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Megan Freeman April 7, 2022

Scales of Survival: The Hope of Realist Subversions in Contemporary Climate Fiction

by

Megan Freeman

Dr. John Sitter
Adviser

Department of English

Dr. John Sitter

Adviser

Dr. Dan Sinykin

Committee Member

Dr. Carrie Keogh

Committee Member

2022

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Megan Freeman

Dr. John Sitter

Adviser

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Abstract

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The traditionally individualist scope of the realist novel conflicts with the global scale of climate change. This thesis explores how contemporary climate fiction navigates this tension by embracing realist conventions and then subverting them to illustrate human finitude. In climate fiction, human limitations manifest on both physical and temporal scales. *The End We Start From* by Megan Hunter, *The Inland Sea* by Madeleine Watts, and *The Ministry for the Future* by Kim Stanley Robinson exhibit the dominance of the collective through omission of proper names, disruption of narrative closure, and expansions of the notion of identity. Along with *A Children's Bible* by Lydia Millet, *The Ministry for the Future* illustrates the importance of the indefinite time scale over the short-range personal time scale through commentary on narratives about the value of the future. The subversions of these novels are necessary, however, to the comedic structure of their endings. The comedic realist climate fiction ending is best described in Jenny Offill's *Weather* as the "obligatory note of hope" (ONOH). I argue that the ONOH of all five novels manifests as some form of chastened survival and is predicated on the recognition of human finitude.

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Introduction

The realization of anthropogenic climate change does not come gently. The Anthropocene is a harsh reality, one that globally scatters suffering with little care for proportional concordance between an individual's carbon footprint size and the severity of impact. Western society charges relentlessly toward excess, and the rest of the biosphere crumples under its vanity. As Hope Jahren writes in *The Story of More* (2019), "It is because so many of us consume far beyond our needs that a great many more of us are left with almost nothing" (13). There is no logic of scale, no commensurate rule for resource management. There is, however, astonishing devastation of the single planet we call home.

I read *The Story of More* as part of the coursework for my Ecosystem Ecology class. During the course, I studied the intricacies of ecological interconnections and gained a sense of the extent of anthropogenic devastation. Though the most direct impacts of human activities may be visible in the immediate physical environs, the consequences also coalesce at an even larger scale. For example, who would anticipate that climate change-induced declines of salmon populations could impact the availability of nutrients in freshwater riparian ecosystems (Naiman et al.)? I quickly learned that, ecologically, there is no such thing as a local problem, only a local perspective.

This lesson of scale complemented a class I took concurrently with Ecosystem Ecology. "Literature: Nature: Now" introduced me to climate fiction, a genre in which the tension between the individual and collective scales dominates novelistic themes and plots. Novels like Richard Powers' *The Overstory* (2018) and Kim Stanley Robinson's *New York 2140* (2017) invited a deeper consideration of how interconnected the human and nonhuman collectives are and how the actions of individuals can be magnified to effect change in billions of lives. Taken in

conjunction, these courses addressed the stakes of humanity's relationship to the biosphere and offered insight through a composite of art and science. They also, however, raised fundamental questions: How do we reconcile the individual and collective scales? What can fiction offer us in the face of colossal climate change? And how could we imagine a happy ending to a crisis incited and sustained by our own behavior?

This thesis seeks to address all these questions with a particular emphasis on how authors conceive of utopian conclusions to their climate fiction (cli-fi) novels. I closely examined five contemporary Anglophone climate novels in the course of the study: *The End We Start From* (2017) by Megan Hunter, *The Inland Sea* (2021) by Madeleine Watts, *The Ministry for the Future* (2020) by Kim Stanley Robinson, *A Children's Bible* (2020) by Lydia Millet, and *Weather* (2020) by Jenny Offill. These authors hail from different nationalities; Offill, Millet, and Robinson are all American novelists, Watts is Australian, and Hunter is English. These five novels are united by their recency in publication and their contemporary setting; each narrative is confined to the twenty-first century, keeping the focus on the problems, solutions, and conversations many readers face today. All five are also characterized by comedic endings—at the conclusion of each, the protagonists survive despite the long odds. This shared manner of concluding is essential to investigating how contemporary authors reconcile the grim reality of climate change with a hopeful outlook. Beyond these similarities, the five novels of this study offer variety in length, form, and setting. While a corpus of only five novels can hardly be representative of the entire contemporary climate fiction landscape, they nonetheless provide a useful sense of cli-fi's substantive variety.

By highlighting specific works in the first two chapters, I seek to emphasize the most compelling aspects of each novel. For example, in chapter one I examine how *The End We Start*

From, The Inland Sea, and *The Ministry for the Future* illustrate how the climate crisis subordinates individual identity to the overwhelming ubiquity of the human and nonhuman collective. I draw on the theory of realism advanced by Ian Watt to examine how the sanctity of individual identity crumbles under the weight of climate change. I also employ Astrid Bracke's scholarship on the essential role of realism in communicating the significance of the climate crisis through narrative. This chapter is further predicated on a rebuttal of Amitav Ghosh's *The Great Derangement* in which he contends that climate change as a representable phenomenon is unsuited to the form of the literary novel and that other attempts to capture it with verisimilitude (such as in science fiction or climate fiction) are unserious. Though Ghosh rightly identifies the conflict of scale between the individually focused novelistic form and the globally expansive phenomenon of climate change, I contend that his argument is overly dismissive of science fiction and cli-fi. Ursula K. Le Guin especially has gone to the mat for the sake of the realist protagonist, whose quotidian life she argues is no less valuable for its mundanity; she convincingly expresses her affinity for realist novels, citing them as virtuous for the fact that "instead of heroes they have people in them" (355). Through close readings of *The End We Start From, The Inland Sea,* and *The Ministry for the Future*, I build on this foundation of realist theory to examine how manifestations of climate change disrupt realist norms of identity. I find that, when pitted against each other, the individual succumbs to the weight of the collective in a powerful display of human finitude under climate change. In *The End We Start From,* the loss of proper names and lack of narrative resolution foregrounds the superiority of the collective scale. Unresolved narratives also disrupt human connection in *The Inland Sea*, a novel in which the nameless protagonist is further overwhelmed by the intrusion of the nonhuman collective into her daily life. Finally, in *The Ministry for the Future,* Robinson explodes the idea of identity to

include the nonhuman, highlighting the finitude of humanity in comparison to the celestial bodies of the sun and earth. My readings of these novels reveal that the individual scale is ill-suited to the demands of the climate crisis and that when it is brought into contention with the collective (as climate change demands), the latter prevails.

Cli-fi's treatment of the spatial scale is complemented by its presentation of disruptions to the temporal scale. My second chapter takes up the ways that climate fiction collapses together the indefinite scale with the personal scale. The indefinite scale is my provisional term for Timothy Clark's description of the indeterminate range of time that, in concert with the geologic time scale of climate change, reaches far beyond a personal life span. Its vastness proves challenging for the reader to grasp, and it requires that authors approach its representation creatively. *The Ministry for the Future* and *A Children's Bible* take distinct approaches to illustrating this indefinite scale in relationship with the personal. In *The Ministry for the Future*, Robinson relies on a discussion of the discount rate, metafictional techniques, and the convergence of plotlines to collapse the indefinite with the personal. Amy Elias informs my discussion of Robinson's use of metafiction to jar his readers into considering the ways that they set and execute future-oriented narratives of value. Millet takes a less expositional approach than Robinson, instead employing the figure of the child to illustrate how the indefinite scale manifests through the warped temporal progression induced by climate change. I refer to the treatment of time and the figure of the child in *A Children's Bible* as the acceleration of maturation, a process by which the children of the novel respond to the demands of climate change by hastening the gradual process of aging. Adeline Johns-Putra's examination of the "synecdochic representation of future generations" through the figure of the child demonstrates how children at once locate the present and the future in themselves and how such a role strains

their conventional development ("Borrowing the World" 2). In the novel, the discomfort of the two scales manifests as the children's strained relationship with their negligent parents rapidly evolves into their fully-fledged maturity. Min Hyoung Song's examination of the "swing" (or, the familiar patterns) of life and its disruption under climate change furthers my argument by illustrating how the swing of childhood is lost to the demands of natural disaster. Together, these novels demonstrate that from a temporal perspective, human limits are definitive and easily surpassed by the enduring nature of the climate crisis.

In the third chapter, I show that realizing the finitude of the human through spatial and temporal scales is not simply an exercise in self-flagellation. Instead, it enables a climate fiction work to meaningfully engage notions of hope in the form of a comedic ending. I contextualize comedy in climate fiction through the work of Joseph W. Meeker, Ruth Nevo, and Mark McGurl. These critics explicitly tie the acceptance of the finite human (or, as Nevo puts it, the fool who is "all flaw") to the capacity for a comedic ending (331). By synthesizing their scholarship, I determine that the comedy of climate fiction is one that advances survival. In a sharp contrast with the festive expressions of human vitality that are common to the classic form of the comedic genre, non-tragic climate fiction commemorates the inherent restrictions on the human species while allowing humanity to persist. To better figure this particular kind of comedic ending, I use Jenny Offill's phrase "the obligatory note of hope" from her novel *Weather.* An encapsulation of the cynicism and simultaneous hope that comes with recognizing human finitude, the obligatory note of hope (ONOH) foregrounds the triumph of survival in the Anthropocene. This survival complicates the finality associated with an ending; in fact, through Frank Kermode's conceptualization of endings and middles, I show that cli-fi authors resist the concluding aspect of the ending. The finitude that the characters (and hopefully readers) have

had to confront engenders staying power, propelling the narrative beyond the final sentence. The ONOH is present in all five novels and takes various shapes. In *The End We Start From* and *Weather*, it manifests as the reunion of the novel's focal nuclear family. *The Inland Sea* communicates hope through a newfound harmony with the nonhuman, *The Ministry for the Future* sees the protagonist embracing the continuation of the human species, and *A Children's Bible* presents an abstract sense of human adaptation. Together, these five novels form a picture of subdued, surviving humanity. Ultimately, this thesis aims to explore how climate authors convey the importance of embracing human finitude to advance the larger project of human survival.

Chapter One
Strange Realism: The Individual, the Collective, and the Real

It is a strange realism, but it is a strange reality.

- *Ursula K. Le Guin, "The Carrier Bag Theory of Fiction"*

Introduction

Climate change fiction (cli-fi) is something of a paradoxical genre. The novel, with its preoccupation with realism and the minutiae of individualism, at first seems a poor vehicle for communicating the enormity and severity of global phenomena. The climate crisis entails devastating collective implications across space and time, defying subordination to individual character arcs. The ostensible problem, then, is one of scale. The characters of a climate fiction novel must contend with the fact that they occupy "a place that is both local and global at once"—an uncomfortable condition that mentally strains character and reader alike (Clark, "Questions of Scale" 139). It is in this discomfort, however, that the climate fiction novel excels as a medium of comprehending the climate crisis.

Central to the task of communicating climate change and its severity is conveying the reality of the thing. Climate fiction is directly linked to a real-world crisis, and thus the genre carries a particular relationship to literary realism. The most basic definition of realism is a "close resemblance to what is real; fidelity of representation, rendering the precise details of the real thing or scene" (*OED*, "Realism").[1] Foundational novel historian Ian Watt chronicles the development of the novel, demonstrating that novel distinguished itself from previous fiction

[1]"Realism" has been interpreted differently by critics of numerous schools of thought. Here, I rely on Watt's theory that realism is the mimetic representation of reality in literature. However, scholars such as Nancy Armstrong and Anna Kornbluh have argued for a reversal of causation, contending that it is literature that influences our sense of reality rather than the inverse. The realist form is also one that has not remained stable over time; for a discussion of how realism has changed in literature over centuries (and how it has manifested in literary forms that precede the novel), see Eric Auerbach's *Mimesis*.

mediums with its faithful and meticulous representation of reality. The novel's predecessors—tragedies, comedies, and romances—championed universal themes and truths, but by the late 17th century, authors exhibited a "growing tendency for individual experience to replace collective tradition as the ultimate arbiter of reality" (Watt 14). The novel tends to privilege the primacy of the individual, drawing on detail to accomplish the verisimilitude of a character's experience.

The realism of climate change narratives manifests through several novelistic elements. For Astrid Bracke, the historical similarities between a textual world and the real world create a believable simulation of the climate crisis. Bracke uses two works of climate fiction—Barbara Kingsolver's 2012 *Flight Behavior* and Nathaniel Rich's 2013 *Odds Against Tomorrow*—to demonstrate how references to real-world events distort "the boundaries between the actual and textual worlds" (177). She argues that fusing the timelines of the real and the imagined worlds generates an uncertainty integral to understanding the climate crisis. This overlap between the textual world and the real demonstrates the principle of minimal departure, a process by which authors craft a story-world that allows readers to "use their own world and environment as a starting point for their understanding of the narrative's world" (Bracke 172). In other words, minimal departure seeks to mimic basic elements of reality. Bracke argues that minimal departure is one of the most important tools a climate narrative has in forcing readers to contend with anthropogenic climate change (166). By mirroring reality, fictive climate narratives can illuminate real-world stakes.

The Hard Work of Climate Realism

Not all climate fiction scholars share Bracke's prioritization of realism as a tool for conveying the climate crisis. Amitav Ghosh is among the most famous authors to reject realism's role in capturing the truth of the Anthropocene. To Ghosh, modern novelists have taken the

principle of minimal departure to a "deranged" extreme. He argues in *The Great Derangement* that the novel's incorporation of realism relies on the "banishing of the improbable and the insertion of the everyday" and thus makes no allowance for the extraordinary events of climate change (17). Though it is one of the defining challenges of the modern world, climate change has yet to be accurately depicted or acknowledged in the corpus of serious fiction. Instead, Ghosh contends that realist authors are too concerned with what realist novelist John Updike terms the "individual moral adventure" (77). For Ghosh, the climate crisis begets events that are so out of line with small-minded representations of reality that they have been written out of the bounds of the contemporary novel. The reliance on realism necessitates that an author inclined to include a reference to climate change "will have to work hard to make it appear persuasive" (Ghosh 24).

In defense of the novel's hallmark realism, Ursula K. Le Guin offers an apt rejoinder: "Who ever said writing a novel was easy?" (356). Though published decades before Ghosh's *The Great Derangement,* her essay, "The Carrier Bag Theory of Fiction," refutes his rejection of realism and makes a powerful (though brief) case for the novel's focus on mundane individuals. While Ghosh laments the loss of stories that leap "blithely from one exceptional event to another" without focusing undue time on negligible character development, Le Guin speaks on behalf of ordinary, recognizable people (16). She states, "That's why I like novels: instead of heroes they have people in them" (355). It will not be heroes that confront the climate crisis, but everyday individuals. Sweeping these individuals aside seems a poor choice when authors seek to capture reality. In a more contemporary evaluation of the role of climate narratives, Markku Lehtimäki argues that "the mimetic aspect of fiction—the lifelike characters and their actions—is a central means of engaging the reader" (89). Lehtimäki reads Ian McEwan's *Solar* (2010) with keen insight, demonstrating how "climate change is written on Beard's body through extreme

temperature's influence upon his physical well-being" (96). Improbable climate change finds realistic purchase in the individual.

Ghosh proclaims that the novel's focus on the individual is its ultimate weakness; Le Guin and Lehtimäki reveal it to be a humble strength. Here, then, are the stakes of the realist climate novel: climate change, improbable and colossal though its impacts may seem in the context of conventional realist plot, is a part of reality. Realist climate authors have undertaken the challenge of representing the phenomenon without abandoning the grounding of their novels in concrete details. Readers need familiarity to navigate the upheaval of the familiar and to maintain their investment in the crisis. Championing mundanity and verisimilitude, realism provides a necessary frame of reference.

The genre of climate fiction embraces realism, whether it be in environments conceived with minimal departure in mind or commonplace protagonists who embody ordinariness. And by virtue of their subject, these cli-fi works still manage to contend with the devastating consequences of climate change. Ghosh, however, remains unsatisfied by the genre's plethora of offerings, focusing exclusively on "the mansion of serious fiction" and summarily dismissing cli-fi written up to 2015 as "disaster stories set in the future" (71-2). For climate stories of the present, the "temptation to lapse into satire" is too strong (62). Since he uses McEwan's *Solar* as the chief example of this "lapse," he seems to have neglected or missed the nuance that Lehtimäki describes. Without appreciation of the genre's capacity for the sincere and simultaneous engagement of local and global scales, climate fiction is an offshoot of science fiction (a genre excluded from Ghosh's literary mansion). Cli-fi cannot be counted among meaningful representations of the Anthropocene. Science fiction and climate fiction cannot represent the climate crisis because the phenomenon is "not an imagined 'other' world apart

from ours; nor is it located in another ‘time’ or ‘dimension’ (72-3). Ghosh finds fault in science fiction and its subgenres for their displacement of the subject matter from reality. Ironically, it seems that realism would be the remedy to his complaint.

