http://www.interferenceslitteraires.be

ISSNI - 2031-2700

Marco CARACCIOLO, Kristin FEREBEE, Heidi TOIVONEN, Gry ULSTEIN & Shannon LAMBERT¹

Climate Fiction: a Posthumanist Survey

Abstract

Discussions of climate fiction (or "cli-fi") frequently revolve around the thematic dimension of the genre or its possible effects on readers. In this article, the NARMESH team adopts a different approach focusing instead on the formal affordances of fiction vis-à-vis the climate crisis. Our goal is to offer a posthumanism-inspired survey of fiction that pursues a rigorous critique of human exceptionalism and anthropocentrism at a deep, formal level. Unashamedly experimental, this kind of fiction pushes the humanist envelope of the novel far more forcefully and systematically than most mainstream cli-fi does. The climate fictions we have in mind need not be *about* climate change, but they speak to the complex challenges of the current moment by implementing a number of formal strategies: nonhuman narration or focalization, global plotting, deep temporality, parallel storyworlds, the inclusion of multimodal or non-narrative elements, and the adoption of non-Western narrative models.

Samenvatting

In discussies over klimaatfictie (of "cli-fi") draait het vaak om de thematische dimensie van het genre of de mogelijke effecten ervan op de lezers. In dit artikel kiest het NARMESH-team voor een andere benadering, waarbij het zich in plaats daarvan richt op de formele mogelijkheden van fictie ten aanzien van de klimaatcrisis. Ons doel is een op het posthumanisme geïnspireerd overzicht te geven van fictie die op een diepgaand, formeel niveau een rigoureuze kritiek uitoefent op het menselijk exceptionalisme en antropocentrisme. Dit soort fictie is onbeschaamd experimenteel en duwt de humanistische enveloppe van de roman veel krachtiger en systematischer dan de meeste mainstream cli-fi doet. De klimaatficties die wij voor ogen hebben hoeven niet over klimaatverandering te gaan, maar zij spreken de complexe uitdagingen van dit moment aan door een aantal formele strategieën toe te passen: niet-menselijke vertelling of focalisatie, mondiale plotten, diepe temporaliteit, parallelle verhaalwerelden, het opnemen van multimodale of niet-verhalende elementen, en het overnemen van niet-westerse verhaalmodellen.

To quote this article:

Marco CARACCIOLO, Kristin FEREBEE, Heidi TOIVONEN, Gry ULSTEIN & Shannon LAMBERT, "Climate Fiction: a posthumanist Survey", *Interférences littéraires/Literaire interferenties*, n° 27, "Narratives and Climate Change", ed. Marieke WINKLER, Marjolein VAN HERTEN, Jilt JORRITSMA, November 2022, 6-21.

¹ The authors of this article received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (grant agreement no. 714166).



CHIEF EDITORS

Liesbeth FRANÇOIS (University of Cambridge – KU Leuven) Anke GILLEIR (KU Leuven)

EDITORIAL BOARD

Ben DE BRUYN (UCL) Christophe COLLARD (VUB) Lieven D'HULST (KU Leuven – Kortrijk) Raphaël INGELBIEN (KU Leuven) Valérie LEYH (Université de Namur) Katrien LIEVOIS (Universiteit Antwerpen)

Chiara NANNICINI (Factultés Universitaires Saint-Louis) Hubert ROLAND (FNRS - UCL) Mathieu SERGIER (Factultés Universitaires Saint-Louis) Lieke VAN DEINSEN (KU Leuven)

David MARTENS (KU Leuven)

EDITORIAL ASSISTANTS

Amélie JAQUES (KU Leuven - FWO) Carolin LOYENS (KU Leuven - FWO)

SCIENTIFIC COMMITTEE

Sascha BRU (KU Leuven)
Geneviève FABRY (UCL)
Agnès GUIDERDONI (FNRS - UCL)
Nadia LIE (KU Leuven)
Michel LISSE (FNRS - UCL)
Christophe MEUREE (Archives et Musée de la littérature)
Reine MEYLAERTS (KULeuven)
Stéphanie VANASTEN (FNRS – UCL)
Ingo BERENSMEYER (LMU München)
Lars BERNAERTS (Universiteit Gent & Vrije Universiteit
Brussel)
Faith BINCKES (Worcester College, Oxford)

Franca Bruera (Università di Torino)
Christian Chelebourg (Université de Nancy II)
Edoardo Costadura (Friedrich-Schiller-Universität -Jena)
Nicola Creighton (Queen's University Belfast)
César Dominguez (Universidad de Santiago de
Compostella & King's College)
Isabelle Krzywkowski (Université de Grenoble)
François Lecercle (Paris IV - Sorbonne)
Isabelle Meuret (Université Libre de Bruxelles)
Christina Morin (University of Limerick)
Andréa Oberhuber (Université de Montréal)

Introduction

A great deal of ink has been spilled upon delimiting the "cli-fi" or "climate fiction" genre in academic and non-academic venues that range from Environmental Humanities² and The Lancet Planetary Health³ to the Christian Science Monitor⁴ and the New Yorker⁵. From its initial rise to popularity via a 2013 spate of mass media reportage⁶, the term "climate fiction" has now become mainstream enough to have qualified for Merriam-Webster consideration, a Wikipedia page, and an Amazon Original Stories series featuring works by Jane Smiley and Lauren Groff (among others). Despite this broad and rapid trajectory, there seems to be no consensus as to the scope and definition of climate fiction.

Merriam-Webster, in its discussion of "cli-fi" on its Words We're Watching blog, defines climate fiction as fiction in which "the narrative deals with how humans manage living in environments with severely altered climates" - fiction that "projects" how climate change "affects or will affect our lives." Broadly, this definition mirrors that offered by scholars: the editors of Cli-Fi: A Companion, Axel Goodbody and Adeline Johns-Putra, write that climate fiction "is not a genre in the scholarly sense: it lacks the plot formulas and stylistic conventions that characterize genres such as sci-fi and the western," but that the term usefully describes "an already significant body of narrative work broadly defined by its thematic focus on climate change and the political, social, psychological, and ethical issues associated with it". Alternative definitions center on the perceived didactic purpose of the literature in question: climate fiction is "fictional books that somehow or some way bring real climate change science to the reader", the "fictional representation of

² Matthew SCHNEIDER-MAYERSON, "The Influence of Climate Fiction: An Empirical

² Matthew SCHNEIDER-MAYERSON, "The Influence of Climate Fiction: An Empirical Survey of Readers", in Environmental Humanities, vol. 10, no. 2, 2018, 473–500.

³ Imogen MALPAS, "Climate Fiction Is a Vital Tool for Producing Better Planetary Futures", in The Lancet Planetary Health, vol. 5, no. 1, Jan. 2021, 12–13.

