Terrestrial Realism:
Climate Fiction Beyond Liberal Humanism

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Abstract

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The rise of the Anthropocene in the public imaginary has coincided with the emergence of a particular mode of realism in contemporary fiction that self-consciously struggles against its own tendency toward anthropocentrism. As this dissertation argues, this turn positions contemporary realism as a particularly generative literary mode for addressing the Anthropocene: This project builds on a conception of realism described by Fredric Jameson, for whom realism is a literary mode that emerges in the tension between narrative and immediate experience. Thus, if the present moment is one characterized by a kind of anxious preoccupation with the struggle to articulate the human's newfound position as an agent of geological impact, then realism, in the Jamesonian sense, seems well situated as a site in which one could encounter alternative modes of articulating the human's relationship to the rest of the planet. This contention is substantiated through an examination of the theoretical intersection of literary realism and the Anthropocene, followed by a series of close readings of novels in which this literary mode, which I've termed "terrestrial realism," is generatively deployed. Ben Lerner's *10:04* and Barbara Kingsolver's *Flight Behavior* illustrate the problematics of comprehending climatological scale, Jenny Offill's *Weather* and Thomas King's *The Back of the Turtle* dramatize the uneven distribution of pressures exerted by environmental change, and Richard Powers' *The Overstory* explores the possibility of kinship between humanity and nonhuman life. In each case, the terrestrial realism of these novels works to subvert the anthropocentric individualism that is so often seen as a

dominant characteristic of the realist novel and demonstrate realism's utility in articulating a mode of fiction that can escape the anthropocentric constraints of liberal humanism and bring itself back down to earth.

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Introduction

It Was Always The Hottest Year On Record

On June 27th, 2021, Lytton, BC broke the record for hottest temperature ever recorded in Canada, reaching 46.1°C. They broke the record again the next day, this time reaching a high of 47.5°C. The next day, Lytton set a third record, recording a temperature of 49.6°C. In an interview with CTV news, climatologist Dave Phillips offered his reaction to this record-breaking heatwave: "For a climatologist like myself, you get kind of excited by breaking a record...It is really a big, big deal. We've already broken records. But stay tuned because we're going to be clobbering more records" (Quoted in Yun). There's an enthusiasm behind his anticipation of even hotter days that feels rhetorically closer to how one might discuss sports than the weather, but it captures the uncanny mixture of dread and exhilaration that this particular type of climate change news seems to evoke.

I don't point this out to suggest that Phillips, a senior Climatologist for Environment and Climate Change Canada, has convinced himself that these record-breaking heatwaves are something to be celebrated. But I can understand the excitement. The changing global climate has set in motion a vast and overlapping set of phenomena that are often difficult to meaningfully illustrate, in an archetypal case of what Timothy Morton usefully terms a "hyperobject," or an event whose massive scale renders it inaccessible to any singular form of representation. Relatively straightforward and quantifiable claims such as "this is the hottest day on record" would seem to offer some solid ground, pointing to the underlying correlation between the gradual warming of the global climate— a phenomenon that is more or less impossible to directly perceive— and its fluctuating expression in daily weather conditions.

As such, these climatological milestones usually serve as a peg for another round of articles and think pieces about climate change. But while Phillips' statement on the heatwave strove to emphasize its novelty, what I was most struck by was how familiar it all felt: both the news itself and the cycle of online discourse that it sparked would follow a predictable pattern. I could already anticipate how the instigating event of a North American heatwave that produced three consecutive record-setting temperatures would ricochet outward and get incorporated as the latest evidence in a wide range of distinctive but interlocking discursive frameworks.

And it did, quickly transforming the quantitative clarity of the bare fact of the heatwave into an inflection point for a wide range of problems that were narrower but no less severe, including crumbling road infrastructure (Noor), the racialized dynamics of "inequitable access to green space and trees" to help mitigate the heat (Herr), and renewed calls to provide heatwave support services for the homeless (Bains). Each of these problems points toward an issue that feels both urgent and internally complex, forcing a recognition that the set of problems nominally gestured toward by the term "climate change" are not reducible to a singular narrative or logic.

This urgency is compounded by the growing sense that the ever-expanding set of problems captured under the umbrella of "climate change" is occurring alongside a shrinking sense of individual or collective agentive capacity. Inundated with a seemingly endless feed of grim milestones and the attendant list of urgent and complex problems signified by the milestones, one can begin to feel a little paralyzed. Climate justice's various intersections with a wide range of other areas of social justice poses an ever-expanding frontier of issues that are all deserving of being taken seriously on their own terms. As a result, just keeping track of the different dimensions of the problem as they arise or bearing witness to whatever climate-related suffering pierces its way into our media consumption can sometimes feel like an end in and of

itself, without even beginning to consider how our witnessing can then be mobilized into some kind of action.

This phenomenon is bleakly dramatized in Guillaume Morissette's novel *The Original Face*, which captures the paralytic weight of making sense of climate change through its nebulous representation in media. Morissette's novel follows Daniel, a freelancer and artist living between Montreal and Toronto, as he struggles to reconcile his vague awareness of the global impact of anthropogenic processes with his own lived experience of disenfranchisement and alienation from these same processes. In this respect, Morissette's novel presents a unique take on climate change fiction, wherein, rather than structuring the narrative around an easily identifiable event or crisis (i.e., the drought in Omar El Akkad's *American War* or the titular seasonal climatic disturbances in NK Jemisin's *The Fifth Season*), Morissette's characters recognize only an obscure relationship between anthropogenic processes and climate change and their own localized experience. In this way, the novel could be seen to bear out Adam Trexler's observation that "[d]irect cause and effect make a satisfying narrative, but anthropogenic global warming is expansive... In order to approach climate change in fiction, it is necessary to re-examine some of our basic assumptions about what things do the work in novels" (205). Rather than artificially rendering the impact of the Anthropocene visible on the human scale, Morissette presents how its globe-spanning reach actually appears to individual people: Here, climate change is not quite cognizable as an event, but rather looms as a kind of ambient threat that is never entirely visible. As the novel's back cover copy instructively suggests, "climate-change anxiety hang[s] in the air" as an unresolvable backdrop that can only ever be accessed incompletely by the novel's characters.

Importantly, the mechanics of this looming threat are foundational to the novel not so much on the level of its content but, more fundamentally, on the level of form: *The Original Face* is a collection of 51 chapters that range in length from a few pages to single sentences. In structuring the text in this way, Morissette is able to confront readers with artifacts of the Anthropocene as pithy bits of trivia. For example, the novel's fourteenth fragment, which simply reads "It was always 'the hottest year on record'" (38) is contained between two similarly short quips: "Staring at my own Tumblr account, I absent-mindedly looked for the 'Unfollow' button" and "What is art except being the real estate agent of your own neuroses" (38). Taken individually, each of these fragments could be said to contain genuine (if somewhat underdeveloped) insights into a uniquely modern brand of anxiety, but by presenting them in rapid succession, Morissette self-consciously undercuts the overall impact of each, and the sequence is experienced more like a series of tweets on a timeline than any kind of sustained commentary; they function as glossed over, half-considered bits of content one might absently consume while waiting for the bus. The fact of anthropogenic climate change, in this sense, becomes paradoxically omnipresent and distant: both a fixture in our ambient patchwork of ongoing societal concerns and unmanageably large, thinkable only in terms of broad headlines that are increasingly difficult to meaningfully respond to.

Again, the point here is that we are being confronted with the fundamental tension between the impact of anthropogenic processes as such and the ability of individual humans to situate themselves relative to those processes. As Bruno Latour suggests, "people are not equipped with the mental and emotional repertoire to deal with such a vast scale of events... How can we simultaneously be part of such a long history, have such an important influence, and yet

be so late in realizing what has happened and so utterly impotent in our attempts to fix it?" ("Agency" 2). Unable to resolve or even productively integrate the fact that it is once again "the hottest year on record," Morissette's protagonist, as well as the narrative itself, simply scrolls onward to something else.

Morissette's novel captures something about the direct experience of climate change not so much as an event or even set of events, but rather as a set of interlocking discursive phenomena, each of which demands consideration and resists easy assimilation into some broader overarching narrative. Crucially, while Morissette's novel cannot definitively solve the discursive problem that it proposes, much of Daniel's behaviour is informed by a struggle to conceptualize it as best he can: While the plot of *The Original Face* remains localized in Montreal and Toronto, the narrative is instructively haunted by the spectre of global anthropogenic power dynamics, which the novel's characters are only ever peripherally able to integrate into their lived experience. For example, consider Daniel's idle reflections on globalized capitalism while at the grocery store:

> Buying fish at the grocery store, I thought about how my lifestyle was only possible because of my participation in a gigantic, worldwide system of exploitation and bullying that kept the price of various items at the supermarket relatively affordable for consumers in North America. Me purchasing tilapia at a convenient price point meant some- one, somewhere else, was inevitably getting short-changed, though did I owe anything to that person? Or was the best thing I could do for that person what I was already doing, which was to live my life like a bed bug of capitalism? (56-57)

Instructively, Daniel translates the "gigantic, worldwide system of exploitation and bullying" into something much narrower: an imagined transaction between himself and "someone, somewhere

else." Framing globalized capitalism in this way usefully demonstrates the disconnect that exists between anthropogenic processes and the actual experience of individual humans within that system; unable to fully integrate the complex apparatus of human and nonhuman components that enable and mediate his access to commodities, Daniel can conjure only a rudimentary simulacrum on the scale of the individual. Instructive as well is that his idle reflections on the injustices of purchasing tilapia are never quite extended to the tilapia itself: the fish never emerges as a living thing deserving of ethical consideration on its own terms, but rather remains rigidly inscribed as a commodity within the logic of consumer capitalism. This is significant, as it suggests the limited imaginative framework within which Daniel's well-intentioned musings are contained. That is to say, Daniel's rigid moral calculus on the scale of the individual human limits not only his understanding of scalar complexity, but also the kinds of beings that he can recognize. As a result, it's unsurprising that the only real solution he's able to muster is so unsatisfying: the inaccessible scale of these processes and the diverse set of human and non-human beings that they contain yield no obvious course of action, and Daniel is left hoping that his own limited and guilt-ridden engagement might somehow absolve his complicity. While Daniel recognizes his own participation in an exploitative system and even wishes to hold himself accountable, he is unable to imagine what that accountability might actually look like.[1]

What I'm attempting to identify here might best be understood as a kind of second-order impact of "climate change," or a representational problem borne of a good faith attempt to take seriously the whole set of problems that the term "climate change" unevenly gestures toward

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[1]For reasons that will be developed further in the third chapter, the scene of a character standing in a grocery store and having a brief confrontation with their place within a globalized network of production and exchange is something like a trope of the particular mode of "climate fiction" that this project is working to theorize.

while simultaneously grappling with the scalar discontinuities that such an effort necessarily forces upon us. What I've termed "terrestrial realism" here names the effort, particular to realist fiction, to delve into this representational problem, to locate and narrativize the experience of these narrowly localized and interlocking climatological problematics and, simultaneously, situate them within a terrestrial sphere that can never be experienced as such. The project of terrestrial realism might then best be understood as to attempt to apprehend the global and local scales simultaneously, without prematurely resolving one into the other.