Ghosh’s appraisal of realism varies by genre—serious fiction is too real, science fiction is not real enough. The former shuns the improbable, the latter plays fast and loose with what is believable. The solution, then, is to hope that “hybrid forms will emerge” within the modern literary landscape to accommodate the collective, the nonhuman, and the improbable (84). Dan Sinykin pierces this comprehensive dismissal of science fiction, stating that “Ghosh’s depiction of a contemporary literary field sharply divided between well-regarded literary fiction and trashier genre fiction bears little resemblance to reality” (154). The scores of climate novels in circulation need not be neglected while the academy waits for the reinvention of fiction; instead, the existing climate fiction corpus offers meaningful contemplation of climate change. While metrics of “well-regarded” are indubitably subjective, authors of climate fiction have nonetheless taken up residence in Ghosh’s mansion of serious literature. The continued commercial and critical success of novels by climate and sci-fi authors such as Kim Stanley Robinson, Barbara Kingsolver, Octavia Butler, and Richard Powers indicates that these works are not squatters in the manor, either. Ghosh’s qualms about the merits of genre fiction are once again answered by Le Guin, who argues that “Science fiction properly conceived, *like all serious fiction*. . . is a way of trying to describe what. . . people actually do and feel, how people relate to. . . this womb of things to be and tomb of things that were” (356, emphasis added). The divide between serious fiction and science fiction is not as wide as Ghosh would have it be. Though their differences merit distinction, as Le Guin states, they are united in that cornerstone of the novel genre: the quotidian characteristics of literary realism.

Though Ghosh's rejection of realism and climate fiction do not resonate as inarguable characterizations of the contemporary literary environment, he does rightly identify the critical problem of scale in climate fiction (78). Exclusive focus on the individual cannot communicate the enormity of climate change. And yet, realism and the individual are indivisible from the novel form. How, then, can an author go about reconciling the two? Ursula K. Heise offers an insightful approach to the conflict of scale, stating that "the aesthetic transformation of the real has a particular potential for reshaping the individual and collective ecosocial imaginary" (258). Our understanding of the tenuous relationship between the local and global manifestations of the climate crisis can thus be comprehended through the stylistic refraction of novelistic realism.

Climate Change and Identity

Of the rich climate fiction corpus, three novels particularly destabilize realist conventions and unsettle the individual as central to the narrative. Megan Hunter's novel, *The End We Start From*, relates a nameless narrator's experience of motherhood during a cataclysmic London flood. Brimming with unresolved narratives and anonymous characters, *The End We Start From* demonstrates how the climate crisis displaces individualism. Madeleine Watts' novel *The Inland Sea* also compromises individual identity. Throughout the story, a series of Australian wildfires highlight narrative irresolution and infiltrate the narrator's self-certainty. As the fires rage, the novel emphasizes the supremacy of the nonhuman in a climate-changed world. This nonhuman authority features prominently in Kim Stanley Robinson's *The Ministry for the Future* as well. Robinson anthropomorphizes the abiotic, and in doing so, effaces conventional notions of the bounds of identity. For many readers of climate fiction, the scope and implications of the climate crisis are inconsistent with their understanding of reality, and these novels seek to capture that sentiment by subverting realist conventions.

To suit the needs of depicting the implications of the climate crisis for individual identity, works of climate fiction do not hesitate to unsettle realist individualization. For example, while proper names are a realist convention that compels the reader to regard characters as "completely individualised entities," Megan Hunter's novel, *The End We Start From,* approaches the problem of global scale by replacing all proper names with single initials (Watt 18). These characters are not archetypes, interchangeable between time periods and vehicles for the plot—they are fictional people distinguishable from the other inhabitants of the fictive setting. And, as Hunter demonstrates, they can exist (uncomfortably) without complete names. Names often provide implicit clues to the reader as their cultural associations can predispose an audience to assumptions about a character's background. Even nicknames can reveal the dynamics of character relationships. They are but one aspect of the "congeries of contingent everyday details" readers of realist fiction expect to encounter when being introduced to a new character (Hebard 3). But with all names reduced to single initials, Hunter intentionally forces the reader to embrace ambiguous identity. The protagonist of *The End We Start From* is not even granted an initial, but she is nonetheless a distinctive individual. Without the benefit of a name, Hunter turns to different strategies to construct the narrator's identity. The contemplative fragments that comprise the novel's structure provide the audience with substantive insight into the protagonist's self. One such fragment describes the protagonist's desire to become pregnant. Such information is jarring, though; we know that she "would test the soreness of her breasts with the tops of [her] arms at work" to see if she was pregnant, but we do not know her name (Hunter 57). Hunter achieves intimacy between the reader and the protagonist, but the pointed anonymity of the protagonist destabilizes perfect representation.

While Hunter is able to convey this type of familiarity with a character, she also uses characters as windows to the conditions of the global scale. The protagonist's in-laws, G and N, are two such sites of the global catastrophe being brought into contention with the individual. After the narrator gives birth to Z, she and her husband, R, flee to his parents' mountain home. Though they have the advantage of being out of the flood range, their group must seek out supplies from the local town. On one supply run, G is trampled in the crowd's panic for goods, and on another, N is killed. The narrator describes neither death extensively. But through these abrupt tragedies, Hunter conveys the larger collective scale simultaneously with the scale of the individual. The void of description of each tragedy subordinates explanation to the larger themes of the climate-changed world. Rather than providing the reader with satisfactory reports of how G and N died, Hunter uses staccato sentences. The cause of G's death is conveyed in the line, "Panic. Crush. G. Panicked. Crushed" (Hunter 23). We are oriented to the situation with the first two nouns. "G" is the turning point; the final two words describe with brutal finality her death. N's death is conveyed with a similarly blunt delivery. The narrator states, "Here are some of R's words for what happened: tussle, squabble, slaughter" (Hunter 41). Hunter flattens the emotional enormity of death into single-word thoughts, and the effect of this sparse detail is one of insidious anxiety. She conveys broad, opaque feelings of the context of G and N's death and invites the reader to look out into the chaos of the world beyond without elucidating how far it extends or what shapes it takes. In doing so, Hunter rejects the expected "heaping up of facts" that are expected of a realist novel, privileging brevity over concrete detail (Hebard 3). And even though the narrator has the opportunity to further characterize the catastrophes of the collective scale through her access to broadcast news, the only reference she makes to it is: "It is bad, the news. Bad news as it always was, forever, but worse. More relevant" (22). "Bad" is an even

vaguer descriptor than “panicked” and “slaughtered,” and her description fails to communicate the same devastating relevance as the deaths of G and N. Broadcast reports communicate the state of the collective, but G and N locate that disaster in their individual identities. Hunter’s strategy of collapsing together the individual and the collective is reminiscent of Lehtimäki’s reading of *Solar;* Lehtimäki argues that the protagonist’s “fears about climate change are not really global but very local, concerning his own body” (96). Condensing the chaos into the body of the individual makes the truth of the climate crisis seem tangibly real in a way that reports of global disaster cannot.

Despite the sparse details of their deaths, Hunter’s inclusion of everyday facts about G and N preserves their status as unique individuals and thus maintains the emotional weight of their loss. Without the specification of their personhood, G and N would be no more than narrative vehicles of the greater tumult beyond the narrator’s immediate setting. However, since the protagonist contemplates the posthumous fragments of G and N’s identities, they exist in the narrative as distinctive characters. She describes seeing “G’s mascara on the sink, in the sculpted well for the soap” and remembers that “N would raise his wide rear from the sofa and let out rippling farts” (Hunter 29, 42). These moments, mixed with mundanity and humor, are exactly the concrete attributes that remind the reader of G and N’s distinctive identities. In contrast, the broadcast news does not have make-up products lying in the bathroom sink nor does the narrator remember its gastrointestinal tendencies. But for G and N, Hunter draws on quotidian realist imagery, providing “immediate imitation of individual experience set in its temporal and spatial environment” (Watt 32). While the circumstances of their deaths are opaque, their personhood is vivid in its minute detail.

The weight of these deaths must then be further located in G and N's initials. After the narrator, R, and Z relocate to a shelter, R becomes restless and abandons their small family to escape the constant crowd of people in the shelter. The narrator considers the reasons for R's later abandonment of her and her son:

> G and N.
>
> The calamity, and the further calamity—disasters breed like rabbits—and now this, crowded by strangers every long hour. (Hunter 50)

R is overwhelmed by the recent trauma of losing his parents, and the narrator is able to concisely summarize his anguish with just their initials. These single-letter identifiers now convey not only distinctive identities, but they also express brutal deaths; the changed world's barbarity is evoked efficiently by the single initials of her deceased in-laws.

Given that G and N's home was the first refuge for the protagonist, their demise marks a crucial turning point in the progress of the narrative and would seem to merit a more elaborated description. However, when reckoning with the complications of scale, Hunter demonstrates a powerful narrative subversion that emphasizes the limitations of the human individual without sacrificing the qualities of distinctive identity. Timothy Clark points out in his discussion of anonymity in eco-fiction that compromising expectations of narrative resolution allow "Narrative forms to survive, but less a mode of immersive truth. . . than as an engaged, chastened reckoning with human finitude" (Clark "The Challenge for Prose Narrative," 105). They remain human and individualized, but their finitude is evident. It is in the initials that replace their names and the brief description of their untimely deaths. Neither the narrator nor R receives closure in any form: they were unable to bury the bodies, and the justice system cannot function with the country in shambles. The protagonist and her husband must press on through the chaos without

closure. And while evidence of the flood invades every aspect of the narrator's life, G and N's deaths make the climate crisis real.

Hunter's narrative, with its haunting lack of resolution, is not the only cli-fi novel that unmoors readers from narrative expectations. Madeleine Watts' novel *The Inland Sea* uses the same strategy of making climate disaster real through incomplete narrative structure. The novel recounts the life of an Australian woman, who, like the protagonist of *The End We Start From,* is unnamed. A languishing writer, the narrator of *The Inland Sea* is searching for purpose when she takes a job at Triple Zero as an Emergency Services Answer Point Representative. As an emergency call operator, the narrator enters a liminal space between raw crisis and urgent aid. The experience is understandably overwhelming, but the most disquieting aspect of the position is the constant lack of closure. She describes the disorientation of the process: "A shift of eight hours involved being dropped into emergencies and pulled out, hearing only pieces of whatever the story was" (Watts 17). These fragments of the story are the only references the narrator has to make sense of the mayhem on the other end of her phone line. The call center provides glimpses into individual lives, the fullness of which it is impossible to comprehend. Two particular aspects of the job contribute to the anxiety of the Triple Zero job: the namelessness of the callers and the abrupt termination of the crisis narratives.

Preserving the realism of the emergency calls without the benefit of proper names is a challenge in the novel. The narrator reveals that the operators "could see neither the names nor precise locations that might illuminate a caller's emergency, only their state and phone number" (Watts 17). Each caller is a unique individual, but the fullness of their identities is compromised by their anonymity. Watts' choice to make the narrator an emergency call operator ensures that the latter is constantly exposed to a wide array of collective chaos, none of which the narrator

can easily process. Without names, the only identifiers the narrator has to distinguish the crises of her workday are the types of crises themselves. "A car crash, a breakdown, asphyxia, a wrong number, a misdial, a car crash, then screaming" characterize a typical sequence of calamities (Watts 17). The asyndeton of this list emphasizes the cascade of disasters. The narrator has no names to organize or distinguish these events, just an assemblage of snapshots of the larger collective of human suffering.

Not having the larger picture of anonymous callers' emergencies takes a toll on the protagonist. The narrator must reckon with the knowledge that these individuals are real, distinct people suffering through life-changing emergencies that, for her, will never be resolved. The fragmentation of these stories upends a critical component of realism: wholeness. The realist narrative is a "form in which the parts and particulars are carefully incorporated into the final aesthetic effect of the work" (Hebard 6). Major "parts and particulars" of the calls are missing, and nowhere in the novel does any situation receive resolution. Instead, each caller leaves the narrator in a state of limbo as she is left to wonder if they received the help they so desperately needed. For seasoned operators, this emotional violence of being brought into the moment of crisis and then abruptly yanked out of it is not a jarring process, but the narrator does not have the same ease in managing the effects of experience. One of the veterans of the call center advises her to avoid personal connection with the individuals on the other end of the line (Watts 20). In the moment, the narrator agrees but later reflects that she is "not suited to this type of work, not having much in the way of appropriate boundaries between [herself] and the rest of the world" (Watts 21). Though she tries to insulate herself from the terror and tragedy, the free-flowing access to the larger collective's pain affects her mental wellbeing. The permeability of her identity becomes evident in her reflections of her first few months of working at Triple Zero:

> In January of the year I left Sydney I became afraid of walking too close to the gutter and the cars that veered around corners too quickly. I was afraid of cyclists, people in tracksuits by traffic lights, afraid of staircases and lit cigarettes and power lines. I was afraid of men. I was afraid of just about everything. (Watts 22)

The problem with internalizing the vast suffering of the collective becomes apparent. In excruciating detail, Watts imagines a life so overrun by fragments of suffering that fear manifests in every aspect of mundane life. The narrator's anxiety, fueled by exposure to the chaos of the larger collective, becomes painfully real and surreptitiously incorporates fear into everything from cyclists to staircases.

The violence of such intensive connection cut short is epitomized by a rattling call from a man from Brewarrina, who reports that he is bleeding profusely. After a few moments spent clarifying his location, the protagonist relates that "he whimpered, I'm fucking dying. . . and when the ambulance answered the line was dead" (Watts 37). Not only was the protagonist's interaction with the man's crisis left unresolved, but the narrative of the man's life was also cut alarmingly short. When the call ends, the narrator retreats to the restroom to process the pieces of tragedy she heard. The experience forces her out of herself: "what I felt on the floor staring at the ceiling was more like dissociation than focus" (Watts 37). The call from the Brewarrina man demonstrates what happens when the collective comes into conflict with the individual: individual identity is overwhelmed, and in the protagonist's case, displaced by the sheer pain of the collective. Although the caller was a fellow individual, his case is representative of the hundreds of catastrophes the narrator interfaces with each day. The overwhelming collective forces the protagonist's mind out of herself as the two cannot coexist; while the protagonist is a realistically developed individual, her identity is subsumed by the massive input from the larger

collective. As she attempts to ground herself amidst the turmoil, she undergoes an "exercise in cleaving [her] mind away from [her] body and floating away" (Watts 38). This detachment also represents an instance in which the narrative separates from the novel's realist foundations; realism values "ideals of totality and organic wholeness," neither of which is possible as the protagonist dissociates under the pressure of climate disaster (Hebard 3). The fragmentation of self is incompatible with realism, and as the representation of the narrator's identity strays from normative familiarity, so too does the reader's perception of the climate crisis.

Though common emergencies take root in the narrator's mind and threaten her integrity of self, the narrator's identity is especially challenged when climate change dictates the nature of the emergency calls. A spring heatwave triggers fires throughout Australia, and as the fire eats its way across the countryside, the magnitude of the collective overwhelms the narrator's boundaries of self. In describing the wildfire calls, the protagonist blends description of her experience with the experience of callers until she seems to be in two places simultaneously:

> The first panicked calls began around half past ten. Calls from Marrangaroo, Bilpin, Zig Zag. In nearly every case, the beginning of the fires looked the same. A smoldering turned into flames. Flames raced across dry grass. Husks of trees caught light, shuddered, and lifted. Leaves like sandpaper. High winds pushed the flame forward, the enemy of property and annihilator of possession. The fire came over the mountain. It embraced whole trees and homes and hillsides. The calls came thick and fast. Smoke, the voices said. Flames at the end of the street. Red glow on the horizon. Spot fires. Spot fires. Spot fires. There goes the shed. (Watts 230)

In this passage, the narrator seems to exist both in the call center and in the wildfire-ravaged landscapes. She imagines the fire in highly elaborated realist detail, informed by frontline

reporters with whose condition she empathizes greatly. Watts omits quotation marks, a stylistic choice that accomplishes two ends: emphasizing the narrator's permeable boundaries between herself and the rest of the world and blurring the line between descriptions from callers and descriptions the narrator generates on her own. It seems unlikely, however, that people rushed by the acceleration of crisis, would have the capacity to relate a piece of imagery as rich as "Husks of trees caught light, shuddered, and lifted" (Watts 230). Without the benefit of cogent narratives of the bushfires, it appears that the narrator is creating a vivid image of fires, locating her mind amid the flames while her body remains "there in the office, watching the television as [she] listened" (Watts 231). Once again, collective emergencies have sundered the narrator's identity from herself.

Far from hearing extensive narratives of the bushfires, the narrator receives the characteristic open-ended accounts of the disaster. Unlike Hunter, Watts does not locate the ramifications of climate disaster in two individuals in proximity to the narrator. Instead, the devastation initially manifests through the onslaught of individual strangers all reporting the same crisis. Only the briefest descriptions of anonymous callers characterize the individuals and their emergencies. One caller is, "home studying for my HSC," another can't get his texts to reach his wife, and another requests, "An ambulance, dear, my husband has asthma" (Watts 231). Under the same threat of the wildfire, each caller is living out their own narrative and the protagonist hears only a piece of each, but that piece is enough to remind her (and the reader) that every caller is an individual in the midst of crisis. The threat of the situations is established, particularized, and then left unresolved. There is no narrative resolution; instead, the emergency call format decenters the relative importance of the individual experience.

