” 223). For LeMenager, these imaginary worlds are most meaningful if set in the present, the narrativization of which manages to read

neoliberalism against the grain to represent the “economic and sociological injuries” and environmental catastrophes that arise from what she terms neoliberalism’s “bioderegulation” (“Climate Change” 225). This is a literature of slow, granular violence that does not need a compelling apocalyptic drama of socio-economic and ecological disaster and collapse—“the charisma of crisis”—to represent the “depletion” of bodies (LeMenager, “Climate Change” 225). The “abstract futurism” of such post-apocalyptic scenarios would not be able to “stay with the trouble” of the present’s precariousness, LeMenager argues, borrowing a phrase from Donna Haraway (“Climate Change” 225-26; see also LeMenager, “The Humanities”). Where our contributors have departed for futural literary terrains, their arguments have been grounded in the troubles of the present. For example, Adeline Johns-Putra’s identification of a postmodern self-reflexivity in Alexis Wright’s and Chang-rae Lee’s climate change novels of the future registers (and projects) current postcolonial strategies for undoing anthropocentric constructions of the world that facilitate environmental violence.

Ultimately, through their investigations of climate change within implicit and explicit Anthropocenic contexts, the contributions to this special issue suggest that the definition of the Anthropocene is as much cultural as it is geological, and, in effect, these essays utilize the tensions between culture and geology and what is at stake—what is remembered and forgotten—in decisions over geological inception dates. The Anthropocene Working Group’s identification of the radioactive isotopes in the planet’s sedimentary layers of the post-1945 period establishes the Anthropocene’s inception—the era of atomic warfare and testing, aligned with the beginnings of the Great Acceleration of oil extraction and consumption—through an insistence on the physical purity of this lithographic inscription. No matter the material evidence, however, the claim itself is semiotic, a discursive reconstruction of sediment, with the cultural implications of how that geological signature shapes what is remembered and represented of the planet’s history and its anthropogenic transformation (Hamilton; Menely and Taylor). The legibility of the signature can fade other planetary histories whose material inscriptions are less consistently discernible. What is more, the multi-scalarity and multi-causality of the Anthropocene’s phenomena that entangle the physical, chemical, biological, cultural, and social cannot necessarily be localized to one signature (Menely and Taylor). Through their varied critical and theoretical accentuations of climate and its literary representation, the essays that follow elicit Anthropocenes (their pasts, presents, and futures), not *the* Anthropocene, and so contribute to a necessary reflexivity in the way we read the weather.

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