⁴ Husna HAQ, "Climate Change Inspires a New Literary Genre: Cli-Fi", in The Christian Science Monitor, 26 April 2013, https://www.csmonitor.com/Books/chapter-and-verse/2013/0426/Climate-change-inspires-a-new-literary-genre-cli-fi.

⁵ Katy WALDMAN, "How Climate-Change Fiction, or 'Cli-Fi,' Forces Us to Confront the Incipient Death of the Planet", in The New Yorker, Nov. 2018, https://www.newyorker.com/books/page-turner/how-climate-change-fiction-or-cli-fi-forces-us-to-confront-the-incipient-death-of-the-planet

https://www.newyorker.com/books/page-turner/how-climate-change-fiction-or-cli-fi-forces-us-to-confront-the-incipient-death-of-the-planet.

6 Angela EVANCIE, "So Hot Right Now: Has Climate Change Created A New Literary Genre?", in *Npr.org*, 20 April 2013, https://www.npr.org/2013/04/20/176713022/so-hot-right-now-has-climate-change-created-a-new-literary-genre?t=1568118349400. Rodge GLASS, "Global Warning: The Rise of Cli-Fi", in *The Guardian*, 31 May 2013, https://www.theguardian.com/books/2013/may/31/global-warning-rise-cli-fi.

7 Axel GOODBODY, Adeline JOHNS-PUTRA, "Introduction", in Axel GOODBODY, Adeline JOHNS-PUTRA (Eds.), *Cli-Fi: A Companion*, Berln, Peter Lang, 2019, 1–19, 1-2.

8 John ABRAHAM, "CliFi: A New Way to Talk About Climate Change", in *The Guardian*, 18 Oct. 2017, *The Guardian* website, https://www.theguardian.com/environment/climate-consensus-97-per-cent/2017/oct/18/clifi-a-new-way-to-talk-about-climate-change.

⁹⁷⁻per-cent/2017/oct/18/clifi-a-new-way-to-talk-about-climate-change.

scientifically substantiated predictions", or fiction that "explores the potential, drastic consequences of climate change" 10.

However, as Goodbody and Johns-Putra note, a "thematic focus on climate change" can take a wide variety of forms. Based on a sample of twelve popular and critical accounts of climate fiction, the most commonly cited novels include Barbara Kingsolver's Flight Behavior (a realist novel about climate change in rural, climateskeptic America), Margaret Atwood's MaddAdam (a trilogy about genetic engineering, mutation, and viral apocalypse that only passingly makes reference to climate change), Paolo Bacigalupi's *The Water Knife* (a sci-fi adventure novel that uses a speculative post-climate change American Southwest as its setting), the works of Jeff VanderMeer (either the Southern Reach or Borne novels, both of which thematically focus on posthuman environments of contamination but neither of which makes reference to climate change) and Kim Stanley Robinson's *The Ministry* for the Future (about financial and scientific attempts to mitigate the effects of nearfuture climate change). 11 Similarly, other works of "climate fiction" that are frequently cited by the articles we examined include those that explicitly engage with climate change (Ian McEwan's *Solar*, Jenny Offill's *Weather*), those that utilize climate change as a setting without significant thematic engagement (Claire Vave Watkin's Gold Fame Citrus, Omar El Akkad's American War), and those in which anthropogenic climate change makes minimal or no appearance (Jeanette Winterson's The Stone Gods, N. K. Jemisin's Broken Earth trilogy, and even Cormac McCarthy's The Road).

Goodbody and Johns-Putra argue that insisting on an explicit climate change focus for climate fiction "excludes novels that do not explicitly name climate change but might be read as addressing it" as well as literature that does not discuss *anthropogenic* climate change but does stage climate transformations unrelated to

⁹ WALDMAN, ibid.

¹⁰ J.K. ULLRICH, "Climate Fiction: Can Popular Books About Environmental Disaster Save the Planet?", in *The Atlantic*, 14 Aug. 2015, https://www.theatlantic.com/entertainment/archive/2015/08/climate-fiction-margaret-atwood-literature/400112/.

of Climate Fiction", in *The Guardian*, 26 June 2021, *The Guardian* website, https://www.theguardian.com/books/2021/jun/26/stories-to-save-the-world-the-new-wave-of-climate-fiction; Rebecca EVANS, "Fantastic Futures? Cli-Fi, Climate Justice, and Queer Futurity", in *Resilience: A Journal of the Emironmental Humanities*, vol. 4, no. 2–3, 2017, 94; FIX STAFF, "The Definitive Climate Fiction Reading List." *Grist Magazine*, 28 September 2021, https://grist.org/fix/definitive-climate-fiction-reading-list-cli-fi-books/; Anna FUNK, "Can Climate Change Writers Reach People in Ways That Scientists Can't?", in *Smithsonian Magazine*, 14 May 021, https://www.smithsonianmag.com/innovation/can-climate-fiction-writers-reach-people-ways-scientists-cant-180977714/; Axel GOODBODY, "Cli-Fi—Genre of the Twenty-First Century? Narrative Strategies in Contemporary Climate Fiction and Film", in Maria LÖSCHNIGG, Melanie BRAUNECKER (eds.), *Green Matters: Ecocultural Functions of Literature*, Leiden, Boston, Brill, 2020; Axel GOODBODY, Adeline JOHNS-PUTRA, *ibid.*; Adeline JOHNS-PUTRA, "Climate Change Novels Allow Us to Imagine Possible Futures—Read These Crucial Seven", in *The Conversation*, 13 December 2019, https://theconversation.com/climate-change-novels-allow-us-to-imagine-possible-futures-read-these-crucial-seven-124216; Matthew SCHNEIDER-MAYERSON, "The Influence of Climate Fiction: An Empirical Survey of Readers", in *Emironmental Humanities*, vol. 10, no. 2, 2018, 473–500; Matthew SCHNEIDER-MAYERSON, Abel GUSTAFSON, Anthony LEISEROWITZ, Matthew H. GOLDBERG, Seth A. ROSENTHAL, Matthew BALLEW, "Environmental Literature as Persuasion: An Experimental Test of the Effects of Reading Climate Fiction", in *Emironmental Communication*, 2020, 1–16. https://doi.org/10.1080/17524032.2020.1814377; ULLRICH, *ibid.*; WALDMAN, *ibid.*; Andrea WHITELY, Angie CHIANG, Edna EINSLEDEL, "Climate Change Imaginaries? Examining Expectation Narratives in Cli-Fi Novels", in *Bulletin of Science*, *Technology, and Society*, vol. 36, no. 1, 2016, 28–3

human activity, as in the novels of J.G. Ballard. Yet the category of "novels that might be read as addressing climate change" is potentially infinite, raising significant questions about the usefulness of such a definition for generic description. Some framings of the genre have pointed towards the popular association of climate fiction with the hope that literary narrative could address the shortcomings of science communication and politics: the genre, it has been argued, promises to influence readers' perception of the climate crisis by helping them cope with or imagine climate change and its consequences.¹³ In even stronger accounts, reading cli-fi has been hailed as fostering environmental action.