However, the nature of the climate crisis creates a scenario that differs from the narrator's usual experience in the call center. Paranoia from repeated exposure to daily catastrophes has infiltrated the narrator's mind, but the climate crisis affects her physical body as well. When her mind comes back to her body, the reunion locates her within the collective of individuals affected by the fire. She leaves work—the environment that engenders mental stress—but soon realizes that "being outside didn't make [her] feel better. The city smelled like smoke" (Watts 232). Before the wildfires, the collective had overwhelmed the narrator's identity by giving rise to constant anxiety and forcing her mind from her body. The ubiquity of the fires means that the narrator is now part of the collective emergency from which she was, only moments ago, experiencing from a distance. The narrator's new role as part of those affected by the wildfires is signaled by her novel use of the collective first person: "We could all see it was out of control" (Watts 233). Climate change creates a collective condition so pervasive as to impact the individual's physical sphere in addition to their mental landscape.

Watts' intensive description and use of the environment are particularly interesting since they represent two elements of literary realism working at cross purposes. In her novel, the particularity of place threatens to eclipse the individualism of the protagonist. The protagonist's identity is not changed by the setting; it is subsumed. Ian Watt establishes that "the characters of the novel can only be individualised if they are set in a background of particularised time and place" (Watt 21). The need for particularization is evident in *The Inland Sea;* the narrator's identity is defined in part by her location in Sydney, Australia. But climate change demands uneven narrative focus, and the balance between the individualization of character and the particularization of place is skewed toward the latter. The narrator describes how even indoors, "the smoke filtered into the room," suggesting that there is nowhere that she can escape the crisis

(Watts 232). It is a function of the narrative that the universality of the climate crisis supersedes the discrete boundaries of the individual self. As the fire rages across Australia and the boundaries of the narrator's identity begin to deteriorate, the novel's portrayal of "human finitude" becomes evident (Clark, "The Challenge for Prose Narrative" 105). The narrator's identity cannot compete with the totality of the climate emergency, and so the collective problem prevails over human individualism.

Watts' emphasis on setting is complemented by the privileging of the nonhuman. As human narratives are cut short, nonhuman entities assume anthropomorphized states of being in their relationships to humans and subduct human identity to the climate crisis. During the wildfire crisis, the narrator relays that "*Over* the voices on the phones I could hear the roar of flames" (Watts 231, emphasis added). The fire drowns out the voices relaying fragments of individual disaster narratives. Even early in her tenure at Triple Zero, during another heatwave, the narrator acknowledges the supremacy of fire over human connection. A woman from Lane Cove calls for the fire brigade and likens the present fires to the fires of 1994. The narrator yearns to commiserate with the woman: "Every part of me wanted to tell her that I, too, could remember the fires of '94. . . But I was not allowed" (Watts 34). The nonhuman emergency takes precedence over human connection, and neither woman gets to communicate the full story of their shared experience (Watts 34). Timothy Clark argues that eco-fiction conveys a "more post-human sense of the place of non-human agency in determining identity, personhood and relationships," and in the case of *The Inland Sea*, fire holds power over human-to-human relationships ("The Challenge for Prose Narrative" 94). Since the wildfires cut short narrative sharing, overwhelm human voices, and penetrate places of human refuge, their nonhuman dominance seems total.

As fire overrides the narrative course of two individuals in the novel, its agency raises an ontological question: Does fire's ability to compromise human relationships entitle it to an identity of its own? While the Anthropocene is a product of human culture, nonhuman agents execute devastation in a way that resembles human behavior. *The Inland Sea*'s narrator uses language typically reserved for humans when describing the fire, stating that the flames "embraced whole homes and trees and hillsides" and naming the fire an "enemy of property and annihilator of possession" (Watts 230). Both phrases attribute intentionality to the wildfires that they do not possess. The novel illustrates what Marco Caracciolo describes as narrative's ability to "break away from anthropocentric assumptions, particularly those that see human society as a metaphysically privileged form of collectivity" ("We-Narrative" 87). The fire receives rich, personifying descriptions, and as an entity, its narrative is decidedly privileged by the novel over that of the individuals whose lives it transforms.

Watts' portrayal of all-consuming fire communicates the ability of nonhuman, inanimate objects to savage the lives and minds of human individuals. Her narrative of nonhuman destruction, however, is told entirely from the perspective of the human. How might the narrative of the climate crisis be influenced by a nonhuman narrator? Kim Stanley Robinson's novel *The Ministry for the Future* takes up that exact question in short, first-person chapters. Code, the Market, the Photon, Carbon, History, Herd Animals—all these nonhumans adopt a unique tone to explain their identities. For example, Carbon conveys a lively personality, exclaiming to the reader, "You think your birth was hard—my mom exploded!" (Robinson 327). The voice of the Herd Animals, in contrast, is blunt: "We eat shit and we shit food." (Robinson 444). The first and last of these chapters, however, do not explicitly reveal their nonhuman personas. The first comes immediately after the novel's opening description of an unprecedentedly devastating

heatwave in India. Robinson focalizes the third-person narration of the Indian heatwave through Frank May, an American volunteer in Uttar Pradesh. Robinson spares no detail in conveying how the town has been laid to waste by the heat: “the stink of death, of rotting meat, could be discerned in one’s torched nostrils” (10). The heatwave kills twenty million people in India, and Frank is the sole survivor of the town in Uttar Pradesh. As the reader is left reeling from this graphic description of mass death, Robinson follows the devastation with a chapter comprising a dispassionate first-person passage:

> I am a god and I am not a god. Either way, you are my creatures. I keep you alive. Inside I am hot beyond all telling, and yet my outside is even hotter. At my touch you burn, though I spin outside the sky. As I breathe my big slow breaths, you freeze and burn, freeze and burn. Someday I will eat you. For now, I feed you. Beware my regard. Never look at me. (Robinson 14)

Given the context of the preceding chapter, Robinson seems to be personifying the Sun. He gives clues by referencing the Sun’s inner and outer heat and its control over the seasons. Furthermore, the beginning of the passage describes the sun’s cultural significance; the line “I am a god and I am not a god” references the Sun’s deification in mythologies (such as Greek and Aztec) while also acknowledging more secular understandings of Earth’s closest star (Robinson 14). The rest of the passage conveys a dispassionate dominance of the Sun over humanity. Stark assertions like “I keep you alive” and “Someday I will eat you” establish the Sun’s complete control over life on Earth (Robinson 14). Since this chapter comes after the tragedy of the Indian heatwave, these statements are codified by the detailed description of the Sun’s impact through the severe rise in temperature. The sun’s tone is largely indifferent as it recounts its absolute control over life on Earth, but the last two sentences establish a subtle, domineering tone: “Beware my regard.

Never look at me" (Robinson 14). Far from resembling a smiling cartoon on a cereal box, Robinson's portrayal of the Sun eliminates any benevolence from the Earth's life-giving star. Instead, these foreboding directives serve as indicators of the smallness of human life.

Robinson's strategy of presenting the Sun as a foreign, hostile, and sentient being embodies the essential effects of anthropomorphizing the nonhuman: defamiliarization and empathy. For Bernaerts, Caracciolo, Herman, and Vervaeck, defamiliarization posits a challenge to the known (and realist) qualities of objects and invites "readers to self-consciously attend to their expectations" in reaction to "strangeness or puzzlement" over such foreign entities (73). Empathy for nonhuman narrators is an imaginative exercise that involves the assumption of the "perceptual, emotional, or axiological perspective of a fictional character" (Bernaerts et al., 73). Both elements are necessary for the most complete experience of the nonhuman perspective. Regarding the Sun, readers are divorced from a conventional understanding of the Sun's ecological relation to the human species. This presentation differs significantly from *The Inland Sea*'s concept of the nonhuman; there, the description of the behavior of the inanimate is mediated by a human narrator, indicating the protagonist's awareness of the fire's dominance within the novel. In contrast, Robinson's treatment of the nonhuman is isolated from the larger plot of *Ministry for the Future.* The Sun narrates its own experience, speaking directly to the audience without the intervention or even presence of human characters. Instead, the inanimate objects speak directly to "you." This fourth wall break explicitly involves readers, prompting them to consider whether the sun is as hostile in reality as in the novel.

The chapter's ominous message is clear: relative to the Sun, humanity is defined by its vulnerability. However, the Sun is not the only nonhuman entity that bests humanity. Toward the

end of the novel, Robinson's final nonhuman-narrated chapter describes the weakness of the human:

> I am a thing. I am alive and I am dead. I am conscious and unconscious. Sentient but not. A multiplicity and a whole. A polity of some sextillions of citizens. I spiral a god that is not a god, and I am not a god. I am not a mother, though I am many mothers. I keep you alive. I will kill you someday, or I won't and something else will, and then, either way, I will take you in. Someday soon. You know what I am. Now find me out. (Robinson 492)

The identity of the last of the nonhuman narrators is harder to discern than the Sun's. However, Robinson alludes to the Sun's chapter to indicate what being asserts inevitable dominance over humanity. The most telling clue is the declaration "I spiral a god that is not a god, and I am not a god" (Robinson 492). Borrowing his phrase "god that is not a god" from the Sun's first words, Robinson informs his reader that this entity is part of our solar system (492). When combined with the line "I am not a mother, though I am many mothers," it seems that the only mother that orbits the sun is our home: Earth (Robinson 492). Though unlike the nurturing iconography of Mother Earth, Robinson's Earth employs the same indifferent tone as the sun: "I will kill you someday, or I won't and something else will, and then, either way, I will take you in" (492). This harsh imagining of Earth's consciousness assumes a role reversal; in the long run of time, the Earth has dominion over humanity, a notion that challenges fundamental Western precepts of the supremacy of the human and defamiliarizes the reader from the security of a conventionally benevolent (or even submissive) Earth.

Though both entities differ significantly in the specification of their relation to humanity, these passages establish that they are not simply nonhuman; they are more-than-human. These chapters communicate the supremacy of the Sun and the Earth, entities that determine the course

of all life. These nonhumans assume narrative agency by addressing their audience with the "I," displacing the human individual as the only entity in the novel that can make use of the first-person singular pronoun. By doing so, they effectively reveal "the fragility and permeability of the culturally drawn boundaries of the (human) subject" (Caracciolo "Object-Oriented," 47). The Sun and the Earth are individuals of sorts; they are not the realist character constructions that make use of extensive detail—it is difficult indeed to imagine the Sun as a real person—but they nonetheless have distinctive voices that assert their identity. And that identity surpasses the limits of the human. They demonstrate that in Robinson's climate-changed imagining of the world, the barriers of individuality have been compromised. Natural entities that fall beyond human control assert their identities by directly addressing a human audience, upending notions of the conventional subject-object relationship that privileges the human. Robinson demonstrates how, in the Anthropocene, human relations with the nonhuman are more likely to resemble a subject-subject interaction. By giving voice to these nonhuman entities, he creates the opportunity for nonhumans to redefine the criteria of "identity, personhood, and relationships" relative to humans (Clark "The Challenge for Prose Narrative," 94).

The nature of this subject-subject relationship further defies normative expectations of the nonhuman by shuffling the hierarchy of beings. While giving voice to the nonhuman is sometimes an opportunity for downtrodden nature to entreat humanity to "widen our sense of identity to embrace human and non-human others, and foster a sense of care," the nonhuman makes no such appeal in Robinson's novel (Goodbody and Johns-Putra, "Introduction"). His imagining of the nonhuman does not put nature in a subordinate position to the human; he instead conveys the opposite. Instead, the "violation of conventions" is highlighted by this "unnatural narratology" (Bernaerts et al., 74). The Earth and Sun ask nothing of humanity, but

they lay the facts of their eminence before the audience plainly: one day they will "eat" us or "take [us] in," two endgames that eclipse human agency (Robinson 14 and 492). The collective of agentive forces in the climate crisis is expanded to prompt new conceptions of "reality, identity, existence" (Bernaerts et al., 75).

Critically, the declarations of the Sun and Earth do not shift responsibility for the condition of the Anthropocene to the nonhuman. In establishing the dominance of the Sun and Earth, Robinson avoids using antagonistic or scheming language. While it is true that humanity's agency pales in comparison to that of the Sun and Earth, neither is responsible for the climate crisis. In fact, Robinson's portrayal highlights their neutrality in the course of modern climate change—neither the sun nor the Earth has an agenda to preserve or raze humanity. Instead, both entities' indifference reminds readers that the narratives of these nonhumans are larger than human outcomes. In the unfamiliarly dispassionate regard of the Earth and Sun, humanity is made vulnerable and finite.

Humanity is not, however, removed from the narrative altogether. As Le Guin's "The Carrier Bag Theory of Fiction" so aptly puts it, cli-fi has "room enough to keep even Man where he belongs, in his place in the scheme of things" (356). The Anthropocene demands balance between the local and the global, and in fiction this condition manifests as simultaneously communicating the smallness of the human individual and expanding conceptions of the agentive collective to include nonhuman inanimate objects. Rather than abandoning realism, climate fiction authors like Hunter, Watts, and Robinson draw on detail to situate their audience, only to invert expectations and eject readers into new modes of thinking that meet the challenge of scale head-on. Nameless narrators and an articulate Sun and Earth are incompatible with notions of

normalcy, but these realist upheavals are effective strategies, ones that embrace the strange and improbable reality of the climate crisis.

Chapter Two
Understanding the Indefinite: Value, Children, and Time

> *There is a real sense in which it is far easier to conceive of "forever" than very large finitude. Forever makes you feel important. One hundred thousand years makes you wonder whether you can imagine one hundred thousand anything. It seems rather abstract to imagine that a book is one hundred thousand words long.*
>
> - *Timothy Morton, "Temporal Undulation"*

Introduction

Despite its apparent friction with the enormity of climate change, the realist climate novel nonetheless proves itself sufficiently capacious to engage the tensions between the collective and individual scales while also grounding the audience in a known environment. The narrative structure of a realistic novel is often a comforting, familiar element that orients the reader in a new story landscape. Narratives are a tool for organizing value, of distilling long ranges of time into meaningful turning points and important players. Regardless of which characters are set to navigate the plot, there is a typical certainty of the progression of events: a beginning, or orientation to the novel's world; a middle, in which characters develop through tribulation; and an end, the final moments of the story that grant meaning to the suffering and tribulation of the preceding stages. Often, the end is the arbiter of the values set forth by the narrative. The trouble with climate change is that it chafes against such neat categorization of narrative junctures. Geologists, historians, and anthropologists all hotly debate the start of the Anthropocene (Davis and Todd). Ambiguity about how long we can live under climate-changed conditions obfuscates any concrete middle. And since Earth's climate fluctuates as a function of its geologic and atmospheric systems, the climate will be undergoing some form of change so long as the Earth is extant. Thus, climate change is ill-suited to narrative conventions, and climate fiction reflects this friction between subject and realist representation. As Frederic Jameson writes, "the deviation of

the individual text from some deeper narrative structure directs our attention to. . . changes in the historical situation which block a full manifestation. . . of the structure on the discursive level" (136). In the case of cli-fi, the "historical situation" is the Anthropocene, a geological epoch that resists the replication of all typical parts of the narrative, particularly the end.

This lack of an ending is most troubling when considering the temporal scale of the novel. The passage of time is foundational to the faithful novelistic representation of reality; Watt writes that "the novel. . . has interested itself more than any other form in the development of its characters in the course of time" (22). Without a traditionally reliable narrative structure, climate change narratives are incompatible with conventional time scales. And yet, as is the case with the spatial conflict of the climate crisis, cli-fi novels engage the complications of temporal scale created by their subject. In this chapter, I explore how authors Kim Stanley Robinson and Lydia Millet make sense of the future and climate change in their respective novels, *The Ministry for the Future* and *A Children's Bible.* Both authors, though they embrace the realist convention, confront the complex representation of the time of climate change. In his novel, Robinson opts for a more literal and pedagogical route; his discussion of the economic discount rate forces readers to consider what price we put on the future and the consequence of our valuation process. Like Robinson, Millet offers commentary on the evaluative narratives that drive our future action. She takes a different approach, however, instead figuratively representing the future using a common synecdochic figure: the child. The treatment of time in either novel is undramatic; there are no massive time jumps, parallel narratives, or rejections of basic temporal conventions. And yet both authors manage to bring together the present and the long climate future, comingling their concerns and outcomes in a single narrative. The lines between the long-term

and the immediate begin to blur as time scales converge, foregrounding the ways that our present value narratives threaten the future collective.