In this sense, the ideological angle of this project could be understood to follow from the conception of realism developed by Georg Lukacs. While this relationship will be substantiated in the second chapter, at the outset here I'll just note that terrestrial realism should be understood to follow Lukacs' aspirational and never-fully-resolvable orientation toward "totality." In this sense, this project refuses the liberal individualism that has come to characterize a growing portion of the centre-left's response to climate change. Rather than giving way to the kind of climatological pessimism characterized by Jonathan Franzen in his recent essay collection, *The End of The End of The Earth*, in which he opines that the contemporary left "had to keep insisting on the truth of climate science while persisting in the fiction that collective world action could stave off the worst of it" (15), this project aims to unpack the ongoing struggle to keep faith in the potentialities of the collective.

I'll also preemptively address the charge that this method of framing climate change primarily as a discursive problematic (or set of discursive problematics) assumes a kind of privileged position, as it presupposes a degree of critical distance from the actual material impacts of climate change. This is true. As will be discussed in the first chapter of this project, terms like "climate change" and "the Anthropocene" both serve to designate both an actual set of

events and phenomena, as well as (at least in the context of academia) the discursive spheres that orbit those events and phenomena. And while my own project is more invested in the discursive spheres than the events themselves, I don't mean for this focus to imply that the broader material consequences of the changing global climate are a foregone conclusion or otherwise not deserving of further discussion. Instead, as these chapters will work to demonstrate, it is through a more rigorous accounting of the representational problem posed by the climate change discourse that we can find a means of mobilizing toward an intervention into the broader problematics of climate change as such.

Global, Planetary, Terrestrial

While this project's proposed identification of a new "terrestrial" mode of literature will be more fully substantiated in its second chapter, this introductory section offers a useful opportunity to set my usage of the term "terrestrial" against the terminologically similar but ideologically distinct critical notions of World Literature and the more recent Planetary turn. While both of these latter concepts share a preoccupation with the relationship between the planet (or "earth," or "globe") and the literary, their respective parsing of what exactly it means to evoke the "planet" (or "earth," or "globe") is often understood to position them antinomically against each other. As this section will begin to suggest, the antinomic relationship between world literature's aspirationally global scope and the Planetary turn's reorientation toward the localized particularities of situated relationality generates a productive site of tension through which we can begin to characterize the terrestrial.

The notion of a world literature, or *Weltliteratur*, is first described by Goethe, who, in 1827, remarked in 1827 that "the epoch of world literature is at hand, and everyone must strive to hasten its approach"(Quoted in Damrosch 1). As David Damrosch observes, for Goethe,

Weltlitertur wasn't so much intended to describe an actual set of literary texts but rather an emerging sense of literary cosmopolitanism, or an international network of exchange for writers and scholars, in what Damrosch describes as a "a network [with] a fundamentally economic character" (3). This same idea is echoed by Marx and Engels, who, twenty years later, observe that "from the numerous national and local literatures there arises a world literature" (13). As with Goethe, Marx and Engel's conception of a world literature was symptomatic of a broader decline in nationalism and a growing sense of global consciousness. As they argue, the rise of this singular world literature was to be hailed as an indicator that "[a]ll old-established national industries have been destroyed or are daily being destroyed" and "national one-sidedness and narrow-mindedness become more and more impossible" (13) in what Spivak describes as a celebration of "the in-itself-dubious achievements of the bourgeoisie and the world market" (108).

Of course, this celebration is short-lived, and the emergence of this anticipated global network of exchange gives way not so much to Marx and Engel's vision of a unified global class struggle but rather a patchwork of national interests, fuelled by the uneven pressures of Western capitalist imperialism. As Tom Nairn neatly summarizes, "[the] world market, world industries and world literature predicted with such exultation in *The Communist Manifesto* all conducted, in fact, to the world of nationalism" (13). What we end up with, as Franco Moretti describes,[2] is "a system which is different from what Goethe and Marx had hoped for, because it's profoundly unequal" ("Conjectures" 56). The anticipation of a singular and universal theory of global

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[2] Notably, Moretti's proposed solution to this inequality is to posit a world literature in which English-language texts and translations become a kind of universal medium of exchange, relegating the particularities of non-English close reading to the domain of national or regional literature. While it's outside the scope of the present writing to address this issue more substantively (my own project not-accidentally dealing only with literature originally written in English), a key criticism of this move is articulated by Jonathan Arac, who argues that Moretti "ignores the actual role of English in contemporary globalization, even though English is the crucial enabling medium that makes possible his survey of all those continents and years" (40).

literature gives way too quickly to what Susan Lanser usefully describes as a kind of literary "tourism": As Lanser goes on to note, by the early 1990s, the critical turn toward this globalized conception of literature had become an avenue for "'cosmopolitans' who pride ourselves on transcending narrow and parochial interests [to] dwell mentally in one or two (usually Western) countries, summer metaphorically in a third, and visit other places for brief interludes" (281). Despite the lofty ideals from which the notion of a *Weltliteratur* initially emerged, the reason for this transition feel fairly obvious in retrospect. Like globalization more broadly, while the notion of a world literature may be global in scope, its internal architecture is dictated largely by centres of power that are still narrowly localized. As Gayatri Spivak describes, "Globalization is the imposition of the same system of exchange everywhere. In the gridwork of electronic capital, we achieve that abstract ball covered in latitudes and longitudes, cut by virtual lines, once the equator and the tropics and so on, now drawn by the requirements of Geographical Information Systems" (72). This drastic reduction of the planetary scale into the simplified logics of global capital results in what Mary Louise Pratt describes as a "selective multinationalism" ("Comparative" 33) in the negotiation of something like a canon of world literatures, in which the "great" literary works of the Western tradition are supplemented by a relatively narrow range of approved non-Western texts.

With this in mind, the notion of the planetary has emerged more recently to serve as a kind of rejoinder to the failures of globalized world literature to adequately account for the complex and overlapping relational networks that characterize contemporary "planetary life," which, as described in the introduction to Elias and Moraru's collection on *The Planetary Turn*, "consists in an incessantly thickening, historically unprecedented web of relations among people, cultures, and locales, to comprehend the planetary must entail grasping the relationality

embedded in it" (xii). A reorientation toward the planet (or what they term “planetarity,” following Spivak) describes a theoretical and representational approach that focuses directly on this intricate web of relationalities. As they go on to posit, "[if] planetarity is the cultural-discursive matrix of innovative art, then the dialogical and the relational may well encapsulate the planetary aesthetic" (xii).

As Elias and Moraru go on to describe, "the best discussions of planetarity gravitate away from global studies’ obsessions with economic, political, and technical administration and move closer to the vital problem of the ethical relation obtaining in new models of transnationality, internationality, or multinationality"(xvii). In this sense, planetarity might be understood to describe a critical turn away from the monolithic and totalizing connotations often ascribed to Goethe's notion of *Weltliteratur* and toward what Elias goes on to describe as a "world commons," or "a social space that is organized neither on the nation-state model nor on the neoliberal global model" (41). As a critical turn, this makes a lot of sense, and productively builds on Spivak's proposal of the term planet to "overwrite the globe" (72). As Spivak describes, the primary utility of this terminological shift is in its attention to what she describes as "alterity," or resistance to the singular or hegemonic logic of globalization through a recognition of our conditional, irreducible, and narrowly localized, inhabitation of the earth. As she argues, "[t]he globe is on our computers. No one lives there. It allows us to think that we can aim to control it. The planet is in the species of alterity, belonging to another system; and yet we inhabit it, on loan" (72). What the planetary turn offers is an alternative to this uninhabited “globe,” providing instead an attention toward the dense network of situated relationalities that iteratively constitute “the planet.”

While I'm broadly sympathetic to the relational focus at the core of the planetary turn, my own notion of the terrestrial can be distinguished from the notion of the planetary primarily in what it aims to recuperate from the notion of the global: That is to say, where the planetary "gravitate[s] away from global studies' obsessions with economic, political, and technical administration" (xvii), what I term the terrestrial might be seen as an effort to hold those globalizing forms of administration in view. Crucially, though, the terrestrial aims to position these globalized forms less as the desirable outcomes of what Spivak describes as "the imposition of the same system of exchange everywhere" (72), but rather as the vestigial skeleton of a grid that, while no longer useful as a totalizing explanatory mechanism, still nonetheless exerts a kind of pressure on individual subjects. While this pressure is exerted unevenly on the basis of class position, geographic positionality, and other demarcations such as race, gender, and species, it is nonetheless fundamentally a planetary phenomenon, in the sense that everything on the planet is exposed to it to some degree.

The tension here between this condition's universality and particularity is actually neatly captured in Erich Aurbach's deployment of Goethe's notion of *Weltliteratur*, which, as Edward and Maire Said describe in the introduction to their translation of Auerbach's "Philology and Weltliteratur," functions as "a visionary concept, for it transcends national literatures without, at the same time, destroying their individualities" (1). As Auerbach himself describes, "Weltliteratur does not merely refer to what is generically common and human; rather it considers humanity to be the product of fruitful intercourse between its members...Today, however, human life is becoming standardized. The process of imposed uniformity, which originally derived from Europe, continues its work, and hence serves to undermine all individual traditions" (2).

All of this is to suggest that while my own deployment of the terrestrial follows the planetary turn's distrust of the monolithic and universalizing connotations implied by the notion of the Global, I also want to retain a sense of the earthly particularity that Auerbach looks to retain from Goethe's notion of *Weltliteratur*. As a result, the notion of the terrestrial contains within it this tension between the irreducible particularity of the local and, simultaneously, the universalizing pressures of a singular planetary situation. In this way, the notion of the Terrestrial aims to both register the planetary scale and influence of globalized and imperial capitalism, while also rejecting the suggestion that any work of literature is fully reducible to its capacity to register these forms of influence: While all of the novels examined in this project will be seen to dramatize some aspect of these globalized pressures, they are not ultimately exhausted by them, following Moretti's insight that, "if after 1750 the novel arises just about everywhere as a compromise between West European patterns and local reality—well, local reality was different in the various places, just as western influence was also very uneven" ("Conjectures" 64). As this project will demonstrate, this same uneven distribution of influence can be felt and registered in the fiction of a single continent: While the novels examined over the course of this project are set in the (geologically) narrow time and space of 21st century North America, the pressures exerted on, for instance, the rural Appalachian community in Barbara Kingsolver's *Flight Behavior* will vary massively from the pressures exerted on the Indigenous reservation in Thomas King's *The Back of the Turtle*, even though both communities share in a kind of struggle against the tentacular reach of globalized capitalism, and how exactly the two novels register that difference can be described through what Moretti, following Fredric Jameson, terms a "formal

compromise" of literary realism, deploying the narrow individualism for which that form was calibrated to describe a set of planetarily phenomena.[3]

To put that a little differently, what the terrestrial describes is less a subject position than an orientation, which aims to thread the needle between the interplay of the local and the global that a meaningful recognition of climate change forces upon us: In this sense, where Spivak advocates that "we imagine ourselves as planetary subjects rather than global agents" (73), I posit that, as Morissette dramatizes in *The Original Face*, for a growing fraction of the human population, our status as "planetary subjects" is tightly interwoven with some sense of the global agentive capacity of the human species in aggregate. With this in mind, an orientation toward the terrestrial is an effort to overcome what Jameson describes as "a deep cultural conviction that the lived experience of our private existences is somehow incommensurable with the abstractions of economic science and political dynamics" (*Allegory* 165). Terrestrial realism, in this sense, names the fictions that are calibrated to the lived experience of the planetary individual grappling with the felt pressures of the global scale.