Yet any didactic purpose or potential of climate fiction remains in dispute; indeed, empirical research by Matthew Schneider-Mayerson suggests that cli-fi *cannot* change the minds of climate skeptics. ¹⁴ At best, if a given reader is already concerned about the implications of climate change, reading fiction can deepen and concretize this concern. Results from science communication research show us that overt reliance on narratives as a way to "convert" people in their attitudes towards climate change might backfire. ¹⁵ In a series of semi-structured interviews recently conducted as a part of the "Narrating the Mesh" (NARMESH) project at Ghent University, literature was occasionally discussed as influencing the participants' environmental thinking, but the "usual suspects" of climate fiction were seldom mentioned. Instead, the interviews suggest that how readers (both academic and nonprofessional) approach and experience cli-fi depends on a large number of factors including their political beliefs and the situation where they encounter a certain narrative. ¹⁶

No matter how desirable it is to think that reading climate fiction will turn readers into champions of sustainability, attitudes towards both climate change and climate fiction are highly complex and entangled phenomena that resist simplistic explanations. Thus, in this article, we aim to explore a different perspective on climate fiction – one less invested in questions of genre policing or in wishful thinking on pro-environmental effects, and more in the significance of literary *form* as a site of negotiation of the climate crisis. Here, we understand literary form as the organization or patterns that emerge in textual representations ¹⁷ – for example, in a network of connected storylines or in the rhythms produced through repetition. A considerable body of work in environmental and posthumanist philosophy has argued convincingly that living up to climate change involves rethinking basic concepts of subjectivity, agency, personhood, materiality, and embodiment. However, much of the literature that is discussed under the heading of "cli-fi" falls short of this challenge, limiting itself to thematizing or referencing climate change

¹³ E.g. EVANCIE, *ibid*; ULLRICH, *ibid*.

¹⁴ SCHNEIDER-MAYERSON, *ibid*, 495.
15 See, e.g., Dahlstrom: "One of the few factors that has been found to hinder narrative persuasion is when the persuasive intent becomes obvious and audiences react against being manipulated" (13616). Michael F. Dahlstrom, "Using Narratives and Storytelling to Communicate Science with Nonexpert Audiences", in *Proceedings of the National Academy of Sciences*, vol. 111, no. 4, 2014, 13614–20.

vol. 111, no. 4, 2014, 13614–20.

16 See: Heidi TOIVONEN, Marco CARACCIOLO, "Storytalk and Complex Constructions of Nonhuman Agency: An Interview-Based Investigation", in *Narrative Inquiry*, forthcoming, https://doi.org/10.1075/ni.21062.toi.

¹⁷ See, e.g.: Caroline LEVINE, Forms: Whole, Rhythm, Hierarchy, Network, Princeton, Princeton University Press, 2015, 2.

while foregrounding relatively conventional characters and situations. Our article asks what it takes to write fiction that is truly up to the task of narrativizing the climate crisis, in that it aligns itself (formally and not just thematically) with ideas emerging from the discourse of posthumanism. We foreground fiction that – regardless of how much textual emphasis is placed on climate change per se – is deeply engaged with the central conceptual struggles underlying the environmental crisis, and that consequently questions the assumptions of human mastery and exceptionality that led to anthropogenic climate change (via a history of capitalist and colonial exploitation of the nonhuman world). Whether this provocation reaches the reader or not depends on many factors, including who the reader is and the context in which the text-reader interaction unfolds. This article does not make empirical claims about literary influence, but it does suggest that the formal strategies we describe have a significant *potential* for reconfiguring the reader's thinking about the nonhuman.

In the following pages, we draw inspiration from a number of contemporary works that deploy formal devices such as multilinear or nonhuman narration to confront the imaginative, epistemological, and ethical challenges raised by climate change. These works are, in one way or another, experimental, because they play with the conventions of the (realist) novel by opening up plot to nonhuman spaces or temporalities, or by moving beyond the novel's traditional focus on individual human protagonists. In our discussion, the emphasis shifts from cataloguing particular examples of climate fiction to identifying formal features and strategies that undercut the anthropocentrism of Western narrative in the novelistic tradition what Monika Fludernik has called its "anthropomorphic bias" 18. We also shift the emphasis from seeing climate fiction as a matter of representation (at the level of plot, theme, etc.) to finding or developing literary forms that are capable of evoking the complex, spatiotemporally distributed, and therefore destabilizing nature of the climate crisis, whether climate change is a central element of the narrative representation or not.¹⁹ That is the idea behind our survey of contemporary fictions that bring up radical questions about human subjectivity; this survey is also meant as a roadmap for future creative work that could further deepen literature's engagement with posthumanist insights.

Why Posthumanism? Why Now?

Why have we opted to center posthumanism as the necessary theoretical turn for meaningful engagement with climate crisis? To begin with, it is important to clarify what we mean by posthumanism. One key distinction rests on the double potential of posthumanism, which can refer to what comes after *humans* or *the human* (in the biological sense) or to what comes after *humanism* (an exploration of a world in which the universalizing and rationalist tenets of humanism, including Man as the rational subject, are no longer accepted). These two meanings sometimes intersect insofar as interest in "advancing" beyond the human engenders a reconceptualization that,

¹⁸ Monika FLUDERNIK, *Towards a "Natural" Narratology*, London, Routledge, 1996, 13.

¹⁹ See CARACCIOLO (*Narrating the Mesh*) for a more sustained argument on the significance

as Katherine Hayles observes, "signals . . . the end of a certain conceptualization of the human"²⁰. Stefan Herbrechter defines critical posthumanism as "a theoretical approach which maps and engages with the 'ongoing deconstruction of humanism' ... [and] differentiates between the 'figure' of the posthuman (and its present, past and projected avatars, like cyborgs, monsters, zombies, ghosts, angels, etc.) and 'posthumanism' as the social discourse"21. which explores the contingent and transcorporeal nature of human beings in an era of Anthropocene disruptions.²² Similarly, Rosi Braidotti's "posthuman theory" centers "on the margins of expression of yet unrealized possibilities for overcoming both Humanism and anthropocentrism by concentrating on the issue: who is this 'we' whose humanity is now at stake?"23

At the same time, postcolonial and critical race theorists have argued that some versions of posthumanism reinscribe "the humanist subject (Man) as the personification of the human by insisting that this is the category to overcome, rarely considering cultural and political formations outside the world of Man that might offer alternative visions of humanity"24. It is important therefore to recognize that the "post-" of posthumanism is also something of a misnomer: alternative conceptions of the human, including some that offer meaningful and productive counter-approaches to climate crisis, pre-existed humanism and continue to exist alongside it around the world. There are justifications for this "post-ness": Serenella Iovino suggests a need to move "past the human," a project that is "not so much that of debunking the human altogether, but rather that of discarding the dogma of human exceptionalism"25. However, for the sake of convention, we will simply use the term "posthumanist" to describe a broad-encompassing philosophical turn that rejects attempts to regard the human as distinct from nature and that understands, as Serpil Oppermann writes, "the nonhuman (biotic and abiotic) as already part of the human in the world's becoming"²⁶.