Climate Change and Temporal Scale

While it may be impossible to conceive of an "end" to climate change that isn't the extinction of the human species, climate authors nonetheless insist on following the logic of the climate crisis into the murky future. Humans struggle to consider the long run of thousands of years; as Jenny Wüstenberg observes, the causes (and some of the effects) of climate change "move slowly, without the flashy drama that can focus our minds in the midst of 24-hour news cycles and social media distractions." As a result, authors must break with formal realism to stretch the novel's temporal jurisdiction to include the distant future. In doing so, novelists collapse together time scales. By nature, these scales have undefined start and endpoints; there is no set date for the arrival of the future. It is useful, then, to view time scales as flexible ranges that represent significant temporal shifts. Timothy Clark creates a rough temporal scale framework that conveys this idea, imagining three scales in which to read an environmental narrative. The first scale is the personal, in which a "critically naïve" reading considers the protagonist's immediate drama, following the course of events over a period of several years (Clark, *Ecocriticism on the Edge* 99). The second scale is what Clark refers to as a "historical period of some kind" (*Ecocriticism on the Edge* 100). It typically encompasses a national focus during the span of a few decades. Even with its extended view, this second scale cannot begin to address the temporal demands of climate change. Instead, Clark's third scale is best suited to that task. The hypothetical third scale is "the one at which scale effects and a certain impersonal ecological dynamic start to become visible and shade out more conventional considerations" (Clark, *Ecocriticism on the Edge* 100). As with the representation of the spatial scale of climate

change, the temporal scale of the crisis requires the individual to be secondary to the collective. To "shade out more conventional considerations" is to step beyond the parameters of realism, destabilize the primacy of the individual, and privilege the future collective (Clark, *Ecocriticism on the Edge* 100). For the length of this scale, Clark somewhat arbitrarily chooses 600 years, splitting the purview to include 300 years before and after the events of the story. The length could be exploded to include thousands or hundreds of thousands of years into the future, a range that is better suited to the slow movements of the geologic processes that serve as the mechanisms of climate change. I have provisionally chosen to label this scale the "indefinite," a representation of the future that we cannot envisage.

Clark rightly describes the third scale as "the difficult one" (*Ecocriticism on the Edge* 100). Even the thousands of years that come before (whose events are largely known and organized by historical narratives) are hard to process as a holistic period. Extrapolating the present forward to imagine several thousand years is nearly impossible. Why does this inability so severely compromise our understanding of climate change? For one thing, fully appreciating the stakes of a future collective is unlikely when the qualities of that future cannot be envisioned. Thus, to convey the implications of present actions on the future, climate authors choose to focus attention on the longer side of the long-term without losing touch with the present. Meaningful consideration of the longer time scale in fiction cannot occur without grounding in contemporary context. Clark discourages climate fiction that bypasses the present day in favor of a "straightforward depiction" of dystopian far-future, an approach that circumnavigates the complications that the genre is meant to engage (Clark, *Ecocriticism on the Edge* 79). Instead, a richer conversation arises from a work that enmeshes the interests of the personal or historical period scales with the indefinite. And while a clear picture of the future never fully emerges,

climate fiction is capable of moving toward an understanding that embraces the complexities of scale to better reveal the stakes of the crisis.

Discounting the Future

Given the context of a global economy dominated by neoliberal capitalism, one of the most efficient ways to collapse time scales is to put a dollar value on the future. Just how much is the future worth in present terms? The discount rate answers this rather abstract question with a single number. As defined by the Handbook of Public Economics, it is "the rate of fall in the value of the numeraire against which goods are valued each year—this rate is used to convert shadow values in different years into common units this year or present values" (Drèze and Stern 967). To figure the value of the future, the discount rate asks: how much is a dollar in the present worth in the years to come? At a high discount rate, a single dollar in the present might be worth one hundred dollars in the future. At a lower discount rate, that same dollar might be worth thirty dollars. Under the latter rate, the value difference between the present and the future is less drastic. It indicates that the unit of valuation remains more consistent as time passes and that we value the future more similarly to the present. Using the high rate, in contrast, indicates how sharply value declines over time. As a currency exchange between time periods, the discount rate governs how value increases, decreases, or remains stable over time. If one hundred dollars in the future are required to reach the same value of a dollar in the present, we have discounted the future dramatically. While blunt, the discount rate's strength lies in its ability to reduce the complexities of valuation to a representative statistic. It brings together Clark's first scale of personal concerns with the longer range of indefinite scale by converting the latter into relevant present amounts.

This translation of value is the primary undertaking of Robinson's *The Ministry for the Future.* The eponymous agency of the novel is created "to advocate for the world's future generations of citizens, whose rights, as defined by the Universal Declaration of Human Rights, are as valid as our own" (Robinson 15-16). The Ministry must liaise between an unborn collective and the present collective of decision-makers who are steadily decimating the former's future. Discussions of discounting the future form the foundation of the Ministry's negotiations. The Ministry comprises several experts, ranging from a legal specialist to an agricultural expert to an artificial intelligence authority. The economic executive of the agency is Dick Bosworth, an Australian economist who explains the discount rate to the head of the Ministry, Mary Murphy. He explains that the rate functions as a representation of how we understand future value, and when Mary prompts him, elaborates on the reasoning behind a given rate:

> Dick: . . . It's a number put on an ethical decision.
>
> Mary: A number which can't be justified on its merits.
>
> Dick: Right. This often gets admitted. No one denies future people are going to be just as real as us. So there isn't any moral justification for the discounting, it's just for our own convenience. (Robinson 131).

Dick's statement that the future collective will be "just as real as us" aligns with the Ministry's mission statement, which calls for the equivalence between the rights of the generations to come with the rights of the present population. One theory, then, is that the Ministry should operate with a discount rate of zero. Dick explains that such an approach would be impractical: "if you rate all future humans as having equal value to us alive now, they become a kind of infinity, whereas we're a finite" (Robinson 130). By articulating the conflict of the discount rate, Dick throws the problem of temporal scale into sharp relief.

Keeping infinity as the representation of the future is much more convenient for the human mind. Forever is an abstraction of time with which we have become comfortable. Timothy Morton observes that "it is far easier to conceive of 'forever' than very large finitude. Forever makes you feel important" (60). The individual is easily lured by the opacity of infinity in which the image of progeny is of blank faces and formless lives. The discount rate, however, destabilizes that familiar illusion, importing stakes into the discussion of the future and demanding a concrete discussion about the real people to come. The indefinite third scale must somehow become tangible.

Future-Oriented Metafiction

Achieving this tangibility is contingent upon the narratives that surround the discount rate. For the discount rate to successfully meld the personal and indefinite time scales, it requires a compelling narrative about how we value future generations. The lack of imperatives or "moral justification" in setting the discount rate creates an opportunity for the manipulation of ambiguity (Robinson 131). Dick tells Mary that we need "a finer instrument than infinity when calculating costs and benefit," but a number alone will not hold more utility than the infinite (Robinson 130). The discount rate is the instrument we need, but crucially, it is tuned by the story that sets its value.

Perhaps the most compelling demonstration of this process of narrative valuation is the narrativization of human history. Amy Elias states that "we must shape the past into history, and when we do this, we inevitably use the tropes fundamental to narrative construction" (300). In this respect, the future and past are not so different. Both are understood on the largest of time scales, and both rely on narrative interpretation to be meaningful in the present. Elias contends that the past "can only be *comprehended through* narrative but. . . can never be *reduced to*

narrative;" the future is much the same (300). The past and the future differ, of course, in that the former has already taken place and that the latter has yet to occur. But the surprising similarity between is the two is their dependence on narrative for intelligibility. Even though the events of the past are well beyond human influence, their presentation is malleable to the narratives imposed upon them. Adeline John-Putra outlines the process of influencing this presentation and its impact on the reader in her proposal of an "Anthropocene realism" ("Climate and History," 247). She employs Walter Benjamin's idea of the historical image, an arresting perception of a historical moment that "has been made *legible* to the present" ("Climate and History," 259). Anthropocene realism uses this historical image, which is informed by the interpretation of the present individual, to jar the reader out of the "human-historical dimension of experience" and "into awareness of the myriad connections that constitute species history" ("Climate History," 257 and 259). This species history corresponds to the indefinite scale, a removed perspective of the larger human project in the geologic context of the Earth. She states that in Anthropocene realism, "the reader is engaged on a journey. . . that might productively be brought to a grinding halt" by the subversion of conventional realism (258). I extend Johns-Putra's argument by contending that the productivity of the jarring moment is to create an opportunity for the reader to recognize the values put in place by the narrative being advanced by the text.

There is a plethora of these historical narratives advanced by literature, each with new ideologies and agendas. And while they may vary in their viability, they nonetheless advance a story and a set of values. It is critical to recognize that histories are often considered to be "culturally meaningful" rather than empirically true, a distinction that underscores their ties to the subjectivity of narrative (Elias 300). Within climate fiction, this contrast is helpful when imagining the future. Waiting for an empirically true representation of the future is a futile

endeavor, but embracing the culturally meaningful values and superimposing them on scenarios is an actionable task for authors. Robinson engages culturally meaningful values head-on with the discount rate and its implications. In his chapter on "The Masque of the Red Death Syndrome," he employs metafiction tactics to examine the posture of the global capitalist economy toward the future. The unnamed narrator of the chapter begins an explanation of the syndrome, a fictional "pathological reaction" to the severity of climate change (Robinson 297). Following an explanation of the Edgar Allen Poe story that serves as the inspiration for the ailment, the narrator states:

> The syndrome is thus an assertion that the end being imminent and inevitable, there is nothing left to do except party while you can. The late middle ages' dance of death, *danse macabre* in French, *Totentanz* in German, is an earlier example of this response, in this case associated with the Black Death; it is likely to have been one of Poe's inspirations (Robinson 297).

The narrator's exposition exercises the same casually pedagogical tone Dick used in his elucidation of the discount rate. Employing the style of textbook writing, the explanation incorporates historical facts with little inflection. This chapter is meant to instruct the reader; it is an arrhythmic insertion into the movement of the plot. The chapters on either side of the discussion of the syndrome detail Mary's evacuation into the Alps after threats to her life become urgent. Just as the reader is introduced to this new danger in Mary's life, the plot comes to a grinding halt and Robinson turns attention to a seemingly unrelated topic. After the abrupt instructive chapter, Mary's journey into the Alps reinvigorates the plot. The effect is jarring but necessary. Robinson intentionally pulls the reader out of the thriller pace of the novel and into a

miniature lecture on the justification of indulgence under the despair of the climate crisis (an image that Lydia Millet vividly constructs in her depiction of the parents of *A Children's Bible*).

This chapter is hardly a unique feature of Robinson's novel; there are several instances in the text when he suspends the plot to explicate the intricacies of an economic principle or political policy. However, in this case, he devotes the educational break to an exploration of the consequences of the discount rate. The Masque of the Red Death Syndrome encapsulates the outcome of a narrative that supports an extremely high discount rate. Time scales are ineffectually melded; instead of bringing the indefinite future together with the personal scale, the latter entirely eclipses the former. Robinson did not need to invent a new name for a pathological response to disaster; as the passage indicates, the *danse macabre* was already an apt description of the phenomenon. But by invoking the "The Masque of the Red Death," Robinson can better illustrate the impact of narrative. The masquerade ball is explained as a way to "distract themselves, or to display indifference or defiance to their eventual fate" (Robinson 297). The partygoers of the story operate with an extremely high discount rate, and their frivolity is harshly illuminated when death arrives at the party in full costume. These people tell themselves a story, one about the futility of holding out hope for the future. That narrative prompts them to behave as though the future holds no value, and they suffer the consequences.

Elias' discussion of metafiction has considerable bearing on this fourth-wall break. She argues that "Historiographic metafiction does not point to the historical past and attempt to render it realistically, but rather points to our *discourse* about the past" (302). Similarly, Robinson's future-oriented metafiction is concerned with discourse about the future and its implications. Here, Robinson mobilizes both form and content to the end of alerting the reader to the values being advanced by the narrative of The Masque of the Red Death Syndrome. Through

his metafictional style, the form of the chapter removes the reader from the flow of the plot. And by way of the chapter's content, he critiques a specific perspective of the future, the self-fulfilling prophecy that resistance is futile and that the last years should be devoted to indulgence. It doesn't matter that The Masque of the Red Death Syndrome is not a real, faithful representation of a future reality; it is a tool for Robinson to raise the reader's awareness in an exercise in self-reflection and a manifestation of the Anthropocene realism and its "jolt out of convention" that Johns-Putra described ("Climate and History," 262). Srinivas Aravamudan describes the phenomenon that Robinson critiques as "catachronism" (8). This "inversion of anachronism. . . re-characterizes the past and the present in terms of a future proclaimed as determinate but that is of course not yet fully realized" (Aravamudan 8). It is the process of jumping to conclusions and using those judgments to inform present action in a demonstration of an unsound decision-making process.

Collapsing the Personal and the Indefinite through Narrative

This discussion on The Masque of the Red Death Syndrome is thus Robinson's warning about the unsuccessful merging of timescales. By writing off the future catachronistically, present individuals obliterate the indefinite scale and privilege the personal time scale at all costs. What, then, would a successful merging look like? Jenny Wüstenberg writes:

> In order for policy making and mass behaviour to change, the threat of climate change and species extinction has to become impossible to ignore. For this to happen, we need to develop an emotional, rather than merely intellectual, relationship with the planet and its future inhabitants. How can we understand "never again" in relation to human-made environmental devastation?

Robinson provides an answer in the course of the novel's central plot. An intrinsic sense of the value of future generations motivates *The Ministry for the Future*'s two main protagonists, Mary and Frank. As the head of the Ministry, Mary's job requires her to operate with a low discount rate. In contrast, Frank's motivation comes from the trauma he experienced in the Indian heatwave.

Their plotlines converge when Frank kidnaps Mary at gunpoint in her Zurich neighborhood. Frustrated by her agency's apparent lack of action, he interrogates her about the Ministry's activities. When she explains their work with predictive models, he seizes on her admission, stating, "You know. *You know the future. . .* And yet you're not doing anything about it" (Robinson 96). Frank assumes that even if the Ministry has a low discount rate, they aren't implementing it; he believes there is a discrepancy on the scale in which they understand the problem and the scale on which they act. He shares his experience in the heatwave with her, trying to forge an "impossible to ignore" emotional connection (Wüstenberg). After steadying himself from the impact of recalling the trauma, he says, "'Everyone died. I died. Then they brought me back" (Robinson 94). Frank sees himself as a ghost, as someone with no personal scale that merits attention. Instead, his entire focus is on the future. The stakes of the discount rate are all-encompassing in his life, driving him to violence.

So while Mary and her team had a theoretical understanding of the indefinite scale, Frank's intervention with the story of his suffering makes it real. With a morally dubious approach, he forces the future into Mary's personal time scale and makes its stakes real. The effect is profound; she schedules a meeting with her right-hand, Badim Bahadur, and tells him she thinks the Ministry needs a black wing to advance the cause in ways that the public agency cannot. To her shock, he reveals that the Ministry already has one. Within the Ministry,

operatives have sabotaged coal plants, tampered with finances, and wielded intimidation tactics against powerful players. It is this last strategy that Mary balks at:

> "I just had that done to me," she said. "That man wanted to scare me."
>
> "It sounds like it."
>
> "It worked," she said, looking at him.
>
> He looked back, letting her think that over. (Robinson 114)

Robinson demonstrates the power of the emotional relationship that Wüstenberg identifies as necessary. Fear is a powerful motivator. Frank forced Mary to revise the narrative she tells herself about her Ministry's success and behavior with his own story. Mary is spurred into action; after her conversation with Badim, she becomes loosely involved with the black wing—her position as Ministry head prevents her from knowing too much—and doubles down on the Ministry's official efforts.

The confluence of the narrative arcs pays off— after Frank is apprehended, sent to rehabilitation therapy, and returned to regular life, he and Mary discuss the Ministry's successes. Mary and Frank have a strange relationship, one that evolves from her visiting him in prison to her visiting his hospital bed when he is diagnosed as terminally ill. He becomes a sort of confidant for her, and they become comfortable enough with one another that he sees fit to joke: "Now you've got me kidnapped" (Robinson 494). Their conversations in his hospital room represent the full circle of their narratives. Frank first came to Mary in outrage, demanding action. At the end of the novel, Mary comes to him, sharing the fruits of his effective (albeit terror-inducing) initiative. Atmospheric carbon dioxide levels are falling, and the world has largely transitioned to renewable energy. Frank successfully brought the future to bear upon the present. He remarks to Mary:

> "I'll be sorry not to see what happens next. It sounds like things are getting interesting."
>
> "I think so. But you know. No one will live long enough to see an end to it. . . Something this big is going to go on for years and years."
>
> "Centuries."
>
> "Exactly."
>
> He thought it over. "Even so. The crux, you called it once. The crux is a crux. You might see an end to that anyway." (Robinson 494-495)

The two characters acknowledge the supremacy of the indefinite scale and how it will stretch long beyond their lives. They have a common understanding now about the value of the future and the action it requires. And they both acknowledge that there is no end to the narrative in which they have each had a role; there is no resounding conclusion to the struggle. The attention remains on the generations to come. But this conversation is nonetheless significant as a milestone: the stakes of the indefinite and the personal have been successfully combined. And as though waiting for that resolution, Frank passes away soon after their conversation. His death marks the close of his character arc, the satisfactory conclusion to the conflict of scale in his development. However, at this point in the novel, he is not the primary protagonist; Mary is. One might imagine their character arcs as a horizontally stretched "x." For the first part of the novel, Robinson privileges Frank's narrative and the fallout of his traumatic experience in India. Simultaneously, he introduces Mary as the Ministry's head. When their trajectories intersect, however, they exchange positions of narrative importance. By Frank's death, Mary has assumed the role of primary protagonist, propelling the plot forward. They have both made it to a "crux" in the climate crisis, but through Mary's character, Robinson reminds us that challenges persist.