Methodology

This project is divided into five chapters which are each detailed below. The first two chapters will establish the theoretical groundwork that structures the textual analysis of following three chapters. The first chapter argues that the critical utility of the term “Anthropocene” emerges only when it is deployed as a kind of academic keyword around which a range of conflicting and overlapping academic discourses can be organized. That is to say, if we take seriously the idea that the term "Anthropocene" can only ever gesture incompletely toward some

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[3] The specific mechanisms that enable this formal compromise are delineated in the second chapter of this project.

as-yet inconceivable geological force called "Anthropos," then the proliferation of alternative "-cenes" that its incompleteness has engendered (i.e., Capitalocene, Plantationocene, Chthulucene, etc.) can be seen as an effort to contingently resolve its inherent terminological instability from this or that critical vantage. As such, this chapter examines an interdisciplinary array of scholars, including Anna Tsing, Stacy Alaimo, Donna Haraway, Dipesh Chakrabarty, Wael Hallaq, John Bellamy Foster, Timothy Morton, and Jason Moore, who have all formulated a critique of liberal humanism's relationship to the environment from their own particular critical angle: The Capitalocene centres capital, the Plantationocene centres race, imperialism, and (somewhat contentiously) plants, the Cthulucene centres something Haraway wants to call "Chthonic ones," and so on. Importantly, as this first chapter will demonstrate, while each of these narrower interventions attempts to further refine the focal point of the broad set of problems that the term Anthropocene is only indirectly able to suggest, none has yet to fully exhaust or otherwise explain the whole hyperobject of the Anthropocene as such. So rather than positioning any one of these alternative -cenes as the Anthropocene's definitive replacement, I posit that they are each most productively engaged with contingently, both on their own terms and in relation to the broader set of problematics that the term Anthropocene, however incompletely, aims to describe.

To do this, I borrow the notion of diffractive reading from Haraway and Karen Barad. As Haraway describes, the notion of diffraction "is a mapping of interference, not of replication, reflection, or reproduction [that highlights] where the effects of difference appear" ("Promises of Monsters" 300). As this first chapter will demonstrate, this mapping of difference can be productively applied to the heterogeneous discourses organized around the term "Anthropocene." Not only does this diffractive approach allow for the narrow problematics addressed by the Plantationocene or Capitalocene to be understood on their own terms, but it also enables a

generative mapping of the points of intersection and tension between the two discourses without definitively affirming one over the other. Instead, by remaining attentive to the emergent *effects* of the tensions between the various alternate -cenes, a diffractive approach both retains the irreducible density that the term "Anthropocene" unevenly aims to capture, while simultaneously positioning each of the narrow discursive interventions represented by the alternate -cenes as a step in the direction of rendering that irreducible density slightly more visible. Each intervention functions as a narrow beam of light diffracting through the broader prism of the Anthropocene discourse at a different angle, and in so doing reveals a new dimension of the complex set of problems toward which the term itself can only vaguely and incompletely describe.

As the first chapter will work to establish, interdisciplinary tension is the driving force behind the critical discourse of the Anthropocene. Along these same lines, the second chapter will examine a similar tension at the intersection of the Anthropocene and contemporary fiction, to argue that, just as the critical discourse of the Anthropocene can be illuminated through a shift in focus toward the cumulative differences that emerge in the array of narrower -cenic reframings, so too can the literature of the Anthropocene be best apprehended through a shift in focus toward the wide ranging impacts that the Anthropocene has imposed on literatures outside of the narrow field of "cli-fi," or climate-related science fiction. In particular, this chapter will examine the under-theorized relationship between the Anthropocene and literary realism, to argue that realism's tendency toward the representation of individual experience has emerged as a particularly generative mode for grappling with the tension between individual humans and the vast scale of climate change. In this way, this chapter functions as a response to Amitav Ghosh's oft-cited claims that "fiction that deals with climate change is almost by definition not the kind that is taken seriously by serious literary journals: the mere mention of the subject is often

enough to relegate a novel or short story to the genre of science fiction. It is as though in the literary imagination climate change were somehow akin to extraterrestrials or interplanetary travel" (7). Contra Ghosh, I argue that the breadth of climate change's impacts has left a clear signature on "serious fiction," and the unique qualities of that signature can be rendered visible not in spite of "serious fiction's" historical tendency toward realism but rather because of it.

To demonstrate this, this chapter will examine the history of realism's generic emergence and gradual transformation form a uniquely Western expression of liberal humanism into the planet-spanning constellation of genres recently termed "peripheral realisms." As this history reveals, realism's tight relationship to Western liberal humanism and colonial imperialism has rendered it a surprisingly generative tool for critique of those same ideological tendencies: As this chapter catalogues, wide-ranging generic instantiations of realism, from Soviet socialist realism to India's realist Dalit literatures, demonstrate both the flexibility of realism's modal focus on the individual lived experience, and how that focus on lived experience can be productively mobilized as a means of social and cultural critique. Developing on insights from Lukacs, Auerbach, and Jameson, I argue that realism's modal tendency to resist the pull of the dominant cultural logic in pursuit of what Lukacs terms "totality" serves a unique function in the project of representing climate change, in a sense positing that realist literature in the Anthropocene "seeks to endow the individual subject with some new heightened sense of its place in a global system" (Jameson *Postmodernism* 54).

Where the first two chapters serve to make a case for utility of turning to literary realism as a legitimate and generative mode for engaging with the problematics of the Anthropocene, the remaining three chapters work to demonstrate that broader claim through a series of interrelated close readings, each of which geared toward highlighting how realist literature has intervened

into a narrower aspect of the climate change discourse. Haraway's advocacy of a diffractive approach that provides a "mapping" of interference patterns between different discursive modes can be most acutely registered in realist fiction on the level of the individual sentence. Reading diffractively demands close attention to the usage of language to construct the world of the novel and its relationship to the planetary scale and geological time.

As a method, close reading represents this project's commitment to the complex scalar demands of the Anthropocene: By focusing on the novel at the level of the sentence, close reading tracks the narrative as it unfolds, and how that unfolding imbricates the human and terrestrial scale. Properly contextualized, close reading is the methodological tendency in which the realism of the text reveals its terrestrial dimension: Quotidian moments at the grocery store reveal dense networks of international commerce and exchange. A passing interaction with a podcast listener evokes the obscured histories of North American colonization. A plane crash renders visible the drastic transformations of nonhuman life.

With that in mind, the third chapter examines the problematics of scale, which have been a central focus of the Anthropocene discourse since Dipesh Chakrabarty's influential "Four Theses." Briefly, for Chakrabarty, the central representational problematic posed by the Anthropocene is that it forces humans to attempt to cognize ourselves as both individuals and, simultaneously, as a global geologic agent. As the previous two chapters serve to demonstrate, this tension between the narrowly localized experience of the individual and the never-quite accessible domain of the global can be mapped onto this project's conception of realism and the terrestrial, respectively. The third chapter, then, will examine how realist literature can be deployed to bridge the gap between these two vastly different modes, without succumbing to what Timothy Clark usefully describes as the "derangements of scale" (148), or the too-clean

linear extrapolation of individual behaviours into their global impacts. In this sense, this chapter will serve as a contribution to the ongoing development and theorization of what Kate Marshall sees as a "growing body of literary fiction published in this decade [that] understands itself within epochal, geologic time and includes that form of time within its larger formal operations" (524). With that in mind, the third chapter examines Barbara Kingsolver's *Flight Behaviour* and Ben Lerner's *10:04*, which both grapple with the scalar divide between the individual and the global, but with distinctive and in a sense oppositional results. In *Flight Behaviour*, the looming threat of environmental change is allegorically represented through a swarm of monarch butterflies who've had their migratory pattern disrupted by climate change. While Kingsolver makes space for the literal significance of the monarch migration on both the local and global scale, the monarchs also play a significant role as an allegory for the domestic drama that is really the crux of the novel: Just as changing environmental conditions trigger the monarchs to find a new winter home, the novel's protagonist's own migratory leap into an uncertain but hopeful future, as the changing environment creates a disjuncture that pushes her to end her stable but unfulfilling marriage. Where *Flight Behavior*'s allegory resolves comfortably back into the scale of the human, Lerner's *10:04* deploys allegory as a means of interrogating the inherent instability of attempting to describe the fallout from Hurricane Sandy from an individual perspective: For Lerner, allegory functions as a means of tracing the limits of the individual, and offers a broad gesture to a vast terrestrial network on a planetary scale, of which the individual is an active but by no means central participant. In this way, Lerner provides a model for realist literature's ability to interrogate the representative limits of the Anthropocene.

As the above description suggests, one commonality between the novels examined in the third chapter is that they are both structured around specific and disruptive climatological "events," which in turn serve as footholds through which their respective authors are able to more organically develop their insights into the scalar problematics that these events have forced them to confront. *Flight Behaviour*'s displaced monarchs and *10:04*'s twin storms function synechdochially, as points of reference around which some kind of climate change discourse within the frame of the novel can emerge. In this respect at least, *10:04* and *Flight Behaviour* sit on the realist end of a broad spectrum of what we might call "event-based" climate fiction, a broad category that would include, on the other end of its spectrum, the natural disasters depicted in cli-fi classics like Kim Stanley Robinson's "Science in the Capitol" trilogy.

While the benefits of this type of climate fiction are obvious, I'd posit that the focus on climate change-related "events" does not fully exhaust the representation of climate change in fiction. With that in mind, the fourth chapter aims to delineate a different kind of "climate" novel: one that does not invoke the climate change synechdochially, through a disruptive climatological event, but rather aims to register the changing global climate as a kind of looming and diffuse presence in our daily lives that never faces direct confrontation through a discrete and disruptive "event," but nonetheless informs and structures our behaviours through a kind of indirect pressure on the quotidian. The two novels examined in the fourth chapter, Jenny Offill's *Weather* and Thomas King's *The Back of the Turtle*, both map the presence of climate change not through a sudden and dramatic appearance like a storm or migratory anomaly, but rather through indirect and asymmetrical pressures on individual lives.

As this chapter will demonstrate, realism's unique relationship to the individual lived experience serves as a particularly generative mode with which to engage this particular and

quotidian dimension of the Anthropocene, which often expresses itself in strange and unpredictable behaviours. In Offill's *Weather,* climate change appears primarily as the theme of a podcast hosted by the novel's protagonist Lizzie's employer. While Lizzie never finds herself directly threatened by the changing global climate, her exposure to increasingly bleak climatological analysis leads her into a kind of half-serious interest in survivalism and the American prepper movement, as she half-heartedly prepares herself for some kind of coming apocalypse. Similarly, King's *The Back of the Turtle* maps the vague unease of Dorian Asher, a chemical company CEO, attempting to justify his complicity in a chemical spill that devastated a remote indigenous reservation across the country before the events of the novel. Throughout the novel, the looming cognizance one's complicity of anthropogenic environmental damage is ironically juxtaposed with the severity of the actual material fallout of that damage experienced by the indigenous community, highlighting the asymmetrical distribution of the consequences of environmental change.