In arguing for posthumanism as a response to climate catastrophe, we join theorists who suggest that the ecological crisis is, at its core, a failure of humanism. Jason W. Moore has explored how our current predicament is "not multiple but singular and manifold," a crisis that looks like one of capitalism-in-nature but is in fact one of "modernity-in-nature" 27, modernity being what he describes as a capitalist "world-ecology"-the "fundamental co-production of earth-moving, ideamaking, and power-creating across the geographical layers of human experience"28.

²⁰ Katherine N. HAYLES, How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics, Chicago, University of Chicago Press, 1999, 286.

²¹ Stefan HERBRECHTER, "Critical Posthumanism", in Rosi BRAIDOTTI, Maria HLAVAJOVA (eds.), *Posthuman Glossary*, London, Bloomsbury, 2018, 94–96, 94.

22 Transcorporeality can be defined as the (human) body's openness to the nonhuman environment, as illustrated for example by environmental disease (see Stacy ALAIMO, *Bodily Natures:*

Science, Environment, and the Material Self, Bloomington, Indiana University Press, 2010).

23 Rosi Braddotti, Posthuman Knowledge, Cambridge, Polity Press, 2019, 86.

24 Alexander Wehellye, Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human, Durham (NC), Duke University Press, 2014, 9-10.

25 Serenella IOVINO, "Posthumanism in Literature and Ecocriticism", in Relations: Beyond Anthropocentrism, vol. 4, no. 1, 2016, 11–20, 13.

²⁶ Serpil OPPERMANN, "From Posthumanism to Posthuman Ecocriticism", in Relations, vol.

^{4,} no. 1, 2016, 23–37, 30.

27 Jason MOORE, Capitalism in the Web of Life: Ecology and the Accumulation of Capital, London, New York, Verso, 2015, 15. ²⁸ *Ibid*.

This co-production involves the production, on the one hand, of a nature that is external to and therefore distinct from the human—"the better that [nature] could be subordinated and rationalized, its bounty extracted, in service to capital and empire"29. On the other hand, through the same process the human is created—or rather, what Sylvia Wynter describes as "the ethnoclass Man" which serves as the prototype of the human around which humanism is constructed. Even those who, like Wendy Brown, argue that neo-humanisms may yet be recuperated from the crisis of this capital-H Humanism acknowledge the centrality of such a collapse to climate crisis.³¹ Brown writes that climate crisis urgently demands a posthumanist reckoning insofar as "it mandates a recognition that what was once quaintly called 'external nature' does not simply exist as our resource to plunder and that we must rapidly and dramatically accommodate our ways of life and problem-solving to this fact",32.

Yet, the necessity of a posthumanist reckoning for engagement with climate crisis poses problems for literature and its theorists. Amitav Ghosh has influentially criticized the failures of the modern, realist novel to move beyond humanist assumptions.³³ The rise of the novel in its Western context is, as Marco Caracciolo notes, "tightly linked to industrialization and therefore to the exploitation of the nonhuman world"34. At a deeper level, Western narrative is "complicit with a worldview that places considerable emphasis on human agents acting for reasons within a human-scale time frame"35. By contrast, posthumanism situates the human "no longer at the origin of the action, but . . . itself the result of intersecting agencies and meanings"36 and requires innovations on the level of language and scalar representation in order to visualize the important phenomena that Timothy Morton has described as "hyperobjects" ³⁷. The very profound and pervasive nature of these challenges means that it is not enough to simply state that climate fiction must be posthumanist. We must instead be very clear about the specific formal affordances that fiction possesses for posthumanist engagements, and how these formal affordances are being or might be enacted in literature.

Posthumanist Strategies in Contemporary Fiction

Given the Western novel's complicity in humanist assumptions, how can storytelling engage with posthumanism, not merely thematically but formally? We now turn to

30 Sylvia Wynter, "Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation—An Argument", in *CR: The New Centennial Review*, Vol. 3, No. 3, Fall 2003, 257–337.

31 Wendy Brown, "Climate Change, Democracy, and Crises of Humanism", in Andrew BALDWIN, Giovanni Britis (Climate Change, Migration, Critique, Lanham,

33 Amitav GHOSH, The Great Derangement: Climate Change and the Unthinkable, Chicago, University of Chicago Press, 2016.

Rowan & Littlefield, 2017, 25-40.

³² *Ibid.*, 26.

³⁴ Marco CARACCIOLO, Narrating the Mesh: Form and Story in the Anthropocene, Charlottesville, University of Virginia Press, 2021, 22.

³⁶ Serpil OPPERMANN, "From Posthumanism to Posthuman Ecocriticism", *ibid.*, 15. ³⁷ Timothy MORTON, *Hyperobjects: Philosophy and Ecology after the End of the World*, Minneapolis, University of Minnesota Press, 2013.

a number of formal strategies through which fiction can decenter the human and resonate with posthumanist ideas, including a critique of human exceptionalism, undifferentiated (and, ultimately, West-centric) conceptions of "Man," and nature/culture binaries. We will provide a number of examples from contemporary fiction, but unlike most other "inventories" of cli-fi, we don't limit our survey to works that directly stage climate change and its possible consequences; rather, we cast a broad net, discussing literary strategies that could, potentially, help develop posthumanist thinking in relation to climate change even if they don't appear (yet) in texts that are centrally concerned with the climate crisis. These strategies are nonhuman narration or focalization, global plotting, deep temporality, parallel storyworlds, the inclusion of multimodal or non-narrative elements, and the adoption of non-Western narrative models. These techniques cover most of the fundamental dimensions of narrative, from character to space and time (i.e., setting and what narrative theorists refer to as the "storyworld") to the overall orchestration of plot.³⁸ It should be kept in mind that ours is not meant to be an exhaustive list, and more strategies could certainly be added to our survey. While the strategies identified here resonate with posthumanist philosophy, they are not merely an illustration of existing philosophical debates. On the contrary, they employ the resources of literary (narrative) form to deepen these debates and explore their ethical relevance imaginatively, in concrete situations of human-nonhuman interaction. That is, incidentally, why form is so significant: thematically, literature can at best be inspired by posthumanist ideas, whereas through form it can transform those ideas into a vivid, affective experience-and thus concretize and specify the imagination of the posthuman.