The Ministry for the Future collapses scale through narrative and representations of the discount rate. As a result, future generations have a stake in the course of present decisions. Those generations are, however, largely absent from the novel. Though Frank has two stepdaughters, they contribute to the novel as factors in Frank's development rather than acting as focal representatives of the future. This absence raises the question: what might the children, the generations who will live out the worst of climate change, think of the future?

The Acceleration of Maturation

Lydia Millet's *A Children's Bible* also embraces the challenge of collapsing together time scales to reveal the significance of narratives of value, but rather than taking Robinson's literal, educational route, the novel turns to metaphor. As indicated by the title, the figure of the child is integral to the novel's progression and its commentary on climate change. Children often act as stand-ins for the future. Just as a dollar amount calculated by the discount rate concretizes future value, children put a face to future generations. In her discussion of climate change and posterity, Johns-Putra writes that the figure of the child in climate discourse is "a convenient signifier" that serves as a "synecdochic representation of future generations and readily conjures up an impulse toward protection, shelter, and guardianship" ("Borrowing the World," 2).[2] Present children are a concrete touchstone in the crisis. Rather than engaging the indefinite time scale, people turn to

[2] Here I draw on normative conceptions of the figure of the child and its deployment as a stand-in for the future. These conceptions have been vigorously examined and challenged by exponents of queer theory who contend that children are not the sole universal representation of the future. As Lee Edelman observes in *No Future: Queer Theory and the Death Drive,* "queerness names the. . . side outside the consensus by which all politics confirms the absolute value of reproductive futurism" (3). Similarly, Kathryn Bond Stockton rejects the "normative child" figure and its grounding in innocence (30). However, as I argue more extensively in the third chapter, comedic climate fiction is opposed to the notion of the death drive. Instead, the persistence of the human species is fundamental to the realist comedic climate fiction I discuss in this study. The normative reproductive futurism of the child is also a fundamental aspect of that continued survival. Though potentially flawed, for the purposes of this argument, the normative child figure necessarily represents what has been lost to climate change. And while an in-depth examination of how climate change might queer the figure of the child is a valid and compelling extension of these critiques, it is one that lies beyond the present inquiry.

the future of their children, often considering the historical period their progeny will enter and not much beyond that. Adults often channel their anxiety into the protection of and provision for the youngest generations of Earth, missing the long-term, indefinite implications of climate change. Johns-Putra goes on to argue that the climate novel overcomes this basic tendency to reduce climate concerns to the more manageable tasks of parenthood. The cli-fi novel is an arena "in which collective anxiety around the environmental crisis of climate change takes centre stage, rather than being bypassed or ignored" (Johns-Putra, "Borrowing the World" 8).

The center stage of *A Children's Bible* showcases a particularly powerful reconsideration of the figure of the child. Millet's Bildungsroman refuses the interpretation of the child that makes youth the recipient of adult worry and care. Instead, the central group of adolescents strikes out in independence. The narrator of the novel, Evie, is a teenager with a nine-year-old brother, Jack. Although they are vacationing with their parents, Evie and Jack largely fend for themselves alongside their fellow adolescents. Their parents, along with the rest of the adult contingent, have descended into decadent indulgence that inspires contempt in their children: "Our parents, these so-called figures of authority, roamed [the great house's] rooms in vague circuits beneath the broad beams, their objectives murky" (Millet 3). Millet sets the tone of the novel early on, establishing that the traditional, normative relationship between guardian and child of responsibility and dependence has been discarded. Instead, these are children that hold a repugnance for their parents:

> The future flew past in a flash of grim. The clock was ticking, and I didn't like that clock.
>
> Yes, it was known that we couldn't stay young. But it was hard to believe, somehow

> . . . We had the vigor of those freshly born. Relatively speaking. And no, we wouldn't be like this forever. We knew it, on a rational level. But the idea that those garbage-like figures that tottered around the great house were a vision of what lay in store—hell no . . . They shamed us. They were a cautionary tale. (Millet 13)

The acceleration of time is a fate worse than death for the children. Their desire to distance themselves from their parents overwhelms any hope or excitement they may hold for the future.

In response to the adults' incompetence, the teenagers demonstrate surprising social intelligence in their interactions with their parents. They know how to get what they want. Evie states early in the novel that they "were strict with the parents: punitive measures were taken" (Millet 11). The idea that the children would have enough control over their parents to determine what approach was best to take in disciplining them demonstrates mature strategizing. However, their execution better reflected their youth; punishments consisted of "Thievery, mockery, contamination of food and drink" (Millet 11). They implement a merit system among themselves and use property destruction as the weekly incentive. But their disrespect toward the parents does not extend to all things; they have a deep appreciation for nature and are familiar with its bounty and danger. When they camp on the nearby beach, they make sure to "leave no trace" out of respect for the land (Millet 48). These children are not average delinquents; there is intentionality and wisdom behind their behavior.

Wisdom proves especially useful for Evie, who in addition to being a member of the teenage collective, also finds herself in a parental role. She fills the void in Jack's life that her parents have left as they embrace self-gratification. He actively seeks comfort from her, and she cares for any physical injuries he accumulates. She states that "When he contracted poison ivy he came only to me, refusing to ask a parent for assistance" (Millet 16). Jack's choice to seek out

his sister keeps them both in the game of hiding their parentage from the other children, but also reveals how much faith he has in Evie to protect him. And the fact that their parents are fine with their son's apparent detachment from them as caregivers further cements Evie's position in his life. She confronts their mother about the latter's lackluster parenting in an absurd conversation:

> "I know he's safe with you. Mature beyond your years."
>
> "Oh please."
>
> "Even your kindergarten teacher said you were extremely precocious. Mentally *and* emotionally. They wanted to put you in fourth grade! When you were six years old!"
>
> "You're flattering me to try to avoid responsibility? That's low." (Millet 84)

Though Evie dismisses the excuses as blandishments, her mother's reaction is a revealing demonstration of how her mother uses narrative to justify the burden she places on her daughter. She fully endorses Evie aging herself up mentally and unwittingly articulates how Evie collapses together time scales in her own person. By citing how Evie is "Mature beyond [her] years," her mother seems to be celebrating how her daughter's childhood has been cut short, ignoring how Evie's precociousness is a response to her mother's incompetence (Millet 84). The idea that climate change forges old souls out of children is not a new one, however. Octavia Butler's *The Parable of the Sower* (1993) demonstrates how protagonist Lauren Olamina's disciplined preparedness is ahead of her fifteen years but not out of place in her climate-ravaged world. In contemporary society, sixteen-year-old Greta Thunberg put aside her own education to raise awareness about the mass extinction that is already upon us (Hesse). While these young women are remarkable examples of youthful resilience in the face of climate change, they do not assume this additional responsibility eagerly. The acceleration of maturation is the product of a reluctant resolve, a decision to do what older generations will not. All three of these women grew to be

mature beyond their years in response to climate change, but their sacrifices are seldom acknowledged.

Losing the "Swing" of Youth

More specifically, Min Hyoung Song addresses how climate change disrupts expected temporal patterns in his book *Climate Lyricism.* In his chapter "Scalar Variance," he examines the importance of swing in climate poetry. He writes that "Swing operates not at the level of sense or meaning but at the level of pattern. . . the motions it conjures can reflect when the patterns start to go awry, when they lose their shape and begin to erode, as in the present" (Song 134). It is an element that is more common in poetry than prose, but that nonetheless has great bearing on literature that engages climate change. Song queries, "What kind of swing is possible when you can't even rely on the seasons to tell you what time of the year you're in? Because of climate change, are the years losing their swing?" (134). Because of climate change, is childhood losing its "swing?" Under the ever-present threat of the climate crisis, the tempo of a child's life is sped up; there is no measured progression between developmental stages. And this pressure is one that, unlike war or poverty, does not have a clear end in sight. Climate change holds the potential to compress the childhoods of the global collective of present children and the generations to come. The personal scale flattens under the weight of a climate-changed future. The disruption of swing leads to a sixteen-year-old parenting a child seven years younger, and climate change warps another pattern of life.

Millet enables us to track this acceleration within the progression of the novel. As part of her parenting duties, Evie feels the need to tell Jack about the reality of the climate crisis. This is not a conversation she broaches lightly, in part because she is still wrestling with the crisis on her own:

> At that time in my personal life, I was coming to grips with the end of the world. The familiar world, anyway. Many of us were. . . We knew who was responsible, of course: it had been a done deal before we were born. (Millet 27)

Here, Evie simultaneously contends with all three scales: the personal, the historical, and the indefinite. At that moment in her life, she realizes how bleak the indefinite future is and considers the casual relationship between the historical past and the climate crisis. Her calm tone provides further evidence of her maturity and resilience; she does not agonize over the impending end of the world but faces the "done deal" with acceptance. She does, however, worry about having to break the news to Jack. Her brother is "a sensitive little guy, sweet-natured. Brimming with hope and fear" (Millet 27). She doesn't want to rob him of his innocence, to be the one to disrupt the swing of his childhood. But Evie resolves to tell him, prompted by the thought that if he found out through some other source before she could break the news, she would "end up looking like a politician" (Millet 27). Her astounding ability to consider the intricacies of her relationship with Jack and his emotional and mental development affirms that her parental role is one of emotional involvement as well as physical care. After Evie tells him, she states, "Later he wiped his eyes and squared his thin little shoulders. My Jack was a brave boy" (Millet 43). Those "thin shoulders" must now bear the burden of the reality of climate change, and though Evie is hesitant to do it, she has brought about a turning point in Jack's development. He has begun to mature beyond his years, abandoning the swing of his youth out of necessity.

The Consequences of Inflexible Scale

The sophistication of the teenagers' approach to dealing with their parents reveals a sharp irony. Despite fearing the future, the children accelerate their maturation process, effectively

time-traveling developmentally under the conditions of climate change. The climate crisis as an impetus of rapid maturation diverges from other traumas in its globally comprehensive disruption of time and its unique relation to children. For children of the Anthropocene, climate change is a given shadow over their development and one that imparts crucial lessons of responsible behavior. As Millet demonstrates, physical aging is (ostensibly) unaffected, but mental attitudes advance beyond what is expected of adolescents. In *A Children's Bible,* this maturity becomes critically important when the climate crisis exacerbates the inversion of normative roles between parent and child.

At the end of the novel, severe climate change fallout has driven both parents and children to seek shelter in the estate of one of the wealthier families that attended the reunion. Initially, the parents pool their resources, building the large residence into a secure compound, complaining all the while about the lack of notice: "It was so sudden, they said. They'd all been told there was more time. *Way* more. It was someone else's fault, that was for sure" (Millet 209). Here, it is obvious the parents operate on a strictly personal time scale. The narrative they had constructed about climate change had put the danger well beyond the horizon of concern. The arrival of that peril reveals the folly of their valuation system. This development mirrors Robinson's didactic examination of the foolishness of subscribing to the narratives that drive "The Masque of the Red Death Syndrome." In short, bacchanalia is not the answer to the climate crisis. The parents operated at a high discount rate, assuming that climate change would remain a drama of the future. They could afford to write off the coming years of crisis. When the time frame is accelerated, however, and the impacts of climate change arrive, they are completely caught off guard.

Over time, the parents' resolve begins to deteriorate. The future they believed to be distant arrived violently, and they were unprepared. With the outside world plunged into hazy chaos, the parents have no direction. Unnerved by the adults' waning interest in survival, the children step in, organizing a work schedule to accomplish projects of self-sufficiency. Evie states that "A long time of industry followed. The parents were helpful, although they sometimes had to be encouraged. We used a bit of the carrot and a bit of the stick" (Millet 215). The carrot and stick metaphor is reminiscent of the children's early machinations in the great house, manipulating their parents out of a sense of contempt. Now, that strategic influence on parental behavior is how they ensure their own survival. The teenagers no longer spend time on disgust, instead attuning their emotional intelligence to the parents' mental states. Once the projects in food production and security are complete, the children watch the parents descend further into depression: "We began to detect changes, subtle at first. . . Their personalities were fading" (Millet 219). Though they try exercise, dance parties, obstacle courses, and hysteric begging, no attempts made by the teenagers are successful in reviving their parents' personalities. The adults realize, belatedly, that the children have become self-sufficient. The youth have done what the grown will not: adapt.

One day, the parents reach a breaking point. When the children wake up, the adults are nowhere to be found on the property. They search for the missing parents but find no trace. Each of the teenagers has a theory of what happened to them, ranging from violent vaporization by the security features to luxurious evacuation. Evie posits her own imagining: "Myself, I pictured them walking down towards the cascading steps of the pool, their fingertips tingling. Down, down, and down, to the narrow end of infinity" (Millet 222). Although Evie is literally referring to the estate's infinity pool, Millet's wordplay offers a fitting metaphorical end. The adults who

refused to engage the urgency of the future immerse themselves in the most indefinite of time scales. They transition from an intensely personal focus to one of unknowability. As a result, there is no merging of time scales at any point in the novel for the parents, only a violent lurch from one extreme to another.

With this final establishment of self-sufficiency, the children completely upend any notion of the figure of the child as a recipient of parental care. In conventional uses of the figure of the child, the synecdoche "replaces the terror of sublime infinity with the intimacy of parental caring, sheltering, and nurturing" (Johns-Putra, "Borrowing the World" 2). *A Children's Bible* systematically destabilizes this function. Parental care becomes expendable and subsequently nonexistent. Without the distraction of nurturing posterity, the adults have no recourse but to face "the terror of sublime infinity" while the children persist through the crisis. Their rapid maturation allows them to recognize the stakes of the future in the present and to implement that knowledge, a way of knowing unique to the climate crisis. Children must engage both the present emergencies they face and the threats to come, and thus their knowledge becomes a blend of practical and imaginative understanding. The novel fulfills Johns-Putra's expectation that climate fiction has the capacity to critically consider the figure of the child, and it is through this examination that both the future and the present are merged into one.

Both *A Children's Bible* and *The Ministry for the Future* foreground the challenge and importance of collapsing together the personal and indefinite scales. Robinson's treatment of the discount rate and narrative, especially in Frank and Mary's character arcs, puts the personal time scale into meaningful conversation with the indefinite, balancing the stakes of both temporal ranges. Millet's *A Children's Bible* takes a more metaphorical route, subverting the familiar role and development of the child to emphasize the injustice of the climate crisis against the children

who bear no responsibility for it. They draw attention to the power of value narratives about the future, illustrating the consequences of ill-conceived ideas about inevitable destruction. In either case, the authors contend with the conflicts of time scales head-on, undaunted by the enormity of the indefinite scale. Closure is difficult in climate change; fittingly, then, climate novelists endeavor to keep our eyes looking forward.

Chapter Three
Obliged to Hope: The Comedy of Climate Fiction

> *Comedy is concerned with muddling through, not progress or perfection.*
>
> - Joseph W. Meeker, "The Comic Mode"

> *what* we *have in common—*
> *the space between me and you, which also includes the nonhuman. Even if*
> *I, whoever I am, were to die, you, whoever you are, would continue to live in*
> *a world of sun, rain, and fire. Together, we persist, swinging in a present that*
> *defies the passage of time and requires variant scales of reference for sense making.*
>
> - Min Hyoung Song, *Climate Lyricism*

Introduction

Modern climate change is not kind to the fiction of human preeminence. Within cli-fi, the climate crisis subordinates individual human identity to larger collectives of humans and nonhumans, and the longevity of the consequences of such a catastrophe demands that present generations turn their attention to the inconceivable future. These unsettling jolts void the popular, comforting (and largely Western) primacy of the human; we are limited in our agency and overwhelmed by the massive scale of the problem that we caused. To what end, then, do we confront the harsh reality of our finitude? Surprisingly, this reorientation of perspective brings a hopeful ending into focus. More formally known as a comedic end, the happy ending is relative in the context of climate change. It does not mean a feel-good conclusion or even one in which all major characters emerge unscathed. There may not be any revolutionary change or earth-shattering success driven by a single individual. The comedic ending does, however, entail a pervading sense of survival; the human race plods on through catastrophe with a keen awareness of its position in the greater ecology of the biosphere. Chastened by the immensity of climate scale, humanity resigns itself to the only viable recourse: hope.

Hope, when well-conceived by authors, is an important aspect of the contemporary climate novel. Inseparable from cli-fi is its real-world stakes, and that relevance to reality raises a question of the function of the novel: How can authors influence reader perspectives on the real-world phenomenon? A 2020 sociological study on the effects of climate fiction by Matthew Schneider-Mayerson demonstrated "that reading climate fiction had small but significant positive effects on several important beliefs and attitudes about global warming – observed immediately after participants read the [cli-fi] stories" ("Environmental Literature as Persuasion" 1). Similarly, Schneider-Mayerson's 2018 study found that "'disaster frame'" narratives generated "affective responses [that] were not only negative but demobilizing" ("The Influence of Climate Fiction" 490). These preliminary findings suggest that, for climate skeptics, reading comedic cli-fi might have the potential to change minds.[3] Even without robust sociological findings, however, critics have homed in on the importance of climate fiction in impacting readers' understanding of climate change. Lisa Ottum, in her reading of *H Is for Hawk,* uses affect theory to illustrate the efficacy of ecofiction in communicating the essence of the Anthropocene. She undermines the prevalent notion that human feeling overwhelms the discussion of environmental or nonhuman issues, arguing that "powerful, deeply personal experiences are at the center of—rather than inimical to— 'ecological' ways of thinking" (246). The emotional connections that narratives generate are an access point for the reader, a way into the foreign ideas about the importance of the nonhuman and the subsequent finitude of the human.