Broadly speaking, both the third and fourth chapters of this project trace limitations of the individual scale. In the third chapter, we follow both Kingsolver's Dellarobia Turnbull and Lerner's autofictional narrator as they struggle to make sense of vast, planetary systems and events from the narrow vantage of their own experience. Similarly, the fourth chapter finds Offill's Lizzie and King's Dorian Asher foreclosing on the planetary entirely, and instead looking to respond to the terrestrial pressures of changing global climate on strictly individualist terms. As I've argued, this focus on the individual and its often uneven points of intersection with the planetary scale is at the core of realism's intervention into the project of representing the Anthropocene. As the third and fourth chapters work to demonstrate, each of these individually focused novels reveals a new angle from which one can diffractively read the Anthropocene, thus

highlighting the utility of the realism in rendering visible new dimensions of the vast and complex assemblage of problematics that the term "Anthropocene" gestures toward.

Still, though, this recurrent focus of the individual scale, even from a critical vantage, does feel a little constraining in and of itself. And while the previous two chapters will hint at what this illusive orientation toward "the terrestrial" might look like, I've not yet directly addressed whether this talk of "tracing the limits of the individual scale" can in turn be mobilized in such a way that actually escapes the gravitational pull of liberal humanism. This, after all, is at the core of Adam Trexler's critique of realism in the Anthropocene, which, he argues, "cannot imagine novel technological, organizational, and political approaches to climate change" (233). This is a serious criticism, and one that implicitly suggests why climate fiction or "cli-fi" is so frequently positioned as a kind of sub-genre of climate fiction (an erroneous categorization that I discuss at some length in this project's third chapter). While I'd argue that the realist novels examined in the third and fourth chapters make contributions to the Anthropocene discourse that are generative in and of themselves, the fifth and final chapter of this project will work to demonstrate how realism can also be deployed as a means toward "imagining" novel political approaches to the climate crisis.

To do this, the fifth chapter first builds on Donna Haraway's notion of "kinship," which, as I demonstrate, has itself become a locus for a wide range of prescriptions for how individuals can and do reorient their relationship to the rest of the planet by fostering “kinship bonds” with the nonhuman. As I argue, though, there's an open-endedness to Haraway's discussion of kinship that has yielded results that range from theoretically generative to ethically dubious, implicitly (or, at times, explicitly) seeming to function more as a coping mechanism for the forgone conclusion of an impending human extinction. As this chapter works to demonstrate, one

relevant question in the field of kinship discourse might be one of how to model a conception of nonhuman kinship that does not resolve into a kind of therapeutic reorganization of one's mindset, but instead demands an actual change of behaviour. With that line of questioning in mind, the chapter turns to Richard Powers' *The Overstory*, which captures a sprawling collective of human lives that are each reorganized around kinship relationships with trees: here, kinship with the nonhuman is presented as both generative and alienating, as Powers catalogues both the academic, social, and political struggles that nonhuman kinship introduces into his characters lives. In this way, the novel deploys realism to directly challenge the normative modes of relationality inscribed within the logic of liberal humanism, with emphasis on the actual tension that these challenges serve to produce. In this sense, realism as a mode of fictional representation can be seen to emerge in the generative friction that non-normative modes of relationality serve to produce, ultimately providing a model through which the dominant ideological tendency can be actively resisted and challenged.

It should be noted that the novels covered in this text are not meant to provide an exhaustive account of the phenomenon of terrestrial realism. Other contemporary novels, such as Lucy Ellmann's free-associative epic *Ducks, Newburyport*, Rivka Galchen's paranoid *Atmospheric Disturbances*, or Ian McEwan's satirical *Solar* all register the pressures of the terrestrial on the individual in their own unique way. The five texts examined in this project were selected as a roughly balanced representation of the three core characteristics of terrestrial realism as a mode: Lerner's *10:04* and Kingsolver's *Flight Behavior* illustrate the problematics of comprehending climatological scale, Offill's *Weather* and King's *Back of the Turtle* dramatize the uneven distribution of pressures exerted by environmental change, and Powers' *Overstory* explores the possibility of kinship between humanity and nonhuman life. In each case, these

terrestrial realism of these novels works to subvert the anthropocentric individualism that is so often seen as a dominant characteristic of conventional realist novels. The novels assembled here serve to represent realism's substantial utility in examining and exceeding the limits of liberal humanism. In this respect, my proposed project not only lays out a useful corrective to the claims (here characterized by Amitav Ghosh and Adam Trexler) of realism's inability to meaningfully deal with climate change, but, more fundamentally, provides an affirmative account of realism's role in addressing the Anthropocene: What I've termed terrestrial realism describes the process through which fiction can escape the anthropocentric constraints of liberal humanism and bring itself back down to earth.

Chapter One: The Diffractive Anthropocene

Much of the contemporary academic discourse surrounding the idea of "The Anthropocene" is characterized by a kind of uneasy ambivalence surrounding the term itself. As Rob Nixon describes, "[t]he term has several disadvantages stacked against it. For one thing, it sounds academic: there's an arcane, egghead quality to the word. Unlike, say, indigenous rights or the environmentalism of the poor, 'the Anthropocene' is not self-explanatory, but requires elaborate intellectual mediation" ("The Anthropocene" 11). Either in spite or because of this eggheadedness, the term Anthropocene has quickly been adopted as a keyword in a wide range of academic disciplines: it's become a mainstay of conference CFPs and has served as a guiding designation for a growing archive of monographs and edited collections, each of which work to add new layers of mediation to an already densely mediated theoretical concept.

I'm not pointing all of this out at the outset to be dismissive of the work being done on the Anthropocene: I maintain that the "elaborate intellectual mediation" that the term "Anthropocene" requires has turned a somewhat obscure bit of jargon into an extremely generative point of departure for a wide range of scholarly inquiry. What I do want to highlight, though, is the extent to which an increasingly large fraction of work on the Anthropocene tends to distrust the term itself: The proliferation of alternative -cenes (Capitalo-, Chultho-, Plantationo-, etc.) advocated by prominent figures like Donna Haraway and Jason Moore suggests the strategic provisionality with which the term Anthropocene is deployed. With that in mind, this chapter will serve as an interrogation of the growing body of work that begrudgingly accepts the term "Anthropocene" as a kind of catachrestic keyword for a more amorphous range of problems. My usage of the term itself, then, is not an uncritical acceptance or endorsement of

Paul Crutzen and Eugene Stoermer's proposed geological era marked by "the central role of mankind in geology and ecology" (17c), but rather a contribution toward a growing effort to conceptualize the ideological conditions under which such a proposal could be made in the first place. Begrudging or not, the broad acceptance of the term "Anthropocene" as a kind of organizational keyword has inevitably skewed the discourse surrounding the range of environmental concerns toward which the term unevenly gestures. With that in mind, I'd argue that the challenge posed by the Anthropocene is not only one of better managing humanity's damaging impact on the environment, but simultaneously one of disentangling environmental discourse from the anthropocentric tendencies that an uncritical acceptance of the term itself often implicitly endorses. While the Anthropocene's broad and universalizing gesture toward a monolithic conception of the human renders it a troubling candidate to name the current geological epoch, the term's breadth actually positions it as a generative point of departure for critical inquiry into a wide range of narrower problematics. In order to better contextualize the utility of the term's contentious reach, this chapter will outline a diffractive approach to the Anthropocene discourse.

Framing the present environmental crisis as a kind of epistemic problem is, as one might expect, well-worn territory for a wide range of interdisciplinary theorists. While the approach to environmentalist discourse is going to vary based on one's critical vantage, the role of *anthropos* itself has emerged as a kind of discursive fulcrum for much of the Anthropocene commentary, as commentators work to make sense of what it means to place the human at the centre of a geological epoch. For instance, Crutzen and Stoermer's broad gesture to the "central role of mankind" as a geological actor has been taken up in an almost celebratory register by Erle Ellis,

whose *Ecomodernist Manifesto* advocates "that humans use their growing social, economic, and technological powers to make life better for people, stabilize the climate, and protect the natural world" in order to achieve "a good, or even great, Anthropocene" (6). This is an optimistic sentiment, but if one considers the unequal global distribution of the "social, economic, and technological powers" that the ecomodernists are looking to leverage, its worth noting the amount of work that the term "human" is actually doing here, as it obliquely obscures the much narrower set of individuals that could actually say that their "social, economic, and technological powers" are growing at all. In this sense, Ellis' ecomodernists' work actually follows a long lineage of liberal humanist thinkers for whom a monolithic conception of humanity stands in a sort of dialectical tension with a similarly monolithic conception of nature. As Rosi Braidotti neatly summarizes, this universalizing understanding of the human ends up excluding the vast majority of the individuals (i.e., actual human beings) that it claims to represent: "the allegedly abstract ideal of Man as a symbol of classical Humanity is very much a male of the species: it is a he. Moreover, he is white, European, handsome and able-bodied…What this ideal model may have in common with the statistical average of most members of the species and the civilization he is supposed to represent is a very good question indeed" (24). Where liberal humanism takes as its central concern the uninhibited autonomy of a universalized figure of "the human" to exert its will against a flat and mute natural world, the limits of this supposedly universal ideal are brought into focus by the intersecting critiques of disciplines that each map, in their own way, the power differentials that emerge within the internal dynamics of the human population in aggregate.

As Wael Hallaq describes, this exclusionary conception of the human ends up having a fairly substantive impact on how those inscribed within this universalizing figure tend to understand their relationship to the environment around them. For Hallaq, liberal humanism's inability to meaningfully respond to the threat of looming environmental catastrophe can be traced to the same liberal humanist tendency toward a kind of epistemic myopia. As he points out, liberalism's bifurcation of the human and nature as distinct ontological categories traps environmentalist discourse within a narrowly anthropocentric framework, which obscures any more nuanced conception of the relationship between humans and the rest of the world: "Environment is all that surrounds the human agent…but the crisis within and challenge to the modern world consist precisely in the recognition of that which has been excluded from the very processes of thinking" (248). With this in mind, combating the liberal humanist conception of the human as the assumed point of departure for the Anthropocene discourse can be best understood as the first step in a process of rearticulating the simplistic binary between "human" and "nature" advocated by the ecomodernists.