Embracing a Nonhuman Perspective

One of the key ideas of posthumanist thinking is that consciousness, subjectivity, and agency aren't a human prerogative but can be found in numerous entities that Western modernity considers "nonhuman." It is fairly uncontroversial to say that nonhuman animals display agency and subjectivity, but some strands of posthumanist thinking go much further than this, arguing-more controversiallythat inanimate things have their own kind of material efficacy or "thing-power"³⁹, or even possess an inchoate form of subjectivity. 40 Indeed, anthropologist Elizabeth Povinelli suggests that current Western civilization struggles to effectively legislate not only the separation of the human and the nonhuman, but also the separation of the animate and inanimate. 41 Narrative typically centers on human consciousness, subjectivity, and agency, but it can deploy a variety of formal tools to complicate its

³⁸ See for a recent discussion of the storyworld concept in narrative theory: Marie-Laure

RYAN, "From Possible Worlds to Storyworlds: On the Worldness of Narrative Representation", in Alice BELL, Marie-Laure RYAN (eds.), Possible Worlds Theory and Contemporary Narratology, Lincoln, University of Nebraska Press, 2019, 62–87.

39 Jane BENNETT, Vibrant Matter: A Political Ecology of Things, Durham (NC), Duke University Press, 2010; Serenella IOVINO, Serpil OPPERMANN, "Introduction: Stories Come to Matter", in Serenella IOVINO, Serpil OPPERMANN (eds.), Material Ecocriticism, Bloomington, Indiana University Press, 2014, 1–20.

⁴⁰ See, e.g., the panpsychist philosophy developed by Steven Shaviro in Steven SHAVIRO, The Universe of Things: On Speculative Realism, Minneapolis, University of Minnesota Press, 2014. ⁴¹ Elizabeth POVINELLI, Geontologies: A Requiem to Late Liberalism, Durham (NC), Duke University Press, 2016.

own anthropomorphic bias. One option is a strategy known as nonhuman narration. Simply put, the speaker of a narrative-its narrator-can use human language while signaling nonhuman identity. The result is what Jan Alber describes, drawing on Mark Turner's cognitive-linguistic theory, an "impossible blend" of human and nonhuman traits, such as human speech and behavior typical of nonhuman animals.⁴² The narrator of Franz Kafka's short story "The Burrow" (1931), for instance, is a mole-like creature who speaks obsessively about his underground dwelling. The character's monologue can be read as an attempt to recreate the psychology of an animal's burrowing instinct-its categorical refusal to leave its nest behind, despite awareness of a looming threat. The narrator's position is thus taken up by a nonhuman character, potentially triggering a defamiliarizing response in the reader. 43 Thus, we bring to bear our anthropocentric expectations on the text, but in the process of relating to the narrator we are given the chance to revise those expectations by embracing-however partially and tentatively-a nonhuman way of being.

Nonhuman narration is not the only way in which nonhuman subjectivity can enter and orient narrative form, however. "Internal focalization" is a technical term used by narrative theorists-in the wake of Gérard Genette's structuralist work⁴⁴-to discuss stories that focus on the private experiences of a character who is not the narrator. Here the narrative expresses a character's thoughts and sensations with a level of detail that would normally be available only to the character him- or herself. This kind of internally focalized narratives can also suggest nonhuman subjectivity. 45 For instance, Jeff VanderMeer's The Strange Bird (2017) applies internal focalization to a biotechnologically modified bird, whose suffering orients the narrative from beginning to end. Like nonhuman narration, nonhuman focalization can invite readers to reconsider humanist assumptions by enriching and expanding their imagination of nonhuman ways of being-for instance, through an empathetic link with nonhuman characters. Furthermore, narrative engagements with animal minds (through narration or focalization) can confront readers with the fundamental limitations of their knowledge of the nonhuman, that is, they invite readers to consider the nonhuman world as something that is not entirely transparent or knowable to them. This kind of epistemological modesty also resonates with posthumanist ideas on the need to embrace reciprocity and shared vulnerability in our relations with nonhuman animals-a move that involves a recognition of our cognitive and existential limitations.⁴⁶

⁴² Jan Alber, Unnatural Narrative: Impossible Worlds in Fiction and Drama, Lincoln, University of Nebraska Press, 2016, 48-49. Mark TURNER, The Literary Mind: The Origins of Thought and Language, Oxford, Oxford University Press, 1996.

⁴³ Lars Bernaerts, Marco Caracciolo, Luc Herman, Bart Vervaeck, "The Storied Lives of Non-Human Narrators", in Narrative, vol. 22, no. 1, 2014, 68–93.

⁴⁴ Gérard Genette, Narrative Discourse: An Essay in Method, translated by J. E. Lewin, Ithaca,

Cornell University Press, 1980.

45 See: William NELLES, "Beyond the Bird's Eye: Animal Focalization", in *Narrative*, vol. 9,

no. 2, 2001, 188–94.

46 See, e.g.: Deborah Bird ROSE, Wild Dog Dreaming: Love and Extinction, Charlottesville, University of Virginia Press, 2011.

Global Plotting

The climate crisis unfolds on a global stage. Certain catastrophic manifestations of climate change (e.g., increased likelihood of heatwaves, devastating flooding, and so on) may be local, but their causes cannot be pinpointed on a local level; they exist on the scale of global production and consumption patterns that have led to the unprecedented release of greenhouse gases into the atmosphere. Coming to grips with climate change thus involves embracing this planetary scale-as argued influentially by Ursula Heise⁴⁷, among others-as well as understanding the discontinuities that complicate the relationship between the local and the global.⁴⁸ In other words, our embodied experience of climate disruption cannot be simply equated with the abstract concept of climate change, because the link between particular meteorological events and the global level is dependent on our trust in scientific models. In other words, moving from the local to the global scale involves a significant epistemological leap.