[3] To get a picture of how many climate-skeptical or climate-indifferent readers are actually picking up climate fiction novels, I conducted a public-facing study on Goodreads shelving data and found that the vast majority of readers in my sample were not explicitly interested in the climate content. These findings suggest that the cli-fi audience could very well include skeptics. For details of the study, see "Bring Your Own Genre: The Top User-Curated Shelves of Climate Fiction."

Ottum's observations do not, however, mean that the emotionally evocative material of climate fiction is meant to be a definitive milestone in a reader's journey of climate awareness. Eric Morel argues that cli-fi novels should not be considered "political silver bullets" (67). He contends that "Discussing cli-fi and its value as a binary between effective or ineffective politicization frames the genre reductively" (Morel 67). Treating cli-fi as purely persuasive content glosses over the complex narrative interplay between characters, ideology, and plot. Though the urgency of climate change levies significant demands on the external significance of the climate novel, critics and readers alike would be remiss to ignore the internal novelistic experience that is the source of any outward change in the reader. The encounter with the text is valuable in itself, a predecessor to any future decision making:

> Reading a work of cli-fi, insofar as it allows readers to inhabit a world as the narrative audience where climate change is factual and relevant, presents for readers what making compelling choices in the context of climate change might be like, which is meaningful intellectual work. Acknowledging the work of reading, cli-fi teacher-scholars can turn their attention to what follows—the moment where readers must reconcile or reject their actual positions to their intellectual work. . . (Morel 76)

The intellectual work of the novel must be compelling if authors seek to effect change in reader attitudes toward climate change. The "work of reading" needs to pay off for the reader.

Hope is one way that readers can receive such a return on the emotional investment of reading a novel. Optimism, however, is often thought of as being in short supply in climate fiction. In a 2014 review of the genre, Danielle Clode and Monika Stasiak observe that "A sense of inevitability and hopelessness pervades much of the modern literature on climate change, irrespective of sub-genre" (7). They contend that, when combined with the lack of coping skills, such despair is deleterious to any transformative power climate fiction may hold. They identify a key need in the climate fiction corpus: a robust sense of hope to buoy the skeptical, weary, or indifferent. Although they rightly identify the tragic tilt of the genre, I diverge from their

findings with respect to their call for an increase in depictions of human agency "solving" climate change. As I will endeavor to demonstrate in this chapter, believable hope is a fragile thing that is better suited to the harsh reality of human finitude than human excellence. For many, it is second nature to imagine that human innovation will lift us beyond the limits of finite resources, but to wait for a consummate technological solution is to indulge in false hope. Any representation of climate change being mitigated by human effort (such as in *The Ministry for the Future*) must be tempered by recognition of the limits to the human. Only then can hope transcend insubstantial wishful thinking and approach something more akin to robust survival.

Such endurance is the focus of the five novels in this study. Beyond their shared discussion of climate change, these novels all construct a hard-won hopeful ending. *The Inland Sea* reveals that the narrator has attained a synergy with the nonhuman that allows her to move forward in life. *The End We Start From* concludes with baby Z taking his first steps, representing the biological reproduction of humanity. *A Children's Bible* closes with Evie telling Jack a bittersweet story of how humanity may persist beyond the corporeal, and *The Ministry for the Future* ends with Mary's resolve to keep pushing forward for the sake of the future collective. For all of these novels, I explore how these hopeful endings reflect the hardened notion of the "obligatory note of hope" that Jenny Offill describes in her 2020 novel *Weather*. This note of hope is made possible only by the embrace of human finitude and rewards recognition of humankind's humble ecological position with the boon of survival. *Weather*'s own ending echoes this appreciation for human persistence by foregrounding the value of restored familial equilibrium. Though none of these novels feature endings that are exuberant or funny, they are nonetheless comedic in their insistence that humans will persevere through both the recognition of our finitude and the devastation of climate change.

Comedy and Tragedy, Survival and Extinction

Climate change, the awesomely devastating subject matter that it is, seems antithetical to comedy. Raging bushfires, the ever-expanding roster of the hurricane season, the ongoing sixth mass extinction—the impacts of global warming indicate that if there is humor in the ravaging of the biosphere, it is a dark humor indeed. But comedy is not so narrow in scope as to only describe the laughable. In the classic dramatic context, comedic works are defined by their "happy and often festive conclusion to the action" (Birch, "Comedy"). The protagonist marries, everyone survives, and the characters celebrate with a return to normal. The return is an especially important aspect as comic resolution often operates "symbolically as an act of rebirth, renewal or reaffirmation" (Weitz 10). While climate change initially resists the notion of restoration, it is firmly incompatible with jolly scenes of celebration. The climate crisis offers little inspiration for festivity unless we want to write off the Anthropocene as humanity's final *danse macabre*. Instead, comedy's opposite genre, tragedy, seems much more compatible with the gravity of global warming. The tragic work is "a dramatic (or, by extension, narrative) work in which events move to a fatal or disastrous conclusion for the protagonist, whose potential greatness is cruelly wasted through error or the mysterious workings of fate" (Birch, "Tragedy").[4] In the context of the pervasive hubris of the Anthropocene, tragedy works well with the notion of wasting human greatness through human error. Joseph W. Meeker argues that tragedies "undertake to demonstrate that man is equal or superior to his conflict," a presumption that places humankind high in the great chain of being (157). In the tragic work, there is nothing absurd about the man versus nature conflict. Tragedians don't consider the improbability of man

[4] For works that do not easily fall into either category of this binary, tragicomedy offers convenient middle ground (See Birch, "Tragicomedy" and Dudley, "Beckett, Atwood, and Postapocalyptic Tragicomedy"). While "comedic" often operates as non-tragic in this study, it is worth noting that the latter term includes this hybrid genre. Tragicomedy is compatible with the structure of cli-fi novels and can feature hopeful, comedic endings.

squaring off against earth systems or the staggering nonhuman collective and emerging nobly. Tragedy instead offers a more favorable picture of human protagonists "whose potential greatness is cruelly wasted through error or the mysterious workings of fate" (Birch, "Tragedy"). The misfortune wasting of human potential emphasizes how much the world benefits from humankind and how devastating the loss of the hero truly is. Tragic protagonists may perish, but they leave behind a robust sense of human valor. Where better to play out the tragedy of humanity's devastating fossil fuel folly than in the individual scope of the realist novel, and what more of a fitting end? Certainly, the author that chooses the disastrous conclusion faces much less resistance from reality than the one who opts for the happy ending.

But as Ursula K. Le Guin has established, fiction need not take the easy route. In fact, ecofiction that offers the promise of a future rivals the potential of tragic cautionary tales. Rather than effecting the unfortunate demobilization that Schneider-Mayerson found to be the result of disaster narratives, the comedic realist climate novel offers staying power for weathering humanity's self-imposed devastation. I do not, however, mean to suggest that comedic climate novels end with a wedding or a saccharine display of human vigor. Instead, to respect the profundity of global warming, climate authors have broken the comedic ending down to its most basic element: survival. The tie between comedy and persistence is foundational; Ruth Nevo observes that the comedic hero's "triumph may be in the mere fact of survival, brute survival, here and now and in the conditions of this world" (328). Similarly, Meeker argues that "Comedy demonstrates that man is durable even though he may be weak, stupid, and undignified" (158). Durability, not nobility, is the primary feature of the comedic ending.

The Finitude of the Fool

"Weak, stupid, and undignified" is a caustic characterization for humanity to accept, but it is a fair appraisal in the context of climate change. The truth of the man versus nature conflict is that humanity is punching above its weight class and wreaking global havoc with every swing. Comic works, especially of the realist variety, have the well-documented potential to remind us of the ubiquity and extent of human finitude through their humorous or absurd portrayal of human faults and misfortune. For evidence of comedy's capacity to convey the limits of the human, we can turn critic Katrin Berndt. In her discussion of Ian McEwan's cli-fi novel *Solar,* Berndt contends that the "formally realist novel" uses comic elements to recast "the idea of social advancement as a modern self-delusion" (86). For Berndt, human progress is nothing more than a well-constructed myth. Similarly, Mark McGurl engages the idea of posthuman comedy in the context of the realist novel in his treatment of the giant figure in the works of Jonathan Swift, Mark Twain, and J.G. Ballard. For McGurl, posthuman comedy is the "literary expression of [the] dislocation" of the human as the pinnacle of existence (406). Comedy thus reliably offers a remedy to the misconception of the primacy of the human. To further cement the close association between comedy and human finitude, Meeker offers a useful description of the genre:

> [The comic hero's] victories are small, but he lives in a world where only small victories are possible. His career demonstrates that weakness is a common condition of mankind that must be lived with, not one worth dying for. . . Comedy is a celebration, a ritual renewal of biological welfare as it persists in spite of any reasons there may be for feeling metaphysical despair. (Meeker 159)

An individual is limited in agency and importance when put into the larger context of the world, and as a result, only personal triumphs are possible. Railing against finitude or "weakness" offers no path forward for humanity; instead, the human species (with a particularly strong emphasis on the Western portion) must learn to recognize and learn to live with its limits.

Nevo contextualizes this realization as the linchpin in the comedic plot: the realization of finitude occurs between "initial confidence" and the "happy end," and the revelation allows the protagonist to be "at once victim and victor" (Nevo 328). Human finitude, however, takes several forms. A popular comedic mechanism for illustrating human flaw is the figure of the fool. Berndt's discussion of human limits relies on *Solar* protagonist Michael Beard's oftentimes ridiculous behavior, and McGurl's discussion of the giant figure in various works presents human protagonists as absurdly small. And in her theory of comedy, Nevo identifies the clown figure as the hero of the genre. She writes that the "Comic character is man's natural disposition to be less than perfect;" the comedic protagonist is "all flaw" as opposed to the tragic hero, who is plagued by only one "fatal flaw which brings him to disaster" (331, 330). It is essential to note, however, that in climate fiction, the main character does not need to occupy the role of fool—that mantle has been bestowed by virtue of being part of Western society in the Anthropocene. Granted, there is significant stratification in responsibility for the climate crisis (the difference between the carbon footprints of a Fortune 500 CEO and a college librarian is glaring), but just as the tragic hero is the proxy for authorial commentary on humanity's moral potential, so too is the comic protagonist the stand-in for the worst of the Anthropocene's players. Nevo's "initial confidence" is implied by humanity's hubristic exploitation of natural resources and systems in the Anthropocene; thus, regardless of the protagonist's relative innocence in the scheme of the crisis, the exposure of their finitude (whether through humor or the realist subversions discussed in the previous chapters) addresses the collective faults of humankind.

The practical implementation of the acceptance of finitude involves reframing the collective perspective of the importance of the present individual. Learning to live within natural bounds enables survival, a feat not as glamorous as a noble death, but one that is nonetheless

preferable to extinction. For Meeker, comedy's celebration of survival is less in the vein of revelry and more in the sense of commemoration. If the narrative has successfully imparted the rigidity of human limits, the triumph of survival is quieted by the solemnity of our new understanding of our position in the *Scala Naturae.* The achievement of survival is one that should surely be recognized, but not with the self-congratulatory disposition that landed us in this predicament in the first place. Meeker writes that "The world has never cared about man," and this blunt truth reminds us that we are not automatically entitled to our survival, especially when we are responsible for putting it in jeopardy (167).

The realism of the Anthropocene thus allows for a humble persistence; the humor of the comic mode is pressured by the gravity of the climate crisis, but nonetheless cli-fi does not have to succumb to the futility of tragedy. Instead, climate fiction that employs the comedic ending requires a balance between the human race's reflexive disenchantment and its fundamental interest in survival. The tension between these two aspects raises the crucial question: Exactly how does this balance manifest in climate fiction?

Oh, No: The Obligatory Note of Hope in Climate Fiction

Jenny Offill's 2020 novel, *Weather,* offers a concise phrase to characterize the comedic ending in the time of global warming: "the obligatory note of hope." As a novel, *Weather* isn't overly hopeful. Protagonist Lizzie is a mother and a collegiate librarian who invests her emotional energy into the lives of those around her (prompting her to consider herself a fake shrink of sorts). A former Ph.D. hopeful, Lizzie also answers emails for her former dissertation advisor, Sylvia, a professor who specializes in climate and ecology. In addition to offering talks around the country, Sylvia produces a podcast called *Hell or High Water* that generates significant email queries. As Lizzie navigates her various roles, the narrative proceeds

chronologically through vignettes of her life in New York City, snippets of emails and replies, and informative blurbs on survival strategies for the coming apocalypse. The novel is rife with melancholia and cynicism, creating an unexpectedly ideal ambiance in which to introduce the obligatory note of hope.

Offill incorporates the notion of the obligatory note of hope (which I have shortened to the phonetically ironic acronym ONOH) in a short fragment of dialogue from Sylvia: "'I have to call you back,' she says. 'I'm about to send off this article, but I have to come up with the obligatory note of hope." (67). The ONOH is a kind of afterthought, an effort to appease readers whose hopes are likely to be crushed by the dismal observations of her article. The phrase is intentionally provocative: how genuine can obligatory hope actually be? And if it is ingenuine, why bother with hope at all? Rather than detracting from the sincerity of the discussion of hope, however, the diction of the phrase and its sardonic delivery endear the audience to the point Offill is making. Through a markedly wry tone, Offill leans into the understandable disenchantment that accompanies the Anthropocene. By stating that the ONOH is something Sylvia "[has] to come up with," Offill joins in on the grim inside joke that those who are climate-conscious share: we are all, to some extent, doomed to the trajectory of climate change no matter what hopeful gestures people make (67). It's easy to mistake a note of hope for an inversion of Robinson's Masque of the Red Death Syndrome; instead of partying out the last days of the world, some people plaster over hockey stick graphs with concept maps of floating utopian cities or images of bustling Mars colonies. For deranged optimists, the human project is too big, has lasted too long, to fail. The ONOH speaks to the reader who has watched wildfires ravage California only to be told that the United States is only aiming for a 50% reduction of

greenhouse gas emissions by 2030 ("Fact Sheet"). In the context of the crisis, Offill and her fellow cli-fi authors cannot afford to be trite.

The sardonic appeal is only a tool of the ONOH, however, not its final effect. Ultimately, the ONOH operates as the genuine entreaty to a given audience to keep going. Sylvia's mention of it initially suggests that the ONOH is a rider to the article, but it is still an element to which she has to devote significant attention. It is as though, being the bearer of bad news, Sylvia feels obliged to remind her audiences to keep surviving. I find the ONOH to be a fitting description of the endings of comedic climate fiction novels. For the novels of this study, the authors communicate the uncomfortable reality of human finitude. They collapse together scales and pressure realist norms in an effort to alert the reader to the smallness of the individual in the present. They challenge narratives of value and notions of identity, but not without an end in mind. Like a well-written editorial piece, they incorporate an indirect call-to-action: survive. While authors take different approaches to the ONOH, each one decenters the human while advocating for human persistence.

When an End Is Not an End

The implication of the continuation of life at the end of a cli-fi novel is paradoxical. And yet, as Frank Kermode indicates in *The Sense of an Ending*, an ending reflects the "irreducibly intermediary preoccupations" that constitute daily life (8). In this sense, the climate fiction novel wholly embraces the intermediary. The realist climate novel depicts a middle portion of the climate crisis, never capturing the beginning or the end. Authors nonetheless strive toward a novel's end to encourage sense-making of the middle portion of the crisis on which they have chosen to focus. In climate fiction, a comedic ending of human survival makes sense of the pervasive human limitations that underlie the narrative.