It's with the problematization of this binary in mind that I'd posit that the term "Anthropocene" is actually quite useful, not in spite of its obfuscatory breadth but rather because of it. That is to say, because the term "Anthropocene" is able to gesture only in the most general sense toward something called *anthropos*, the notion of the Anthropocene not only prompts further questions but actually requires some additional form of theoretical scaffolding before it can become meaningful. This is why, for example, the term continues to function as a locus for a vast and interdisciplinary array of scholarly activity twenty years since its conception, and while

many of the most substantive works of what we might term "Anthropocene theory" actively work to distance themselves from an uncritical acceptance of the term itself, there still appears to be little interest in completely abandoning the term altogether, at least as a sort of institutional keyword. Instead, it increasingly functions as a catachresis for a range of narrower dialectical tensions: Nick Dyer-Witheford's Marxist account of the Anthropocene as a "struggle in the planet factory" or Donna Haraway's call to "make kin not babies" both take up the term Anthropocene not as a more generalized condition of an actual geological age, but rather as a means toward interrogating some narrower problematic. All of this is to say, the utility of the term Anthropocene is a function of its generative incompleteness, which serves as a point of departure for a whole array of critical interventions. These interventions are not unified by any singular logic, but rather hang together as a kind of unresolvable assemblage of the vast and complex set of problems toward which the term "Anthropocene" can only broadly gesture.

From this perspective, the tension behind much of the Anthropocene discourse is driven forward by a kind of terminological instability: the term alternatingly and unevenly signifies a set of real world problems such as natural resource extraction, the global refugee crisis, and the crisis of institutional legitimacy in adapting to the changing global climate, but it also (in academic circles, at least) increasingly corresponds to this growing critical literature of "epistemic" problems outlined above. While all of these issues can be captured under the broad umbrella of the term "Anthropocene," they all deploy the term in different registers and with varying degrees of trust: While photographer Edward Burtynsky can more-or-less uncritically use the term as the title for his latest exhibition, which he describes in an edited collection on the exhibition as cataloguing a "global catastrophe…caused solely by the activity of a single

species"(189), Karla McManus, writing in the same collection, can succinctly capture the exact problem that Burtynsky's usage of the term fails to meaningfully consider: "[w]hen we argue about the basic meaning of a term— for example, does the *anthropo* imply human responsibility is equally shared?— we are making cultural decisions about what the Anthropocene will mean to people for years, maybe even centuries, to come" (45). The point here is that McManus and Burtynsky aren't exactly "disagreeing" about what the term Anthropocene means so much as participating in two different discourses, which deploy the term in two interrelated but ultimately distinct registers: For Burtynsky, the term Anthropocene is embraced as a signifier of human culpability for climate change: in this sense, his project of capturing this (implicitly shared) human culpability follows more-or-less directly from the similarly broad gesture toward some monolithic recognition of the "global effects of human activities" (17) described by Crutzen and Stoermer in their initial formulation of the term. Like Crutzen and Stoermer, Burtynsky's work operates under a kind of strategic logic that figures the term as a call to action for the environmentally conscious: As Crutzen and Stoermer make clear, their conception of the Anthropocene is primarily intended to mobilize some kind of political response, arguing that to "develop a world-wide accepted strategy leading to sustainability of ecosystems against human induced stresses will be one of the great future tasks of mankind" (18). From this perspective, to get bogged down in the semantics of the term itself risks atrophying the discourse into a kind of bewildered cycle of hand-wringing, when what is really needed, in their account, is drastic and immediate action.

McManus, on the other hand, is deploying the term Anthropocene in order to problematize it. She questions the epistemic commitments that we're implicitly making when we

refer to the present moment as the Anthropocene, which, while perhaps less satisfying than the language of crisis that tends to be the default mode for much of the popular environmental discourse, has proven to be a generative and necessary field of inquiry and analysis in its own right. It helps draw attention to what Rob Nixon terms the "slow violence" of climate change, as he asks, "how can we convert into image and narrative the disasters that are slow moving and long in the making, disasters that are anonymous and that start nobody, disasters that are attritional and of indifferent interest to the sensation-driver technologies of our image-world?" (*Slow Violence* 3). Like Nixon, McManus is addressing the Anthropocene in a register that does not lend itself to quick or easy answers, much less action. And while she generously frames her rhetorical question about shared responsibility as part of an ongoing conversation, it's worth noting that it's not a conversation that everyone who uses the term Anthropocene is actively taking part in.

Importantly, though, it's also worth noting that despite their differences in approach and register, there is a broadly shared orientation toward the environmental identifiable in the work of McManus, Nixon, Burtynsky, Cruetzen, and Stoermer that we don't want to reductively paper over just for the sake of argumentative simplicity, and which justifies McManus' critical intervention on the term. While it is true, for instance, that Burtynsky's broad and monolithic conception of the human in his own commentary on his work is, as TJ Demos points out, "part of a ruse that universalizes responsibility for climate disruption [and diverts] attention from the fact of corporate petrocapitalism's enormous economic influence on global politics that keeps us all locked in its clutches" (65), Burtynsky's work's subsumption into this ruse is not necessarily a foregone conclusion: In representing environmental degradation on a scale to which most people

do not have access, Burtynsky's work has a kind of disruptive potentiality, offering what Margaret Grebowicz describes as the "uncolonizable moment…that holds political potential in conditions of 24/7 capitalism" (9) that is a feature of effective art about the environment. In this sense, Burtynsky's work can't be written off as irretrievably subsumed by the dominant tendency of the Anthropocene discourse toward a kind of universalizing Anthropocentrism, but can instead be seized as a moment of disjunction, in which that dominant tendency can be engaged and critiqued. In order to build on the potentiality of these moments, though, one needs to a firm understanding of how these overlapping discourses can be productively diffracted through each other, such that their latent points of disagreement can be mobilized. What is needed is some kind of framework to better situate these overlapping discourses, in order to produce a more critical discursive apparatus for theorizing the Anthropocene.

Discursive Diffraction

A useful metaphor for conceptualizing the overlapping and interlocking narratives that constitute the Anthropocene discourse is the optical phenomena of diffraction: To read the Anthropocene diffractively positions the term itself as a kind of discursive aperture through which an array of sub-discursive bands iteratively and contingently emerge. My usage of this optical metaphor is modelled on Jeffery Jerome Cohen's recent collection *Prismatic Ecology,* wherein the turn toward the prismatic is intended as a corrective to what he terms "Green criticism," or the tendency in ecological theory to overemphasize green space as the assumed focal point of environmental thought. As he describes, "Green dominates our thinking about ecology like no other, as if the color were the only organic hue, a blazon for nature itself" (xix). This focus on green space, in his view, obscures a recognition of the broader chromatic range of the

environment, and constrains the discourse into a few narrow issues: “Green analysis often focuses on the destabilizing encroachment of industrialized society into wild spaces, the restorative and even ecstatic powers of unblemished landscapes, and the companionless dignity of nonhuman creatures” (xx). In contrast to this monochromatic critical tendency, *Prismatic Ecology* is organized into fourteen chapters that each describe a different “colour” from which to approach the problematics of ecology: Stacy Alaimo’s "Violet-Black,” for instance, plumbs the abysmal nonhuman depths of the deep oceans’ “bathypelagic, abyssopelagic, and hadal zones” (Cohen 234). While my own turn to the “diffractive” here is going to deploy a less literal chromaticism to describe the heterogenetic composition of the Anthropocene discourse, I share Cohen and his collaborators’ commitment to mapping an environmental discourse that extends beyond the restrictively anthropocentric binary of Nature and Culture and toward “a restless expanse of multihued contaminations, impurities, hybridity, monstrosity, contagion, interruption, hesitation, enmeshment, refraction, unexpected relations, and wonder” (Cohen xxvi).

Importantly, though, where Cohen’s metaphoric usage of the prism leverages the optical phenomena of refraction and dispersion (i.e., the breaking of a single beam of light into an array of distinct chromatic bands), my own project deploys the related phenomenon of diffraction, which, as I’ll demonstrate, better captures the dynamics of the discursive tension and overlap that are at the centre of the epistemic problematic posed by the Anthropocene. In her 1992 essay, “The Promises of Monsters,” Donna Haraway leverages the concept of diffraction to describe how alternative modes of understanding can be read through the monolithic “Western patriarchal narratives” that tend to inform the Western understanding of our relationship to our environment.

As Haraway describes, "[d]iffraction does not produce 'the same' displaced, as reflection and refraction do. Diffraction is a mapping of interference, not of replication, reflection, or reproduction. A diffraction pattern does not map where differences appear, but rather maps where the *effects* of difference appear" (300). To read diffractively, in this sense, is a method for mapping not just differences in knowledges but the impact of those differences. By shifting focus from difference as such and toward their effects, Haraway provides a model for coherently dealing with a wider range of epistemic frameworks without privileging one over another: Rather than knowledge following from a single dominant logic (one which is implicitly, in her account, coded as Western and patriarchal), diffractive reading describes an open-ended process of knowledge production, where different modes of understanding hang in a kind of productive tension with each other. In this sense, diffractive reading offers "a means of making potent connection that exceeds domination" (299). While for Haraway this model is deployed to subvert the normative Western conception of "nature," as we'll see, this concept of diffractive reading can be helpfully deployed as a means of better framing the diverging and overlapping registers of the Anthropocene discourse.

This Harawayan notion of diffractive reading is further developed by feminist theorist and quantum physicist Karen Barad, who, in her book *Meeting the Universe Halfway*, points out that "[d]iffraction is...an apt metaphor for describing the methodological approach that I use of reading insights through one another in attending to and responding to the details and specificities of relations of difference and how they matter" (71). As a quantum physicist, Barad's real agenda in elaborating on the significance of the term "diffraction" is not entirely metaphorical: As she goes on to describe, whether the physics of diffraction are best explained

by classical or quantum physical models ends up becoming the fundamental question in the philosophy of science in the early 20th century, and constitutes the basis of the famous Bohr-Einstein debates, through which, as Barad describes, Bohr "poses a radical challenge not only to Newtonian physics but also to Cartesian epistemology and its representationalist triadic structure of words, knowers, and things" (97). For Barad, Bohr's insights into the problematics of diffraction represent not only a paradigmatic shift in contemporary physics, but also a radical rearticulation of how knowledge itself is produced. As she explains:

> The lesson that Bohr takes from quantum physics is very deep and profound: there aren't little things wandering aimlessly in the void that possess the complete set of properties that Newtonian physics assumes (e.g., position and momentum); rather, there is something fundamental about the nature of measurement interactions such that, given a particular measuring apparatus, certain properties become determinate, while others are specifically excluded. Which properties become determinate is not governed by the desires or will of the experimenter but rather by the specificity of the experimental apparatus. (19)

Rather than positioning the project of knowledge production as a matter of simply having the correctly calibrated tools to reach out into the world and pluck preexisting bits of quantified data from one's object of study, Bohr understands knowledge as an emergent property of the collaborative process between the object of study and the apparatus of inquiry. With that in mind, Barad deploys the concept of diffraction not only as a useful optical metaphor, but as an object lesson in how knowledge is both produced and operates in the world, which in turn provides a useful tool for organizing and situating distinctive modes of knowledge production. As Barad

describes: “a diffractive methodology is a critical practice for making a difference in the world. It is a commitment to understanding which differences matter, how they matter, and for whom… Making knowledge is not simply about making facts but about making worlds” (90-91). To apply diffractive reading as a method, in this sense, is not to reach out into the world from a position of objectivity and retrieve some pre-existing unit of capital-K Knowledge, but rather to actively participate in the production of knowledge as an interactive and contingent process, pieced together through a patchwork of diffuse and uniquely-calibrated epistemic frameworks.