Formally sophisticated narrative can help audiences make this leap in imaginative terms. The main candidate for this foregrounding of the planetary through narrative form is global plotting, in which the overall pattern of story emerges from (often surprising) interactions between characters existing in different parts of the world. Consider, for example, Amitav Ghosh's Gun Island (2019), which is partly a response to Ghosh's own argument about the limitations of the novel in The Great Derangement: here, a Brooklyn resident embarks on a global quest to investigate a mysterious "gun merchant" of Bengali folklore. An astounding number coincidences punctuate the protagonist's travels, suggesting interconnectedness of a globalized world threatened by multiple crises (the ecological one, but also mass migration from the Global South). This coincidence plot puts pressure on novelistic verisimilitude, but it also successfully conveys the stochastic (that is, chance-driven) nature of the local manifestations of climate change.49

While Ghosh's work retains a novelistic focus on an individual protagonist, other contemporary narratives push global plotting much further. Here multiple characters cross paths and storylines intersect, creating a complex tapestry of coincidence and interdependency that effectively decenters novelistic storytelling from the human teleology of a protagonist seeking to achieve his or her personal goals. In film studies, David Bordwell discusses this plot strategy under the heading of "network narrative," because the pattern of the characters' interactions takes the form of a network of connections instead of linear, cause-effect sequentiality. 50 Such

⁵⁰ David BORDWELL, *Poetics of Cinema*, London, Routledge, 2008, 191.

⁴⁷ Ursula K. HEISE, "Climate Stories: Review of Amitav Ghosh's The Great Derangement", in *Boundary 2*, 19 Feb. 2018, https://www.boundary2.org/2018/02/ursula-k-heise-climate-stories-review-of-amitav-ghoshs-the-great-derangement/; Ursula K. HEISE, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global*, Oxford, Oxford University Press, 2008.

⁴⁸ Derek WOODS, "Scale Critique for the Anthropocene", in *Minnesota Review*, vol. 83, 2014,

⁴⁹ For more on climate change fiction and probability, see Marco CARACCIOLO, "Rabbit Holes and Butterfly Effects: Narrative Probabilities and Climate Science", *Journal of Narrative Theory*,

a distributed approach to storytelling resonates with posthumanist ideas on the importance of cultivating an imagination of the global. While not concerned with the climate crisis specifically, Alejandro González Iñárritu's film Babel (2006) is an excellent example of globally decentered plotting, since the narrative follows the material circulation of a nonhuman object (a rifle) that affects the lives of characters situated in different parts of the world. 51 David Mitchell's novels-for instance, Cloud Atlas (2004)-also place a heavy emphasis on global connections through thematic resonances between storylines that are separated by both time and space. In this way, narrative opens itself up to a globalized reality in which human subjectivity including the teleology of intentions that has conventionally steered novelistic plots is eclipsed by more-than-human patterns of material circulation or probabilistically driven, catastrophic events.

Deep Temporality

Just as the climate crisis destabilizes spatiality by creating dramatic collisions between the local and the global, it involves an expanded awareness of temporal scales beyond individual human life, or even the history of human societies (or the human species itself). From this "deep time" perspective⁵², we start realizing that the fossil fuels that are currently driving greenhouse gas emissions are the result of millions of years of geological history, or that anthropogenic climate change complicates planetary processes that started well before our first hominid ancestors emerged in Africa's savannahs. Posthumanist philosophy emphasizes what Dipesh Chakrabarty describes as the "collision" of the temporalities of human culture, biological evolution, and geological processes.⁵³ Narrative can integrate this collision and imagine deep time's influence on the human characters along multiple routes. One possibility is to show geological time at work through strategic flashbacks. Thus, Ben Smith's novel Doggerland (2019) imagines a postapocalyptic future in which two characters-a boy and an old man-live a solitary life on an offshore windfarm. The turbines are located in the North Sea, where a stretch of land (the titular "Doggerland") once connected Great Britain to continental Europe. A number of dated interludes (the first one is titled "c. 8,200 Before Present") present tableaux from this ancestral time, showing a gradual rise in sea levels and of course foreshadowing the consequences of climate change. These scenes position the characters' predicament vis-à-vis a geological history that transcends them and the novel's readers.

In The Great Bay (2010), by Dale Pendell, the same depth of temporality is projected into the future. Here the narrative consists in a series of samples of a postapocalyptic future, detailing the evolution of California's coastline in the wake of catastrophic sea level rise. Each chapter of Pendell's work is set a number of years

⁵¹ Marco CARACCIOLO, "Object-Oriented Plotting and Nonhuman Realities in DeLillo's Underworld and Iñárritu's Babel.", in Erin JAMES, Eric MOREL (eds.), Environment and Narrative: New Directions in Econarratology, Columbus, Ohio State University Press, 2020, 45–64.

52 Wai Chee DIMOCK, Through Other Continents: American Literature across Deep Time, Princeton, Princeton University Press, 2006.

⁵³ Dipesh CHAKRABARTY, "Climate and Capital: On Conjoined Histories", in *Critical Inquiry*, vol. 41, no. 1, 2014, 1–23, 1.

after the disaster, and their temporal scope keeps increasing: thus, chapter 1 focuses on the "first decade of the collapse", chapter 6 encompasses an entire century, while the final chapter spans a few millennia. This crescendo means that, as noted by Alexa Weik von Mossner, there is no single protagonist bringing the narrative together: 54 indeed, novelistic progression is almost entirely absent here, with the chapters connected only by occasional thematic or diegetic echoes. In this way, Pendell's work explores how human time fades into geological temporality, and while the resulting narrative is challengingly slow and fragmentary, it is uniquely suited to unsettle humanist assumptions about temporality.

In a similar (but more humorous) vein, Kurt Vonnegut's novel Galápagos (1985) imagines humanity's evolution into a species of furry seal-like creatures after a devastating pandemic. Located millions of years in the future, the narrator comments satirically on how the survival of humankind was determined not by our species' intelligence or technological advancements, but by a long series of accidents and coincidences that led a small group of humans to find themselves stranded on the Galápagos islands. While Pendell's *The Great Bay* favors a geological perspective that is deliberately detached and unemotional, the paradoxes of Vonnegut's narration deploy humor as integral part of the narrative's engagement with posthumanist ideas.55

Parallel Storyworlds

The science of climate change presents us with a multiplicity of possible futures, which mirror different assumptions about governments' response to the ecological crisis and its ramifications for societies around the globe. 56 Even our best scientific models cannot predict climate trends with absolute precision, because of the staggering number of physical, political, and socio-cultural factors involved. Uncertainty thus becomes a fundamental dimension of posthumanist thinking about the climate crisis.⁵⁷

Literary narrative can directly model this anxious coexistence of possible futures and the uncertainty that derives from this openness. We find a formal equivalent for this coexistence in Jesse Kellerman's novella Controller (2018), which centers on the relationship between a young man and his bedridden mother. The text is divided into three separate parts, each of which imagines the two characters' deteriorating relationship at different degrees of warming. Thus, these mutually exclusive storylines take place on the same day in January, but the temperature varies from 87.8° F (part one) to 96.9° F (part two) and 78.7° F (part three). These parallel

⁵⁴ Alexa WEIK VON MOSSNER, "Science Fiction and the Risks of the Anthropocene: Anticipated Transformations in Dale Pendell's *The Great Bay*", in *Environmental Humanities*, vol. 5, no. 1, 2014, 203–16.