Weather

Consider *Weather*: Offill's proclivity for the non-ending is evident in both the character's treatment of the notion of an end and in the novel's own conclusion. Lizzie's last phone call with Sylvia reveals the latter's jaded perspective on the permanence of endings: "'Of course, the world continues to end,' Sylvia says, then gets off the phone to water her garden" (198). With a sharp oxymoron, Sylvia has gotten to the heart of the reality of the climate crisis. The world continues to end without really ending, and humanity survives, tending to gardens. Sylvia's crusade to educate the public has left her disheartened; by the end of the narrative, she has lost her conviction, retreated to isolation in nature, and left behind the obligatory note of hope. Lizzie narrates "Already things she worked on for years have been swept away with the stroke of a pen" (Offill 140). This dismissal of the ONOH by the character who introduced it would be detrimental to its validity if the novel did not, in its own structure, endorse the notion of an obligatory note of hope. *Weather* ends with a restoration of equilibrium, a picture of the mundane, intermediary life that constitutes survival:

> My husband is under the covers reading a long book about an ancient war. He turns out the light, arranges the blankets so we'll stay warm. The dog twitches her paws softly against the bed. Dreams of running, of other animals. I wake to the sound of gunshots. Walnuts on the roof, Ben says. The core delusion is that I am here and you are there. (Offill 202)

The ending is a reinstatement of Lizzie's normal life, which has been badly disrupted by her growing anxiety about climate fallout and by her strained marriage. In the last act of the novel, Lizzie is overwhelmed by anxiety over the future. Ben and their son, Eli, are away on a three-week road trip to California, leaving Lizzie by herself in their apartment. She has to remain behind to support her brother's addiction recovery, but without her husband and son, there is no one to support her as her fears of the future take hold. There is no "warm hum of [Ben's] body

next to [her] in bed," and the absence takes its toll (Offill 166). One prose fragment begins with: "I've been thinking more about my doomstead," and as the novel progresses, such thoughts of doom and fallout dominate Lizzie's consciousness (Offill 156). She finds an outlet in the form of a journalist named Will who becomes her sounding board for her fears and newfound prepper knowledge. Enamored by him, Lizzie teeters on the edge of adultery while remaining cognizant of the recklessness of the possibility. She thinks wryly: "All I would have to do is take my clothes off with a stranger who has no interest in my long-term well-being or mental stability" (Offill 174). She keeps their relationship purely platonic, but her emotional attachment to Will leaves the door open for infidelity up until his departure late in the novel. Even after he leaves, the relationship between Lizzie and Ben seems fraught—upon his return, Ben notices that "Something happened while he was away" (Offill 195). While it is unclear if he has fully apprehended how close his wife came to cheating on him, he nonetheless has sensed a shift in the stability of their relationship. Not until the final paragraph is the reader given a sense of the intact resilience of their marriage. Ben is there with Lizzie, making sure they stay warm through the night. The coziness of the image, marked though it may be by the reality of marital strain, indicates that the final word on their relationship is persistence. And while Lizzie's anxiety hasn't magically dissipated with the restoration of her relationship ("the sound of gunshots" suggests a lingering nervousness), Ben's explanation indicates that she nonetheless will endure it.

This comedic "restoration of balance or order" and its associated sense of survival are the basis of the novel's obligatory note of hope (Nevo 332). The finitude that grounds the ONOH is evident in Lizzie's lingering anxiety, but the hope surges in Ben's reassurance. His returned presence to their bed is the culmination of their hardiness. Their reconciliation is not the happy

wedding that typically characterizes comedy, but it is nonetheless a signal of renewal. Despite conflicts of fear and infidelity, they press on, flawed relationship and all. As Robert Markley writes, in cli-fi with a comedic ending, "characters experience 'utopia' not as a static ideal, but as recalibrating relationships to others and to the world" (13). Survival requires constant adjustment to the turbulence caused by human faults, including the disturbance of adulterous ideation. The novel's title even speaks to the endurance climate change demands. "Weather" as a noun is the daily manifestation of climate change, but "weather" is also a verb. To weather is to ride out the storm, to see the end of the long night. And ultimately, *Weather* is the story of a woman "muddling through" the vicissitudes of climate awareness and threats to interpersonal relationships (Meeker 160). The novel acknowledges that the world continues to suffer endings, but its conclusion contends that, despite our shortcomings, we continue to weather each one.

Weather's ending is also significant for its mundane detail; there is no great triumph or earth-shattering development. Instead, there is only a durable marriage, a dog, and the comfort of safety; in short, survival. This quotidian picture of domestic life is an example of one of comedy's key features; as Meeker describes it, comedy champions the unremarkable:

> To people disposed in favor of heroism and idealistic ethics, comedy may seem trivial in its insistence that the commonplace is worth maintaining. The comic point of view is that man's high moral ideals and glorified heroic poses are themselves largely based upon fantasy and are likely to lead to misery or death for those who hold them. (Meeker 160)

Comedy is the genre of the trivial and the commonplace. It complements the meticulous detail often found in the realist climate novel, justifying the intense focus on the mundane by demonstrating how it is better to live an ordinary (possibly boring) life than to die for grandeur. Under climate change, there are no individual heroes, only a human collective cognizant of its natural confines in pursuit of survival.

The Inland Sea

Madeleine Watts' *The Inland Sea* also features a conclusion that emphasizes the ordinariness of the individual scale. Overwhelmed by anxiety and left unsettled by fraying relationships, the narrator decides to leave Australia for Los Angeles. Her job as an emergency call operator at Triple Zero has encroached too severely on her ability to establish meaningful interpersonal connections and to make it through the day without crippling paranoia; the oppressive interference of the nonhuman in her life is total. The bushfires are especially pervasive in her life, cutting short her opportunities to commiserate with fellow victims and infiltrating the sanctity of her home. In his examination of posthuman comedy, McGurl describes the impact of this reckoning with finitude as an "incapacitation of human will at this scale, where . . . there are simply too many seething trillions of competing agency to achieve one's ends" (428). For the narrator, she does not need trillions of competitors, only the formidable presence of fire. Given the inimical impacts of wildfire, it seems fitting then that Watts ends the novel with submersion in water. The last lines of the novel describe her return to the ocean during the week before she leaves Sydney:

> The thud of my heart. Bird cries.
> There were cuts on my legs from when I'd slipped on the rocks, but the salt water didn't sting. I swam out farther, away from the shore, letting the tide take me out to the threshold of the bay and the beginning of the open water. The birds called. The light dipped. No one held me back. (Watts 257-258)

Watts' natural imagery immediately calls to mind the narrator's conflict with the nonhuman earlier in the novel. At the novel's end, however, there seems to be a greater harmony between the narrator and the nonhuman. Whereas the wildfires overrode the narrator's ability to speak, the sound of her heart seems to be on more equal footing with the sound of bird cries; the narrator doesn't note that one overwhelms the other. They simply exist together. The fact that

"the salt water didn't sting" also contrasts sharply with the smell of smoke that invaded her bedroom during the worst of the bushfires and eroded her identity. The narrator isn't superior to the nonhuman; she has been too thoroughly overwhelmed by it to attempt mastery over it. Instead, she lets "the tide take [her] out to the threshold of the bay and the beginning of open water." The final line communicates the protagonist's hard-earned sense of freedom, suggesting forward movement. She has survived the invasion of myriad fears rather than being defeated by them. Like Lizzie's experience in *Weather*, the anxiety doesn't go away, but it becomes manageable. Despite her newfound freedom, the narrator's tone isn't jubilant. She comes across as measured, almost flat. It is the product of her extensive experience with her individual finitude in the face of the nonhuman. Having overcome that "incapacitation of will," however, the protagonist embraces a freedom that is also an assertion of her persistence. The novel closes on a liberating obligatory note of hope, one informed by the limits of the human while simultaneously suggesting that the narrator's arc continues beyond the last page. The reader never learns how the narrator's new life in California unfolds, but through this last scene, Watts provides a strong indication that survival prevails.

The End We Start From

A beginning embedded in the novel's end is a fitting form for the ONOH. Meghan Hunter's *The End We Start From,* as hinted by the title, embraces this form of the obligatory note of hope.

> I let Z down on the bare damp board, on the rotting wood that glowed a year ago.
> He grapples around our knees for a few minutes, feels his way over the idea of his parents.
> Then, he lets go.
> His body stands on its two points. He puts his hands up for balance.
> He lifts a leg and—impossible, impossible—he takes a step. (Hunter 134)

Hunter presents the obligatory note of hope as what Meeker describes as the celebration of the "ritual renewal of biological welfare as it persists in spite of any reasons there may be fore feeling metaphysical despair" (159). The protagonist and her family have had plenty of reason for metaphysical despair; after G and N's deaths prompt R to strike out from the family unit, the narrator becomes a vulnerable climate refugee, navigating motherhood while having to protect herself and her son from the depravity of a society reduced to panic. In one memorable scene, the protagonist and Z are detained at a checkpoint while traveling across England with a fellow mother and son. She narrates the event in one congealed mass of despairing prose: "Theyforceusoutofthecarbabieswillmakeussafedoesn'tseemtruetheyareroughwithusandtheysearch ustheymakeustakeourclothesoff" (Hunter 69). Contextualized by this harrowing brutality, the safety the protagonist and her family find at the end of the novel is a powerful representation of hope. Z's first step is ordinary as can be for a child of his age, but it is an impactful representation of survival in the novel's context. This scene takes place in the family's apartment after the floodwaters have receded. The narrator and Z have reunited with a severely traumatized R through the management efforts of a slowly recovering bureaucracy. The little family returns to their ruined home a year after the disaster, and at the site of devastation, they witness a major developmental milestone. Z's mobile life is just beginning as the novel comes to a close, and his first step heralds the hope of survival in the wake of devastation. Kermode writes that "When we survive, we make little images of moments which have seemed like ends; we thrive on epochs" (7). The survival of the nuclear family in *The End We Start From* marks the conclusion of one chapter of life and the start of another. Such demarcations of end and beginning are, on a larger scale, arbitrary, but they grant significance to the suffering and resilience the narrator has shown over the course of the novel. Humbled by the global scale of catastrophe, the family has

persisted, and there is unlikely but forceful hope in the comedic ending. Markley characterizes comedy as implying "an individual recognition of a way forward toward some approximation of domestic and societal happiness;" both Z's first step and the reestablishment of the family unit are steps toward domestic and societal happiness (12). Astoundingly, the narrator and R not only achieve biological renewal but also overcome the multitude of reasons for metaphysical despair, helped along by the marvel of their infant son.

A Children's Bible

The notion of persistence need not be so literal as a child's first steps, however. In Lydia Millet's *A Children's Bible*, the obligatory note of hope is more abstract. The novel closes with a final conversation between Evie and Jack. After the parents disappear, the children continue to run the compound, but Jack falls ill with an unknown ailment. Evie splits her time between nursing him and researching potential diagnoses and cures. But Jack's concern doesn't regard what has him ill; instead, he wants to know what happens after the End. Throughout the novel, Jack has been interpreting an illustrated Bible for children that one of the mothers gave him. He has deciphered metaphorical meanings from the book, particularly focusing on decoding the Holy Trinity to make secular sense. Though fascinated by the Bible, he is frustrated by its lack of ending; the children's version he owns doesn't include Revelation. He asks Evie what happens after Revelation, essentially requesting that she figure existence after the apocalypse. Forced to come up with an answer on the fly (and urged by Jack to "Think better"), she tells him that "Some other creatures come and live here, like we did. And all the old beautiful things will still be in the air. Invisible but there" (Millet 223). Jack isn't appeased; the fact that he, Evie, and possibly the entire human race won't be able to witness such wonders agitates him. To soothe his distress, she offers:

> "The comets and the stars will be our eyes," I told him.
> And I went on. The clouds the moon. The dirt the rocks the water and the wind. We call that hope, you see. (Millet 224)

Millet presents a heartbreaking representation of human finitude. Evie is essentially consoling Jack with the Law of Conservation of Mass, suggesting metaphorical adaptations that would keep alive the essence of the human even after the corporeal human species has passed.

While it seems like Evie is trying to break the fact of imminent human demise gently to her brother (similarly to her discussion with him about climate change), the conversation operates in the novel as Millet's commentary on adaptation. Adjustment is another aspect of the comedic ending—according to Meeker: "Evolution itself is a gigantic comic drama. . . the evolutionary process is one of adaptation and accommodation" (164). As the mechanism of species survival, evolution aligns with comedy. The evolutionary process is conservative, meaning that "whatever may threaten the continuity of life itself is considered. . . to be expendable and subject to modification" (Meeker 165).[5] Millet imagines a world in which the corporeal form of the human has become expendable, but the essence of the human persists through synergy with the nonhuman. Her proposal for human survival is impractical, but it is one that can still be called hopeful. Millet foregrounds human finitude in this final discussion, drawing on the indefinite scale reach past Revelation and the Apocalypse to consider how the human might persist past even complete destruction. Millet seems to ask: how might even the most absolute of ends be understood as a continuation of life? The answer lies in persistence through adaptation. Abstract though her example may seem, "Comedy is the art of

[5] While Meeker's evolutionary perspective may seem reductive to some critics, as the exclusive mechanism of human propagation, the importance of adaptation is foundational. Furthermore, as the globe has reached a point of warming that will inevitably produce (and is already producing) severe catastrophic impacts, it is in our interest to adopt an attitude of adaptation.

accommodation and reconciliation" (Meeker 168). It is hard to imagine greater accommodation than accepting comets and stars for eyes, but survival takes strange shapes.

The Ministry for the Future

Adaptations feature heavily in Robinson's *The Ministry for the Future,* as well. In the context of his other work, the utopian ending is not surprising; Robinson is known for his hopeful endings. His climate novel *New York 2140* and Science in the Capital trilogy both spotlight the importance of human survival. In his assessment of the Science in the Capital trilogy, Robert Markley engages Robinson's figuring of "'how to go forward' in the face of profound uncertainty, finding that "the journey towards utopia takes place within the individual's consciousness and propels 'forward' his or her body" (27, 22). The mental journey that Markley describes is one that Robinson foregrounds in *The Ministry for the Future* through Mary's character arc. The surprising post-kidnapping amity between Frank and Mary leaves them at peace when he passes away. Mary has adapted her perspective to Frank's more urgent perception of the future, a development that grants him closure before his death. Frank's death, however, seems a sharp contrast with the survival of the comedic genre, especially since "the problem of comedy is how to resolve the conflict without destroying the participants" (Meeker 168). And if *The Ministry for the Future* ended on his passing, the novel would not be comedic. But Min Hyoung Song explains how the interconnectedness of the human collective means that death is not a hopeless end:

> Even if I, whoever I am, were to die, you, whoever you are, would continue to live in a world of sun, rain, and fire. Together we persist, swinging in a present that defies the passage of time and requires variant scales of reference for sense-making. (Song 137)

Though Frank dies, Mary continues to live in a "world of sun, and rain, and fire." Rather than ending with Frank's death, the novel continues to describe Mary's transition out of her position

as the Ministry head. She is now the sole focus of the plot, but even she must undergo an ending of her own. She tells her team "Everyone has to do what they can in their time. Then it's time to pass it along" (Robinson 503). Badim, her former right hand, is assuming responsibility for the Ministry, and this transfer of power is in and of itself a kind of renewal. Mary's time has ended, but the Ministry will continue to fight the good fight. The comfort of embracing the superiority of the collective lies in its resilience; the future does not hinge on Mary's leadership and likewise will not collapse without it.

But even that changing of the guard is not the end of the novel; the momentum of the comedic ending continues to propel the narrative forward. Robinson describes Mary's retired life as she passes the torch of office. She decides to embark on an airship journey, befriending the captain, Art, during the long voyage. As they travel across the world, Mary takes comfort in the new relationship and the prospect of growing and exploring with Art. The novel concludes with Mary and Art contemplating a statue of Ganymede and a phoenix. Art takes an optimistic view of the statue, interpreting it as Ganymede "offering the world back to the animals" (Robinson 562). When Mary indicates doubt, Art doubles down, contending that "we will cope no matter how stupid things get," and that "the only catastrophe that can't be undone is extinction" (Robinson 562). Mary refrains from answering him outright, but nonetheless makes a silent promise:

> We will keep going, she said to him in her head—to everyone she knew or had ever known, all those people so tangled inside her, living or dead, we will keep going, she reassured them all, but mostly herself, if she could; we will keep going, we will keep going, because there is no such thing as fate. Because we never really come to the end. (Robinson 564)

In the last act of the novel, Robinson includes several false endings. And the final end of the novel is one that rejects the notion of an end altogether. Mary's observation that "we never really

come to the end" explains the multiple moments in the last 100 pages of the novel that could have served as the ending. Mary's survival creates the "little images of moments that seem like ends" that Kermode describes (7). Robinson brings together the close of arcs—Frank's, the Ministry's, and finally, Mary's. And with each successive ending, the reader receives some element of closure without reaching a complete sense of finality. Mary unreservedly denies the notion that humanity ever reaches the end. Instead, she locates herself as part of the present collective and makes a promise to the future collective to continue the good fight. Her use of the first-person plural suggests a larger statement about the human project, a hope that "we will keep going." *The Ministry for the Future*'s obligatory note of hope focuses on the indefinite scale, suggesting to the reader an indubitable sense of human persistence even in spite of human smallness.

There are moments in each of these novels when persistence and survival seem futile. Each protagonist must undergo demoralizing realizations of human finitude, but each perseveres nonetheless. At his most ironic, Meeker remarks that "In the world as revealed by comedy, the important thing is to live and to encourage life even though it is probably meaningless to do so" (160). For the climate-weary reader, such a notion resonates with feelings of ineffectiveness and general anxiety. And for the protagonists of these five novels, the undertaking of survival culminates in a final declaration of hope. The end of the novel is not the End, but rather a conclusion of a segment of life. The action is incomplete, but there is a sense that the preceding endeavor has wrought significance from experience. Kermode's language is useful: "Men in the middest make considerable imaginative investments in coherent patterns which, by the provision of an end, make possible a satisfying consonance" (17). The main protagonists of all five novels

are, like humanity, "in the middest" of climate change. As such, their endings are not meant to establish finality, but rather to offer the potential for hopeful sense-making.