With that in mind, the concept of diffractive reading is a useful practice for making sense of the Anthropocene discourse as a whole, as it provides a means of parsing its status as what Timothy Morton helpfully terms a “hyperobject,” or a vast, non-localized, and irreducibly complex assemblage of phenomena that we “can think or compute [and yet] can’t directly see” (*Humankind* 125). Where Morton cautions that dealing with hyperobjects like the Anthropocene means “[abolishing] the idea of the possibility of a metalanguage that could account for things while remaining uncontaminated by them” (*Hyperobjects* 2), Barad’s notion of diffraction provides a model through which that contamination can be meaningfully accounted for: Rather than affirming a single discursive framework as the definitive metalanguage through which the Anthropocene can be understood, Barad’s method of diffractive reading (and the epistemological flexibility it entails) repositions the Anthropocene as a discursive aperture through which a wide range of interrelated discourses can be diffracted to iteratively emerge against and alongside each other.

The practice of diffractively reading the Anthropocene will also serve as part of this project’s methodological commitment to decolonizing the Anthropocene discourse, as it works to

push back against the universalizing tendency of the liberal humanist conception of *anthropos*. As Zoe Todd and Heather Davis argue: "without recognizing that from the beginning, the Anthropocene is a universalizing project, it serves to re-invisiblize the power of Eurocentric narratives, again re-placing them as the neutral and global perspective" (763). Importantly, rather than disavowing the term entirely, Davis and Todd aim to leverage its power as a kind of discursive fulcrum as a means of challenging the term itself, and "open up the geologic questions and implications of the Anthropocene beyond the realm of Western and European epistemology to think with Indigenous knowledges from North America" (764). Following Todd and Davis, my own project will aim to broaden the scope of knowledges mobilized within the Anthropocene discourse. As I'll demonstrate over the course of this chapter, remaining cognizant of the non-Western epistemic traditions that work to decolonize the Anthropocene discourse will serve as a central pillar in this chapter's project of tracing the limits of the Anthropocene discourse as such.

The diffractive Anthropocene describes the heterogeneous array of narratives and theoretical positions that coalesce around the Anthropocene as a discursive keyword. To read that array diffractively means both taking these positions seriously on their own terms, while simultaneously resisting the impulse to resolve the discourse as a whole under a single dominant logic. As a methodological principle, reading the diffraction patterns of the Anthropocene discourse means attending to the overlapping systems of power operating on the present moment as well as the irresolvable tensions that these points of overlap produce. Importantly, this is not to suggest that all of the sub-discursive bands that emerge from the Anthropocene need to be relativistically balanced against each other: Instead, it forces theorists to be intentional about which voices and ideological positions we iteratively assemble, and take responsibility for their

implications not out of deference to their adherence to any single domineeringly "objective" narrative of the Anthropocene, but out of respect for one's own participation in the the process of knowledge production, not as a the neutral instrument of some singular objective logic but as an active participant in an ongoing and contingent act of composition[4]. To take seriously the notion that the Anthropocene is a kind of inexhaustible "hyperobject" that can never be fully or definitively captured by a single narrative is to take responsibility for the narratives we chose to compose, however provisional or incomplete those compositions may be.

Anthropocene, Capitalocene, Plantationocene

If the term Anthropocene is best understood as an aperture through which other discourses can be iteratively diffracted, then one of its most generative bands has been the Capitalocene: As one of the growing collection of alternative *-cenes* that name the present moment, the term focuses the Anthropocene's broad gesture to a monolithic conception of humanity in a manner that the term Anthropocene itself is unable to accomplish. As Jason Moore describes,

> The Anthropocene makes for an easy story. Easy, because it does not challenge the naturalized inequalities, alienation, and violence inscribed in modernity's strategic relations of power and production. It is an easy story to tell because it does not ask us to think about these relations *at all*. It reduces the mosaic of human activity in the web of life to an abstract, homogenous humanity. ("Cheap Nature").

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[4] I'm here leaning on Bruno Latour's definition of composition, which as he describes, "underlines that thing have to be put together (Latin *componere*) while retaining their heterogeneity…it carries with it the pungent but ecologically correct smell of 'compost,' itself due to the active 'de-composition' of many invisible agents"("Attempt" 473-74).

While some prominent Marxist thinkers (see Foster et al., Angus) more or less accept the term Anthropocene, Moore (alongside Andreas Malm, Matt Hern, Am Johal, and, in a somewhat different register, Donna Haraway) advocates for the term Capitalocene, which, by explicitly challenging this homogenous conception of the human, foregrounds a recognition of capitalism not only as a mode of economic relations but as what Moore terms a "world-ecology, joining the accumulation of capital, the pursuit of power, and the co-production of nature in dialectical unity" (*Capitalism* 3) as a central driver of environmental degradation.

Importantly, the Capitalocene's terminological focus on the correlation between economic power and environmental impact actually reflects the findings of the scientific discourse on the Anthropocene: A 2011 study conducted by leading Anthropocene scientists (including Paul Crutzen) found that "the world's wealthy countries account for 80% of the cumulative emission of CO2 since 1751… The world's poorest countries, with a combined population of about 800 million, have contributed less than 1% of the cumulative emissions" (Steffen et al. 746). In this sense, the notion of the Capitalocene offers both a useful reframing of the scientific discourse as well as a rebuke of what Moore characterizes as "fundamentally bourgeois character" ("Cheap Nature") of the term Anthropocene's universalizing breadth.

Like the term Anthropocene itself, though, Moore's Capitalocene is an attractive lens through which to understand the range of present environmental crises in part due to the clarity of its diagnostic narrative: Where the term Anthropocene suggests the broad culpability of humanity as a whole, Moore's Capitalocene narrows the focus onto a more specific set of actors, a specific ideological tendency, and specific relationship to nature. This narrowing of the frame

produces some useful insights: For instance, Moore rejects the "Cartesian binary" (*Capitalism* 5) of Nature and Culture as ontologically distinct zones, and replaces it with what he terms "work/energy," wherein the non-human is refigured as another kind of exploited labourer. As he describes,

> [t]he concept of work/energy looms large in this argument. It allows us to pierce the Cartesian fog that surrounds the unity of human and extra-human work…'Work/energy' (or *potential* work/energy) may be capitalized— as in commodified labour-power via the cash nexus— or it may be appropriated via non-economic means, as in the work of a river, waterfall, forest, or some forms of social reproduction" (*Capitalism* 14, emphasis his).

Positioning the non-human as a kind of exploited worker offers a model for redescribing environmental degradation as a feature of the underlying the calculus of capitalism: As Martin P.A. Craig summarizes, "Moore's argument is that capital accumulation (and thus, capitalist society) depends upon a relatively small quantity of capital being able to set in motion a larger quantity of unpaid work/energy…Capitalist societies' ecological conditions of possibility are thus socio-ecological relations through which the ecological surplus is expanded at a faster rate than capital accumulates" (54). What has led to the present crises, in Moore's account, is that dwindling global resources have greatly reduced the volume unpaid work/energy available to be mobilized, and the invoice for this previously unpaid work/energy is effectively coming due.

Still, though, it's a narrative governed by a singular logic, which forces Moore's theorization of the Capitalocene to make some uncomfortable contortions: his conflation of human labour and nonhuman energy, while an illustrative means of redescribing the relationship between humans and the environment, risks flattening out the history of racialized exploitation

that serves as a precursor to his conception of "cheap nature." As Françoise Vergés asks, in her reading of Moore's Capitalocene against Cedric J. Robinson's *Black Marxism*, "what connection can be made between the Western conception of nature as 'cheap' and the global organization of a 'cheap,' racialized, disposable workforce, given the connection of nature as constant capital and the fact that 'the organizers of the capitalist world system appropriated Black labor power as constant capital'?" (81). Robinson, whose work maps the tension between Marxism's originary Eurocentrism and racialism, or "the legitimation and corroboration of social organization as natural by reference to the 'racial' components of its elements" (2), serves as a productive counterpoint to Moore, whose pronouncement that "[t]he crisis today is…not multiple but singular and manifold"(*Capitalism* 4) ultimately resolves this tension into a singular overdetermined narrative.[5]

There's a similarly overarching tendency in Marxist theorist Nick Dyer-Witheford's notion of the planet-factory: As he argues, "[w]e can refer to a 'planet factory' in a double sense, both as naming the operation of a world-market crisscrossed by supply chains feeding in and out of the ever-escalating industrial production of commodities, and as designating the process by which what is produced (and destroyed) in these operations is nothing less than the biosphere itself—with global warming as, of course, exhibit one" (77). As with Moore, this is a framework that provides a clean (if somewhat broad) narrative of the present environmental crises as a kind of global labour struggle. Importantly, though, the limitations of Dyer-Witheford's "planet factory" are brought into focus when he attempts to use his analogy to describe Indigenous

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[5] To further illustrate the limited utility of Moore's conception of "work/energy," consider how he might try to explain the power dynamics of "work/labour" that exists outside of human organization entirely: are beavers exploiting rivers by damming them? Are earthworms "appropriating" the latent energy in the soil they consume?

environmental activism: "what is emerging in today's 'fourth world war' of indigenous peoples colonial occupation should not be written down as some 'primitivist' response to capitalism. It is rather a new synthesis bringing together elements of modernity and anti-modernity in rebellion against the logic of the planet factory, a rebellion that now plays a major role in radical politics against global warming" (90). While it's true that indigenous activist groups, like the water protectors at the forefront of the resistance to North American oil pipeline expansion, are not "primitivists," it's also not quite the case that they'd uniformly position themselves as part of a global labour struggle. As with the Capitalocene, Dyer-Witheford's planet factory offers an apparatus that, while useful in some respects, necessarily obscures other significant features of the Anthropocene discourse. While the notion of a global labour struggle productively emphasizes the role that class position plays in one's exposure to the myriad impacts of the climate crisis, the breadth of its gesture risks papering over the particular texture that this global dynamic takes on in its more localized instantiations, which are inevitably informed not only by class but also race, gender, and other cultural dynamics.

The complexity of capitalist modes of exploitation is explored by Ken Saro-Wiwa, whose work both catalogued and resisted what he termed the "recolonization" (*Genocide* 20) of Nigeria's Ogoni people by Shell and British Petroleum in the early 1990s. While Saro-Wiwa is clear that Shell-BP's actions in Nigeria "displayed the ugliest possible face of international capitalism"(*Genocide* 44), both his reporting collected in *Genocide in Nigeria* and his posthumously published prison writings *A Month and a Day* describe the complex interactions of capitalism with the social and political tensions of Nigeria. As Feghabo Charles Cliff argues, "Shell is able to perpetrate this act of suppression and estrangement of the people of the host

communities in the Niger Delta with impunity because of the minority status of the people and the prevalence of ethnic politics in the country that also works against ethnic minorities vis-à-vis the control of political and economic power" (Okuyade 66). The exploitation of the Ogoni land, in this sense, is a function of the compounding oppressions of both the localized power dynamics of the recently independent Nigeria, in which the Ogoni were already an ostracized minority, and international capitalist resource extraction, which leveraged the Ogoni's lack of political power against their own. Importantly, this is not to downplay the central role of capitalism in the global climate crisis or to undermine the usefulness of anti-capitalist critique, but rather to draw attention to how capitalism intersects with other dynamics of power to produce modes of exploitation that are not wholly reducible to a narrative of a single global labour struggle as suggested by figures like Moore and Dyer-Witheford.