⁵⁵ For a more sustained reading of Vonnegut's novel, see Marco CARACCIOLO, "Posthuman Narration as a Test Bed for Experientiality: The Case of Kurt Vonnegut's *Galápagos*", in *Partial Answers*, vol. 16, no. 2, 2018, 303–14.

56 Melinda COOPER, "Turbulent Worlds", in *Theory, Culture & Society*, vol. 27, no. 2–3, 2010,

<sup>167–90.

57</sup> See, e.g., Anna Tsing's discussion of the precarity and uncertainty of living in times of ecological disruption. Anna Lowenhaupt TSING, *The Mushroom at the End of the World: On the* Possibility of Life in Capitalist Ruins, Princeton, Princeton University Press, 2015.

storyworlds demonstrate that global warming has far-reaching consequences for human interactions, even in the absence of overtly catastrophic events. While the first two parts trace a crescendo of aggression, the protagonist's cohabitation becomes much less toxic in the third section, clearly marking this as the "best" scenario-the one readers should be aiming for in their everyday outlook on an uncertain future.

Dead Astronauts (2019), by Jeff VanderMeer, offers a more experimental take on the same idea: it multiplies timelines without a clear "best case" scenario. The protagonists are a group of time travelers in a postapocalyptic world devasted by corporate greed and environmental exploitation; these characters, who combine human and nonhuman traits, are guided by a single "purpose": "to destroy the Company and save the Future. Some future"58. As they move through time, the protagonists create a plethora of "versions" of reality, whose version numbers are constantly-and enigmatically-referenced in the margin of the book. The plot never coalesces into a single, clear-cut progression between parallel worlds of the kind we find in Kellerman's Controller. The result is challenging and even disorienting for the reader, but it is extremely effective at evoking the radical uncertainty of a world that appears future-less, and in which the very survival of the human is on the line.⁵⁹

Multimodal Strategies and Non-Narrative Discourse

With their decentralized and multilinear structure, texts like Pendell's The Great Bay or VanderMeer's Dead Astronauts take us to the outer limits of narrativity—the place where (novelistic) storytelling shades into descriptive or argumentative discourse. These crossovers between narrative and other discourse types are highly significant. In effect, the climate crisis is also a crisis of storytelling's power to fully encapsulate relations in a climate changed-world. As Zoltán Boldizsár Simon argues⁶⁰, while discussions on the Anthropocene confront us with a plurality of narratives, no single story can offer an adequate response to the present moment: to some degree, storytelling may even obstruct understanding of the scale and complexity of climate change. This is why it may be useful for writers to step outside of narrative-if only temporarily-and incorporate other textual forms to do justice to the multiple ways of knowing and discussing climate change.

There are, fundamentally, two ways of hybridizing storytelling with nonnarrative modes of expression; both hold considerable promise vis-à-vis posthumanist ideas. The first consists in the use of "multimodal strategies"-that is, the inclusion of non-verbal material within the verbal texture of narrative. 61 Most frequently, these multimodal devices involve visual elements such as drawings, diagrams, or unconventional typography that undercut anthropocentric

58 Jeff VANDERMEER, *Dead Astronauts*, New York, Farrar, Straus and Giroux, 2019, 9.
59 For further discussion of VanderMeer's experimental work, see Marco CARACCIOLO, Gry ULSTEIN, "The Weird and the Meta in Jeff VanderMeer's *Dead Astronauts*", in *Configurations*, vol. 30, no. 1, 2022.

⁶⁰ Zoltán Boldizsár SIMON, "The Limits of Anthropocene Narratives", in *European Journal of Social Theory*, vol. 23, no. 2, 2018, 184–99.
61 See: Alison GIBBONS, "Multimodal Literature and Experimentation", in Joe BRAY et al.

⁽eds.), The Routledge Companion to Experimental Literature, Oxfordshire, Routledge, 2012, 420–34.

assumptions by displaying realities beyond the human scale. For example, Steve Tomasula's VAS: An Opera in Flatland (2004) is an experimental novel that deploys a combination of text, photographs, and comic book panels to reimagine Edwin A. Abbott's satirical novella Flatland (1884) along posthumanist lines. Tomasula's work raises questions about biotechnology and the future of humankind, using diagrams and a variety of images to suggest the abstraction of scientific knowledge. Through the combination of visual elements and a fragmented, nonlinear structure, Tomasula seeks a radical alternative to narrative as the work's main organizing principle.

A second way in which writers may complicate narrative is by directly including philosophical discourse or non-narrative text types such as the list. In Thalia Field's Bird Lovers, Backyard (2010), a frame narrative coexists with essayistic passages that reconstruct (for example) Konrad Lorenz's problematic complicity in Nazi ideology or discuss methods for getting rid of an ant infestation in the garden. The discourses of narrative and science are thus juxtaposed in a way that both extends the reach of narrative (through the integration of scientific language) and highlights the ethical dimension of science. 62 In a more localized example of this hybridization, a chapter in Emily St. John Mandel's postapocalyptic Station Eleven (2014) consists entirely of an enumeration of activities and experiences that are no longer possible after societal collapse (despite being part of most readers' everyday life). The enumeration slows down the progression of the plot and affords insight into the scale of the catastrophe, showing how it pervades aspects of the characters' lives that are normally overlooked by postapocalyptic fiction (and by its readers). If narrative focuses on particular characters and events, the list allows Mandel to "zoom out" and paint an affectively charged picture of a whole world in ruins. 63 The encounter of narrative and non-narrative elements or genres (such as visual strategies, the list, or the essay) thus enriches contemporary literature's power to model the complexity of the climate crisis: it can disrupt the linear progression and particularity we associate with storytelling, instead hinting at the scale of humannonhuman entanglement and at the statistical and conceptual abstractions implicated in our knowledge of the nonhuman.

Non-Western Narrative Models

Posthumanist thinking puts pressure on binaries—such as those between subject and object, mind and body, or human and nonhuman-that undergird the dominant ontologies of Western modernity. 64 As part of this critique of Western assumptions, posthumanist philosophy (and scholarship which centralizes its concerns) will benefit from more sustained and careful conversations with the myriad of non-

⁶² Through the affective framing of storytelling; see chapter 4 in Marco CARACCIOLO, *Slow*

Narrative and Nonhuman Materialities, Lincoln, University of Nebraska Press, 2022.

63 For more on narrative, lists, and affect, see Eva Von Contzen, "Experience, Affect, and Literary Lists", in Partial Answers, vol. 16, no. 2, 2018, 315–27.