Human Finitude, Not Finality

As climate change worsens, the need for sense-making will become even more pronounced. The obligatory note of hope provides readers in the midst of their own crises with the opportunity to orient themselves accordingly. As a trope, the ONOH is made possible by the acceptance of human limitations in exchange for survival. It is worth noting, also, that the ONOH participates in cli-fi's subversion of realist scalar conventions. Hope is inherently future-oriented and thus embraces the indefinite scale and its radical emphasis on the unimaginable. In hoping for a future under the burdens of the Anthropocene, humanity chooses to persist "even though it is probably meaningless to do so" (Meeker 160). We cannot know the purpose of the survival of our species, but our inherent drive to carry on demonstrates remarkable faith in the future to come. This outlook may seem a contradiction between knowledge and action, but realist climate fiction is full of contradictions. It forces together the individual and the global, the personal and the indefinite. Extending hope to the unknown is well within its unorthodox conventions. The rejection of an End at the end of the novel is another hallmark of climate fiction's subversive comedy. But as Meeker argues, the comedic ending is a conclusion to the story; it provides the reader with a sense of closure on the narrative at hand, not the larger narrative of climate change and its impact on the human project. Instead, the product of collapsing together scales, of recognizing our own finitude, is survival. Practical solutions lean toward aligning our global impact with our natural limitations in the interest of prolonging our residency on Earth.[6]

[6] For extensive discussions of how individual lifestyle changes can help contribute to making ourselves smaller, see, among others, Hope Jahren's *The Story of More* (2019) and Mike Berners-Lee's *There Is No Planet B* (2019).

Meeker writes “Comedy is concerned with muddling through, not with progress or perfection” (160). What a relief it is to know that our survival does not depend on our brilliance; in fact, it requires our humility. In the context of the larger scales of the collective and the indefinite, we are relegated to our proportional place in the global scheme. Climate authors, in a show of compassion for the human project, choose to take humanity down from the unforgiving scaffolding of the tragic. They return humanity to the solidity of the ground, where the size of the nonhuman and the needs of the future collective tower over present individuals, but such downsizing is not a defeat. If humanity manages to scale down its own sense of importance and “muddle through” the Anthropocene and whatever future it brings, it will be a triumph indeed.

Conclusion

Though climate change at first seems too massive a subject to fit into the confines of the realist novel, climate fiction demonstrates that the novelistic form is more capacious than it first appears. By collapsing together the opposing scales of the individual and the collective as well as the personal and indefinite, many contemporary climate authors model humanity's realistic position in the global ecology of the Anthropocene. Rather than being an unserious medium that cannot meaningfully engage present concerns, climate fiction champions the everyday realism that captures the attention of the reader. At the same time, it upends that realism to throw the reality of human finitude into sharp relief. A complex and often foreign notion, human finitude takes multiple forms in cli-fi, including the destabilization of individuality. *The End We Start From* demonstrates how climate change threatens reliable ideas of identity through the replacement of proper names with single initials and the dangling ends of individual narratives. *The Inland Sea* emphasizes the ability of the nonhuman to impede interhuman connection and invade one's sense of self. And *The Ministry for the Future* emphasizes the priority of the nonhuman over the human. Cli-fi thus demonstrates unreservedly that to be human is to be finite.

It is not, however, only our submission to the collective scale that limits us, but our larger historical positioning in the long run of time. For too long has the given present generation valued its interests above the needs of the future collective. We burn through resources with the personal scale at the forefront of our decision-making, and the generations to come pay the price. In *The Ministry for the Future,* Robinson alerts us to the importance of our narratives of value through metafiction and plot structure. He contends that, even in our finitude, we can assume agency by committing to low discount rates and asserting the importance of a future worth having. We must first, however, learn to recognize the narratives that guide our present action. *A*

Children's Bible presents a similar perspective, instead turning to the synecdochic figure of the child to illustrate the strain on the future individuals in the present create. Millet's uncannily mature protagonists communicate to readers the lost swing of childhood, and the fate of the delinquent parents conveys the consequences of resisting the recognition of the superiority of the indefinite scale. The children, humble and cognizant of their larger position in the Anthropocene, surpass their parents and achieve the highest boon under climate-changed conditions: survival.

This survival is the hallmark of the realist comedic climate fiction novel. It manifests in the five novels as "the obligatory note of hope," an ending that is at once disenchanted with humanity's folly and committed to the continuation of the species. Hope is hard to come by in the Anthropocene, but it is not extinct. It bolsters the human instinct to survive, asking only that humanity embrace reality; any notions of full control, any belief in supremacy must be surrendered. Climate fiction argues that we have to match our self-concept to the truth of our existence. And when do so successfully, we find a way forward. To avoid a tragic end brought about by a hubristic hamartia, climate fiction authors underscore humanity's limitations. While unpleasant for characters and readers alike, the narrative dressing-down sustains the human in the larger story, both fictional and real. In the larger historical narrative (whatever contentious form it may take), humanity often emerges as the dominant, heroic player who is constantly achieving new ends. Climate fiction helps us realize that in the blip of our collective existence on the earth there are really no ends. So long as we are surviving, we never reach the end. And we are compelled by the interest of our own survival to learn how to live out the middle, keeping our eyes forward and ourselves small. Accepting our finitude in exchange for survival is far from an easy or palatable task, but to invoke Le Guin, whoever said living was easy? The only hope worth having is hard-won; the only life worth living, a realistic one. Realist comedic climate

fiction offers us insight into both, encouraging the continuation of the human endeavor through many modes of finitude, ultimately providing us with invaluable tools: the chastened and protective scales of human survival.

Works Cited

Aravamudan, Srinivas. "The Catachronism of Climate Change." *Diacritics*, vol. 41, no. 3, 2013, pp. 6–30. *DOI.org (Crossref)*, https://doi.org/10.1353/dia.2013.0019.

Bernaerts, Lars, et al. "The Storied Lives of Non-Human Narrators." *Narrative*, vol. 22, no. 1, 2014, pp. 68–93. *Project MUSE*, https://doi.org/10.1353/nar.2014.0002.

Berndt, Katrin. "Science as Comedy and the Myth of Progress in Ian McEwan's Solar." *Mosaic*, vol. 50, no. 4, Dec. 2017, pp. 85–101.

Berners-Lee, Mike. *There Is No Planet B: A Handbook for the Make or Break Years*. 2019. *Open WorldCat*, https://doi.org/10.1017/9781108545969.

Birch, Dinah. "Comedy." *The Oxford Companion to English Literature*, edited by Dinah Birch, Oxford University Press, 2009. *www-oxfordreference-com.proxy.library.emory.edu*, http://www.oxfordreference.com/view/10.1093/acref/9780192806871.001.0001/acref-9780192806871-e-1711.

---. "Tragicomedy." *The Oxford Companion to English Literature*, edited by Dinah Birch, Oxford University Press, 2009. *www-oxfordreference-com.proxy.library.emory.edu*, http://www.oxfordreference.com/view/10.1093/acref/9780192806871.001.0001/acref-9780192806871-e-9466.

---. "Tragedy." *The Oxford Companion to English Literature*, edited by Dinah Birch, Oxford University Press, 2009. *www-oxfordreference-com.proxy.library.emory.edu*, http://www.oxfordreference.com/view/10.1093/acref/9780192806871.001.0001/acref-9780192806871-e-7577.

Bracke, Astrid. "Worldmaking Environmental Crisis: Climate Fiction, Econarratology, and Genre." *Environment and Narrative: New Directions in Econarratology*, edited by Erin James and Eric Morel, The Ohio State University Press, 2020, pp. 165–82.

Caracciolo, Marco. "Object-Oriented Plotting and Nonhuman Realities in DeLillo's Underworld and Iñárritu's Babel." *Environment and Narrative: New Essays in Econarratology*, edited by Eric Morel and James, Erin, The Ohio State University Press, 2020. *library.oapen.org*, https://doi.org/10.26818/9780814214206.

---. "We-Narrative and the Challenges of Nonhuman Collectives." *Style*, vol. 54, no. 1, 2020, p. 86-97. *DOI.org (Crossref)*, https://doi.org/10.5325/style.54.1.0086.

Clark, Timothy. "Questions of Scale: The Local, the National and the Global." *The Cambridge Introduction to Literature and the Environment*, Cambridge University Press, 2011, pp. 130–40.

---. *Ecocriticism on the Edge: The Anthropocene As a Threshold Concept*, Bloomsbury Publishing Plc, 2015, *ProQuest Ebook Central*, http://ebookcentral.proquest.com/lib/emory/detail.action?docID=2056898.

---. "The Challenge for Prose Narrative." *The Value of Ecocriticism*, Cambridge University Press, 2018, pp. 78–110.

Clode, Danielle, and Stasiak, Monika. "Fictional Depictions of Climate Change." *International Journal of Climate Change: Impacts and Responses*, vol. 5, Oct. 2014, pp. 19–29.

Drèze, Jean, and Nicholas Stern. "The Theory of Cost-Benefit Analysis." *Handbook of Public Economics*, vol. 2, Elsevier, 1987, pp. 909–89. *ScienceDirect*, https://doi.org/10.1016/S1573-4420(87)80009-5.

Davis, Heather, and Zoe Todd. "On the Importance of a Date, or, Decolonizing the Anthropocene." *ACME: An International Journal for Critical Geographies*, vol. 16, no. 4, 4, Dec. 2017, pp. 761–80.

Edelman, Lee. *No Future: Queer Theory and the Death Drive*. Edited by Michèle Aina Barale et al., Duke University Press, 2004. *ProQuest Ebook Central*, http://ebookcentral.proquest.com/lib/emory/detail.action?docID=1168042.

Elias, Amy. "Historiographic Metafiction." *The Cambridge History of Postmodern Literature*, edited by Brian McHale and Len Platt, Cambridge University Press, 2016, pp. 293–307. *Cambridge University Press*, https://doi.org/10.1017/CHO9781316492697.021.

"Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies." *The White House*, 22 Apr. 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/.

Freeman, Megan. *Bring Your Own Genre: The Top User-Curated Shelves of Climate Fiction*. 14 Dec. 2021, https://goodreads-shelves.webflow.io/.

Ghosh, Amitav. *The Great Derangement: Climate Change and the Unthinkable*. The University of Chicago press, 2017.

Goodbody, Axel, and Adeline Johns-Putra. "Introduction." *Cli-Fi: A Companion*, edited by Axel Goodbody and Adeline Johns-Putra, Peter Lang, 2019.

Hebard, Andrew. "Science and Aesthetics in American Realism." *The Oxford Handbook of American Literary Realism*, by Andrew Hebard, edited by Keith Newlin, Oxford University Press, 2019, pp. 357–74. *DOI.org (Crossref)*, https://doi.org/10.1093/oxfordhb/9780190642891.013.19.

Heise, Ursula K. "Afterword: Postcolonial Ecocriticism and the Question of Literature." *Postcolonial Green*, edited by Bonnie Roos and Alex Hunt, University of Virginia Press, 2010, pp. 251–58. *JSTOR*, http://www.jstor.org/stable/j.ctt6wrkp7.18.

Hesse, Monica. "Perspective | Greta Thunberg Weaponized Shame in an Era of Shamelessness." *Washington Post*. *www.washingtonpost.com*, https://www.washingtonpost.com/lifestyle/style/greta-thunberg-weaponized-shame-in-an-era-of-shamelessness/2019/09/25/66e3ec78-deea-11e9-8dc8-498eabc129a0_story.html. Accessed 13 Feb. 2022.

Hunter, Megan. *The End We Start From*. Grove Press, 2017.

Jahren, Hope. *The Story of More: How We Got to Climate Change and Where to Go From Here*. Vintage Books, 2020.

Jameson, Fredric. *Political Unconscious*. Taylor & Francis Group, 1983. *ProQuest Ebook Central*, http://ebookcentral.proquest.com/lib/emory/detail.action?docID=237240.

Johns-Putra, Adeline. "Borrowing the World: Climate Change Fiction and the Problem of Posterity." *Metaphora*, vol. 2, Nov. 2017.

---. "Climate and History in the Anthropocene: Realist Narrative and the Framing of Time." *Climate and Literature*, edited by Adeline Johns-Putra, Cambridge University Press, 2019, pp. 246–62. *Cambridge University Press*, https://doi.org/10.1017/9781108505321.016.

Kermode, Frank. "The End." *The Sense of an Ending: Studies in the Theory of Fiction with a New Epilogue*, Oxford University Press USA - OSO, 2000, pp. 3–34. *ProQuest Ebook Central*, http://ebookcentral.proquest.com/lib/emory/detail.action?docID=281184.

Le Guin, Ursula K. "The Carrier Bag Theory of Fiction." *Ecocriticism: The Essential Reader*, edited by Ken Hiltner, Routledge, 2015, pp. 353–356.

Lehtimäki, Markku. "A Comedy of Survival: Narrative Progression and the Rhetoric of Climate Change in Ian McEwan's Solar." *Environment and Narrative: New Directions in Econarratology*, edited by Erin James and Eric Morel, The Ohio State University Press, 2020, pp. 87–106.

Markley, Robert. "'How to Go Forward': Catastrophe and Comedy in Kim Stanley Robinson's Science in the Capital Trilogy." *Configurations*, vol. 20, no. 1, 2012, pp. 7–27. *DOI.org (Crossref)*, https://doi.org/10.1353/con.2012.0004.

McGurl, Mark. "Gigantic Realism: The Rise of the Novel and the Comedy of Scale." *Critical Inquiry*, vol. 43, no. 2, Jan. 2017, pp. 403–30. *www-journals-uchicago-edu.proxy.library.emory.edu (Atypon)*, https://doi.org/10.1086/689661.

Meeker, Joseph. "The Comic Mode." *The Ecocriticism Reader: Landmarks in Literary Ecology*, edited by Cheryll Glotfelty and Harold Fromm, University of Georgia Press, 1996, pp. 155–69.

Millet, Lydia. *A Children's Bible*. W.W. Norton & Company, 2020.

Morel, Eric. "Readerly Dynamics in Dynamic Climatic Times: Cli-Fi and Rhetorical Narrative Theory." *Environment and Narrative: New Directions in Econarratology*, edited by Erin James and Eric Morel, The Ohio State University Press, 2020, pp. 67–86.

Morton, Timothy. "The End of the World." *Hyperobjects*, University of Minnesota Press, 2013, pp. 99–133. *JSTOR*, http://www.jstor.org/stable/10.5749/j.ctt4cggm7.10.

Naiman, Robert J., et al. "Pacific Salmon, Nutrients, and the Dynamics of Freshwater and Riparian Ecosystems." *Ecosystems*, vol. 5, no. 4, June 2002, pp. 399–417. *DOI.org (Crossref)*, https://doi.org/10.1007/s10021-001-0083-3.

Nevo, Ruth. "Toward a Theory of Comedy." *The Journal of Aesthetics and Art Criticism*, vol. 21, no. 3, 1963, pp. 327–32. *JSTOR*, https://doi.org/10.2307/427442.

Offill, Jenny. *Weather*. Alfred A. Knopf, 2020.

Ottum, Lisa. "Feeling Nature, Reconsidered: Ecocriticism, Affect, and the Case of H Is for Hawk." *Affect Theory and Literary Critical Practice: A Feel for the Text*, edited by Stephen Ahern, Springer International Publishing, 2019, pp. 235–49. *Springer Link*, https://doi.org/10.1007/978-3-319-97268-8_13.

"Realism, n." *OED Online*, Oxford University Press. *Oxford English Dictionary*, http://www.oed.com/view/Entry/158931. Accessed 9 Jan. 2022.

Robinson, Kim Stanley. *The Ministry for the Future*. First edition, Orbit, 2020.

Schneider-Mayerson, Matthew, et al. "Environmental Literature as Persuasion: An Experimental Test of the Effects of Reading Climate Fiction." *Environmental Communication*, Sept. 2020, pp. 1–16. *DOI.org (Crossref)*, https://doi.org/10.1080/17524032.2020.1814377.

---. "The Influence of Climate Fiction." *Environmental Humanities*, vol. 10, no. 2, Nov. 2018, pp. 473–500. *DOI.org (Crossref)*, https://doi.org/10.1215/22011919-7156848.

Sinykin, Dan. "Conclusion." *American Literature and the Long Downturn*, Oxford University Press, 2020. *University Press Scholarship*, https://doi.org/10.1093/oso/9780198852704.003.0007.

Song, Min Hyoung. "Where Are We Now? Scalar Variance, Persistence, Swing, and David Bowie." *Climate Lyricism*, Duke University Press, 2022, pp. 121–37.

Stockton, Kathryn Bond. *The Queer Child, or Growing Sideways in the Twentieth Century*. Duke University Press, 2009.

Watt, Ian. "Realism and the Novel Form." *The Rise of the Novel*, University of California Press, 1964, pp. 9–34.

Watts, Madeleine. *The Inland Sea*. Catapult, 2021.

Weitz, Eric, editor. "Introduction: Thinking about Comedy." *The Cambridge Introduction to Comedy*, Cambridge University Press, 2009, pp. 1–19. *Cambridge University Press*, https://doi.org/10.1017/CBO9780511816857.002.

Wüstenberg, Jenny. "Climate and Extinction Crises Move Too Slowly for Us to Pay Attention – Here's the Answer." *The Conversation*, http://theconversation.com/climate-and-extinction-crises-move-too-slowly-for-us-to-pay-attention-heres-the-answer-174556. Accessed 1 Feb. 2022.