The struggle to better represent the national and racial dynamics that the term Capitalocene potentially obscures is in part what leads Donna Haraway and Anna Tsing to introduce the term "Plantationocene." As Haraway describes, the Plantationocene draws our attention to "the networks of sugar, precious metals, plantations, indigenous genocides, and slavery, with their labor innovations and relocations and recompositions of critters and things sweeping up both human and nonhuman workers of all kinds" (*Staying* 48). Since its inception, Haraway and Tsing's formulation of the term has emphasized different modes of multi-species kinship, highlighting the extent to which human activity's impacts on the environment are felt on both the macro- and microscopic scales of planetary life.

Here again, though, the effort to regard the plantation as a site of multi-species kinship

also risks flattening out and ultimately erasing the histories of racial oppression that are at the core of the plantation system. At the 2014 roundtable in which the term was initially derived, for instance, it was generally agreed upon that "plantations are just the slavery of plants" (Haraway et al. 556). As Janae Davis et al. point out, in these early discussions of the plantationocene,

> [h]uman labor receives brief attention and is conceived as only one element within the broader constellation of exploited lifeforms underpinning historical and present-day plantation economies. Thus, the matters of Black embodiment and the disciplinary regimes of the slave plantation remain obscured…Since the plantation was not a device of undifferentiated socioecological transformation, the lack of an analysis underscoring human embodiment and examining socioecological hierarchies as both causes and consequences of the plantation is a conspicuous absence. (5)

The fact that both the Capitalocene and Plantatonocene have such evident limits on their respective diagnostic utility shouldn't come as a surprise: As Donna Haraway suggests, "[a]ll the thousand names are too big and too small; all the stories are too big and too small…we need stories (and theories) that are just big enough to gather up the complexities and keep the edges open and greedy for surprising new and old connections" (Anthropocene, Capitalocene 160). Haraway's appropriation of the terms Capitalocene and Plantationocene as part of a growing constellation of alternative *-cenes* is instructively performative: rather than suggesting a definitive new name for the Anthropocene as an epoch, Haraway is instead suggesting a range of new names that narrativize different aspects of the Anthropocene. These alternative *-cenes* work in generative tension with each other as overlapping and interlocking frameworks for describing different aspects of the present.

In this sense, to read the Anthropocene discourse diffractively means taking seriously both the foregrounded concerns of the Capitalocene and Plantationocene frameworks, while simultaneously remaining attentive to the shortcomings that each approach will necessarily entail. Both Vergés' critique of the Capitalocene and Davis et al.'s critique of the Plantationocene demonstrate an important feature of the production of knowledge that Barad's notion of diffractive reading can help illuminate: If knowledge production is a collaborative process, then the collaborators in that process directly impact the nature of the knowledge produced. As Davis et al.'s critique of Haraway suggests, the absence of those excluded from that collaborative process will produce corresponding lacunas in knowledge production. Crucially, this is not to argue that capitalism's unbounded exploitation of the earth's resources is not a major contributor to the range of interlocking environmental crises that currently face the planet, or that Haraway's interspecies modes of relationality are not worth exploring and developing: What I am suggesting, though, is that the discursive apparatus through which those crises are understood (and in particular, the aspects of those crises that most directly impact colonized subjects) need to be refined by diffractively reading both the logics of capitalism and interspecies relationality through the histories of racism and colonial exploitation.

With that in mind, the project of decolonizing the Anthropocene will mean widening the scope of interlocutors through which its meaning is iteratively negotiated. This project of responding to a broad range of non-Western knowledges has long been a central concern of decoloniality: As Walter Mignolo describes, to uncritically accept the Anthropocene as a name for the present moment implicitly reifies the totalizing logic of Western colonial expansion by subsuming the narratives of colonized peoples:

> The [A]nthropocene…is not a single line of "evolution" of one tribe of anthropos, but a multiplicity of time lines of anthropos inhabiting what are today Asia, Africa, Europe, the Americas, Australasia. Geopolitics of the anthropocene's narrative consists in silencing geopolitics. The narratives are embedded in the rhetoric of modernity and the logic of coloniality that frame them" (221).

In this sense, decoloniality names the commitment to resist the "logic of coloniality" through a direct engagement with (non-Western) modes of understanding the Anthropocene, many of which, as we'll see, work to challenge the universalizing tendency of the Anthropocene discourse as an extension of a longstanding project of colonial erasure.

As suggested above, this universalizing tendency is evident not only in the term Anthropocene itself, but also the academic field of geology from which the term initially emerges: As Kathryn Yusoff points out, to name the present moment the Anthropocene is to accept the grammars of (Western) geology, which in turn erase the histories of black and indigenous peoples who have always been figured as geological resources under the logic of colonialism: "[a]s the Anthropocene proclaims the language of species life—*anthropos*—through a universalist geologic commons, it neatly erases histories of racism that were incubated through the regulatory structure of geologic relations" (2). These grammars of geology, she goes on to argue, are deployed in the Anthropocene discourse to effect a very specific kind of erasure: Posing as a kind of neutral or objective mode of inquiry, geological studies (the sort from which the term Anthropocene was initially derived) often obscure their own histories of racial oppression in an "attempt to absolve the positionally of Western colonial knowledge and extraction practices, while simultaneously reinforcing and resettling them in a new territory— a

Western frontier of pioneers armed with eco-optimism and geoengineering"(27). This new frontier, she argues, signals "a desire to overcome colonially without a corresponding relinquishing of the power it continues to generate in terms of who gets to formulate, implement, and speak to/of the future" (27). With that in mind, Yusoff's intervention into the often obscured racial dynamics of geology offers a useful framework for understanding the extent to which practices of knowledge production is always an ideological process: As she describes, the liberal humanist ideological infrastructure that relegated the natural world into the position of inert resources available for human consumption is a product of the same imperial project that positioned black and indigenous peoples as nonhuman resources or obstacles to colonial expansion: "[t]he racial categorization of Blackness shares its natality with mining the New World, as does the material impetus for colonialism in the first instance. This means that the idea of Blackness and the displacement and eradication of indigenous peoples get caught and defined in the ontological weight of geology" (2). In drawing attention to the racialized dynamics that are often obscured by geology as a discipline, Yusoff offers a powerful corrective to the universalizing tendency of the Anthropocene discourse.

Importantly, though, the exclusionary tendency of academic institutions is not limited to geology: Métis scholar Zoe Todd describes her own uneasy relationship with the term Anthropocene as representative of a broader trend in the academic spaces of which she is a part:

> As a Métis scholar, I have an inherent distrust of this term, the Anthropocene, since terms and theories can act as gentrifiers in their own right, and I frequently have to force myself to engage in good faith with it as heuristic...Not all humans are equally implicated in the forces that created the disasters driving contemporary human-environmental crises, and I

> argue that not all humans are equally invited into the conceptual spaces where these disasters are theorized or responses to disaster formulated. (244)

As Todd goes on to describe, the universalizing tendency of much of the Anthropocene discourse can be traced to the exclusionary tendencies of academic institutions as such. As she argues, to meaningfully address the exclusionary nature of the Anthropocene discourse requires a more substantive address to the exclusionary nature of academic knowledge production more generally: "There is no way to get around the fact that the business of making knowledge and making art in the European and North American academies is still very much a Eurocentric endeavour. But I would offer: *An effective art of the Anthropocene is one that directly engages with the structural violences of heteropatriarchy and white supremacy as they shape discourse and praxis"* (248-49, emphasis hers). In this sense, Todd identifies a limitation on the Anthropocene discourse baked into the structure of institutions through which it is iteratively constituted.

With this limitation in mind, Todd advocates for broadening our understanding of what are considered to be legitimate or acceptable mediums of knowledge production:

> Art, as one mode of thought and praxis, can play a role in dismantling the condos of the art and academic world and help us build something different in their stead. The Anthropocene, after all, need not gentrify our discourses of outrage at the state of things when there are so many other ways to engage with our shared plight as beings on this planet. In order to resist the hegemonic tendencies of a universalizing paradigm like the Anthropocene, we need joyful and critical engagement through many forms of praxis. (252)

With that in mind, accounting for a wider range of perspectives is not as straightforward as just making space for more scholarship: As Potawatomi scholar Kyle Powys Whyte argues, indigenous modes of knowledge production are themselves constituted through a wide range of cultural practices that are vastly different from the discursive register that tends to dominate the conversation. As he describes, indigenous climate change studies "arise from memories, knowledges, histories, and experiences of oppression that differ from many of the non-indigenous scientists, environmentalists, and politicians who are prominent in the framing of the issue of climate change today" ("Indigenous Climate" 153). The task of decolonizing the Anthropocene, in this sense, is not only a question of who is allowed to participate in the discourse, but more fundamentally about the terms in which the discourse itself takes place.

As Whyte goes on to argue, one of the clear points of disjuncture between colonial and indigenous knowledges is evident in their vastly different conceptions of timescale. As Whyte notes, for example,

> The *First Alaskan's Institute*, an Indigenous organization, includes as one of its slogans, "progress for the *next* 10,000 years," referring to Indigenous Alaskans' own histories of living in that region for that long. Since Indigenous peoples in North America think at this scale, the time period of European, U.S., and Canadian colonialism, imperialism, and settlement appears very short and acutely disruptive. Indigenous conceptions of the future often present striking contrasts between deep Indigenous histories and the brief, but highly disruptive colonial, capitalist, and industrial periods. ("Indigenous Climate" 159)

This cognizance of deep time in conjunction with the acute impacts of colonialism produce a cultural narrative of climate change that is markedly distinct from that of the popular imaginary

of the dominant colonial culture, where climate change looms on the horizon as an impending threat that has not yet quite arrived. In contrast to this, as Whyte describes, "Indigenous imaginations of our futures in relation to climate change—the stuff of didactic science fiction—begin already with our living today in post-apocalyptic situation" ("Indigenous Climate" 160).

In examining the intersection of capitalism, colonialism, and the Anthropocene, this section has offered a compact outline of a diverse range of critical lenses through which the Anthropocene can be engaged. Hopefully, the inherent tension that these engagements bring to bear on the Anthropocene should make clear the utility of reading the Anthropocene diffractively: Rather than affirming a singular logic or narrative as the de facto framework for understanding the Anthropocene as such (as Moore's Capitalocene attempts to do with somewhat mixed results), a diffractive methodology accepts that the Anthropocene's breadth forecloses on a single overarching logic: The diffractive Anthropocene is a heterogenous array of epistemic tensions, the generative irreducibility of which serves as the engine for new theoretical insight. The overarching goal of reading the Anthropocene diffractively, in this sense, is not to locate the definitive *-cene* or descriptive apparatus for the Anthropocene as a whole, but to make space for the widest possible assemblage of perspectives on their own terms, without reductively subsuming them into a prefigured narrative. In this sense, reading the Anthropocene diffractively not only promotes the epistemic heterogeneity that is a prerequisite for decolonization, but, more broadly, serves as a guiding methodology for capturing the wide range of narratives that iteratively constitute the lived experience of the planet as a whole.