64 Obviously, this does not mean that all philosophers active within Western modernity bought into those dishertances. What we want is a finite production of the control of the contro

bought into these dichotomies. What we are identifying here is not a universal but a cultural dominant, which has been discussed by both posthumanist and cultural scholars. See, e.g., Latour: "In the Western tradition . . . most definitions of the human stress the extent to which it is distinguished from nature" (14). Bruno LATOUR, Facing Gaia: Eight Lectures on the New Climatic Regime, Cambridge, Polity Press, 2017.

Western and Indigenous epistemologies—conversations that may build bridges between different "ways of knowing"⁶⁵. Deborah Bird Rose's "ecological existentialism," for instance, is based on extensive fieldwork and interactions with Aboriginal communities in Australia⁶⁶, while a collection edited by Salma Monani and Joni Adamson aims to deepen the conversation between Indigenous studies and ecocriticism.⁶⁷

Also in formal terms, the novel–a quintessentially Western genre–can draw inspiration from non-Western or Indigenous narrative practices. This encounter can be extremely productive in terms of expanding Western audiences' imagination of the nonhuman, as shown (in relation to postcolonial narrative) by Erin James in The Storyworld Accord. 68 Amitav Ghosh's already mentioned Gun Island, for example, revolves around a traditional story from Bengali folklore: the protagonist's interest in mythology colors his understanding of the unlikely coincidences that punctuate his experiences, turning the Bengali legend of the "gun merchant" into a source of mystery and enchantment. The coincidence plot of Ghosh's novel can thus be read as a twenty-first-century rewriting of the wondrous travels of the gun merchant of Bengali mythology. At first glance, there is significant tension between the rationalism of Western science (embraced by the protagonist, Deen) and mythological narrative, but the two start converging when Deen realizes that climate change fundamentally disrupts the probability calculus of Western modernity-the kind of calculus on which realist fiction has built itself upon (as argued by Ghosh in The Great Derangement). Non-Western narrative becomes a way of thinking about the radical nature of climate change, as well as the unsettling weirdness of its consequences.

In *The Swan Book* (2013), Aboriginal Australian writer Alexis Wright goes even further in bringing together Indigenous storytelling and a Western (novelistic) narrative. Wright's meandering style, rich in poetic leitmotifs and references to Aboriginal culture that will prove challenging (and even inaccessible) to most Western readers, can be seen as an attempt to graft traditional Indigenous knowledge onto a novelistic plot. As Lucy Rowland argues in her reading of another novel by Wright, *Carpentaria*, her work "sustains a unique temporality of climate change through its non-linear form, narrative voice and style: a temporality that is not solely confined to scientific logic or notions of teleological time" ⁶⁹. In this way, not only do the novels by Ghosh and Wright foreground the impact of the ecological crisis on non-Western and Indigenous communities at the level of subject-matter, but they deploy the *form* of traditional storytelling in order to

⁶⁵ Glen S. AIKENHEAD, Masakata OGAWA, "Indigenous Knowledge and Science Revisited", in *Cultural Studies of Science Education*, vol. 2, no. 3, 2007, 539–620, 540.

⁶⁶ ROSE, ibid.
67 Salma MONANI, Joni ADAMSON (eds.), Ecocriticism and Indigenous Studies: Conversations from Earth to Cosmos, Oxfordshire, Routledge, 2016.

⁶⁸ Erin JAMES, The Storyworld Accord: Econarratology and Postcolonial Narratives, Lincoln, University of Nebraska Press, 2015. There are always risks involved in this kind of cultural encounter, particularly the possibility of Western audiences appropriating Indigenous or non-Western cultures. Nevertheless, we believe that this is a risk worth taking, and indeed a necessary step towards overcoming the limitations of literary realism as it developed in the West.

step towards overcoming the limitations of literary realism as it developed in the West.

69 Lucy ROWLAND, "Indigenous Temporality and Climate Change in Alexis Wright's Carpentaria (2006)", in *Journal of Postcolonial Writing*, vol. 55, no. 4, 2019, 541–54, 542.

challenge the environmental imagination of the West and move beyond Eurocentric perspectives on climate change itself.

Conclusion

Our goal in this article has been to present promising, genre-bending storytelling techniques that seek new ways of communicating what it means to (co-)exist or imagine future (co-)existence in a warming world. The strategies we have listed above are far from exhaustive, but rather meant as coordinates that we hope might stimulate further research and discussion on the topic of climate change across a broad selection of texts. We are not suggesting that authors should attempt to integrate as many of these techniques as possible—a checklist-like approach that flattens the complexity and variability of climate change. Nevertheless, there is value in thinking about how such narrative strategies may work in tandem to interrogate and expand audiences' imagination of human-nonhuman relations, making it difficult for individual readers to "explain away" the posthumanist provocation and instead inviting them to reflect on the humanist underpinnings of their own thinking. A single strategy is likely to be less effective at that than a concerted combination of strategies—although, of course, the empirical impact of narrative form lies beyond the scope of this article.

While we have chosen posthumanism as a theoretical framework that we believe productively questions conventional, realist, or humanist texts and uncovers the affordances of experimental techniques, this does not mean that non-experimental, conventional, realist, or humanist texts have no ecocritical merit. In fact, it might be just as interesting to ask whether there are strategies that emphatically *fail* at representing climate change or other Anthropocene predicaments—and also, according to whom and why they fail.

It is not a given that the strategies we have mentioned always facilitate a better understanding of the climate crisis. As noted in the introduction, climate change and its many related issues are complex phenomena that may in many ways always remain out of reach for the human imagination. Sometimes, like in VanderMeer's Dead Astronauts or in Wright's The Swan Book, strategies like parallel storyworlds, nonhuman focalization, or non-Western models of storytelling reveal how little we (as Western readers) understand about the climate crisis and how important it is to humbly admit and accept this lack of understanding. Of course, acknowledging our limited understanding should not be an excuse not to take positions of care, concern, and action vis-à-vis climate change and related phenomena in the human and nonhuman worlds. Reaching beyond the humancenteredness of storytelling does not absolve us from our role in creating the climate crisis and from our responsibilities in mitigating its consequences. Indeed, by going beyond simplistic calls to "do something about climate change"—a problematically vague agenda sometimes attributed to cli-fi-posthumanist narrative practices hold promise in cultivating more balanced human-nonhuman relationships and in opening up new ways of imagining environmental action. There are multiple valuable lessons readers can derive from fiction in light of the insights into

complexity and posthumanism we have foregrounded in this article–lessons which push us beyond familiar forms of thinking and storying climate change.

Marco CARACCIOLO (Ghent University)

K. M. FEREBEE (Helsinki Collegium for Advanced Studies)

Shannon LAMBERT (Ghent University)

Heidi TOIVONEN (University of Twente)

Gry ULSTEIN (Ghent University)