Toward the Terrestrial

As the previous section demonstrates, the Anthropocene discourse cannot be meaningfully apprehended through a singular narrative or logic, but is rather best understood as a tightly interlocking array of problematics that need to be read diffractively against each other. While reading the Anthropocene diffractively serves as a generative method for interrogating each of its constitutive discursive elements, the decentralizing breadth of this method is also kind of disorienting, as it forecloses on many of the usual theoretical footholds: Reading diffractively makes it difficult, for instance, to imagine pinning down something like an "Anthropocene subjectivity" with any degree of representative usefulness, given the wide range of concerns contentiously inscribed within the discursive boundaries of the term Anthropocene as a whole. While it may seem tempting to suggest that the subject of the Anthropocene is simply "anthropos," the universalizing tendency with which the term is deployed is more often a kind of a deflectionary gesture toward some idealized figure of the human than a meaningfully representative subject position.

With that in mind, the liberal humanist subject, as described by Braidotti above, proves to be an epistemically thin perspective from which to make sense of the wide range of lived experiences of the figure of *anthropos* who serves as the ostensible focal point of the Anthropocene: not only does its broad universality obscure the dynamics of power that emerge within the human population as a whole, but an uncritical acceptance of the liberal humanist conception of *anthropos* reifies what Donna Haraway describes as an "unthinkable theory of relations"(*Staying* 46) that "saps our capacity for imagining and caring for other worlds, both those that exist precariously now … and those we need to bring into being"(*Staying* 50). For Haraway, liberal humanism's universalizing conception of *anthropos* describes the human in a

kind of perpetual tension with the world around itself in order to maintain control over the remaining earthly resources, which in turn effectively forecloses on other modes of engagement with the world and its diverse inhabitants. An uncritical acceptance of this liberal humanist subject as the default conception of the human at the centre of the Anthropocene discourse poses a real problem, as it precludes a more serious undertaking of the project that the term "Anthropocene" was meant to catalyze in the first place. Without properly unpacking the inherent tensions that the notion of the Anthropocene raises for the normative conception of the human, we risk simply replicating the ontic problem that Crutzen and Stoermer's initial formulation seems poised to address, and the liberal humanist conception of *anthropos* remains unchallenged as the default subjective mode of the Anthropocene discourse.

The concerns Haraway raises regarding the impact of liberal humanism's restrictive conception of *anthropos* on the Anthropocene discourse can be addressed through a direct rearticulation of how we understand "the human" in the first place. For instance, Anna Tsing advocates beyond the individualist, anthropocentric logic of liberal humanism and pay attention to "patchy landscapes, multiple temporalities, and shifting assemblages of humans and nonhumans: the very stuff of collaborative survival" (*Mushroom* 20). For Tsing, the human must become responsive to the world through participation: in the age of the Anthropocene, we can no longer afford the cushion of abstraction that enabled the liberal humanist subject to view "nature" from a distance. Instead, we have to take seriously the idea that our engagements with the world have real consequences not only for other humans but our planetary cohabitants as well.

Similarly, Stacy Alaimo argues for a rearticulation of the human as "immersed and enmeshed in the world"(156) to better account for the extent to which nonhuman matter is a

necessary precondition for human existence as such. For Alaimo, the human is not an isolated figure imposing its will on a flat and static natural world, but rather an embedded participant who emerges alongside a whole host of nonhuman others, and whose continued survival requires the survival of those others as well. As both theorists work to demonstrate, hope for survival and flourishing in the age of the Anthropocene will require a critical posthuman conception of *anthropos*: the human must be understood not as the rigid individualist prescribed by liberal humanism, but rather as a flexible and lively collaborator, working alongside our nonhuman planet-mates toward sustainable futures, not just for humans as some isolated and centralized feature of the planet, but for the planetary system as a whole.

Importantly, though, rooting out the liberal humanist tendency in the Anthropocene discourse's conception of the human requires attending not only to humanity's relationship to the rest of the planet, but simultaneously attending to the intra-human dynamics of power that emerge within the human population itself. As Yusoff describes, a failure to meaningfully critique the monolithic conception of humanity that exists in the popular imaginary as the central actor in the present environmental crisis "is why the Anthropocene is configured in a future tense rather than in recognition of the extinctions already undergone by black and indigenous peoples. Following in the wake of humanism, the production of the Anthropocene is predicated on Whiteness as the colour of universality" (51). With that in mind, locating the subject of the Anthropocene will require a meaningful interrogation of the often unacknowledged centrality of whiteness in the normative conception of the human that the Anthropocene discourse tends to inherit.

Interrogating the role of racial dynamics Anthropocene discourse also means confronting the colonial histories through which that centrality was both initially achieved and continues to be maintained: While I share Haraway and Alaimo's general orientation toward situating the human subject back on the planet, it seems equally important to recognize the extent to which this orientational shift is best understood not as a necessary corrective for humanity as a whole but rather a unique challenge to the colonial ideological assumptions of liberal humanism. As Kyle Powys White describes, his own Potawatomi society is already "'multispecies' in the sense that it has its own conceptions of responsibility, agency and value for the hundreds of plants and animals that humans interact with in the Great Lakes region" ("Colonial Déjà Vu" 89). As Whyte goes on to argue, these "multispecies" cosmologies continue to exist largely in spite of and in resistance to the totalizing logic of liberal humanism: "There are thousands of Indigenous peoples living in the world today who share comparable histories of continuing their self-determination in spite of invasion, colonization, or settlement" ("Colonial Déjà Vu" 2).

As legal scholar Anna Grear argues, the recognition of our own planetary situatedness that the Anthropocene discourse imposes ultimately challenges the ontic veracity of Anthropos as such: "The inescapably embodied, corporeally specific, situated human being can never be the disembodied, abstract, rational knower of Cartesian subject-object relations…*Anthropos* is a cypher, therefore, characterized by the impossibility of its own nature" (237-38). While Grear's work goes on to trace the impact of this shift in the domain of law, its reverberations can be seen to extend to almost all aspects of how humans understand our relationship to the world around us. In this sense, Anthropos is less the "subject" of the Anthropocene than a vaguely human-

shaped placeholder whose distinguishing attributes are redefined depending on the discursive apparatus through which it is appraised.

With that in mind, though, the question of locating an Anthropocene subject has become its own pillar of theoretical inquiry within the Anthropocene discourse: collections like Anna Tsing et al.'s *Arts of Living on a Damaged Planet*, or Thomas Hylland Eriksen and Elisabeth Schober's *Identity Destabilized: Living in an Overheated World* both work through the unique problematics of subjectivity that the Anthropocene poses. As Mary Louise Pratt describes in her coda to the *Arts of Living* collection, what is at stake is "not what the Anthropocene *is* but how it will be *lived"* (G170). In that same collection, Andrew S. Mathews advocates for conceiving of the lived experience of the Anthropocene as "irreducibly multiple rather than of a singular 'Anthropocene'" (G154). In this way, Mathews recognizes the importance of remaining attentive to the wide range of experiences of both human and nonhuman life in the Anthropocene:

"Paying close attention to the ghostly forms of past histories in present-day forests allows us to consider the many forms of political and economic life that these forests are or might be connected to, including imagining multiple possible Anthropocene futures. The texture and form of our material surroundings are full of speculative politics and causal accounts, not only in forests but in other places, if we can only attend to them."(G154). With this in mind, one of the central challenges of locating the subject of the Anthropocene could be this perspectival shift, as we learn to see the nonhuman as an active participant in the world, rather than the backdrop of human activity.

This tension, between the human subject and the environment against which we tend to define ourselves, hints at the uncannily fractal quality to how the Anthropocene discourse figures

the human: As Dipesh Chakrabarty describes, the Anthropocene forces us to recognize that we "are biological agents, both collectively and as individuals" (206). Depending on how you parse the inclusivity of the "we" of this claim, the human here becomes either a distributed participant in or hostage to some geological event occurring on a scale that we can never quite access or directly experience, but whose outcome is nonetheless an existential threat. We experience our presence in the world and are simultaneously asked to recognize that presence as a kind of instrument in that world's impending destruction. In this sense, the Anthropocene discourse echoes the kind of posthuman collapse in distinction between subject and object that Brian Massumi identifies in *Parables of the Virtual:* As Massumi argues,

> [t]he extension into the posthuman is…a bringing to full expression a prehumanity of the human. It is the limit-expression of *what the human shares with everything it is not*: a bringing out of its *inclusion* in matter, its belonging int he same self-referential material world in which every being unfolds…The moon's the limit. Or maybe not. Having counteracted the earth's force of gravity, the posthuman body-world is in its own orbit: the *becoming-planetary* of the human." (128, emphasis his)

For all of the competing narratives of culpability and dynamics of power, the Anthropocene discourse demands a recognition of the fact that we (in the broadest sense of the pronoun) are situated on a planet whose existence is an ontological prerequisite to our own.

As this chapter as thus far proposed, reading the Anthropocene diffractively is the methodological project of composing a heterogeneous discursive framework that is not dominated by a single narrative or logic, nor a singular universalizing subject position. Retaining this heterogeneity poses a different kind of problem: if the diffuse discursive strands that make

up the Anthropocene discourse can't be meaningfully organized around a singular subject position (previously, if contentiously, occupied by the figure of *anthropos*) then how else can we conceptualize their organization? What I'm slowly creeping up on here is the first appearance of the term "terrestrial," which, as foreshadowed by this dissertation's title, provides an alternative means of organizing the diffuse array of problematics that iteratively comprise the diffractive Anthropocene. By way of a kind of introduction, I'll offer a reformulation of this chapter's thesis that situates the diffuse assemblage of discourses we've just traced within the context of this project as a whole: Where the Anthropocene (alongside the growing constellation of alternative -cenes) describe the present moment around a range of competing narratives, the term "terrestrial" reorients the discourse toward the underlying situation upon which each of those narratives are built: That is to say, While the diffractive Anthropocene is comprised of a heterogeneous array of overlapping but ultimately distinct problematics, they are all unified by being situated on and oriented toward the domain of the terrestrial, or the earth itself.

Importantly, the move here is not simply to replace the grand universalism of *anthropos* with a separate but equally grand universal of the terrestrial, or to suggest that our shared status as terrestrial beings somehow erases or papers over the range of overlapping systems of power that we've been tracing over the course of this chapter. What it does provide, in an extremely literal sense, is a neutral point of common ground that sits somewhere upstream from those emergent dynamics: the problem with liberal humanist anthropocentrism, in its orientation toward the solitary figure of anthropos as the sole actor against the backdrop of a silent and inert world of natural resources waiting to be extracted is that it is fundamentally anti-terrestrial: It

fails to recognize the human subject's irrevocable situatedness on a planet, alongside a whole heterogeneous entanglement of planetary coinhabitors. The shift to the terrestrial, as we'll see, provides a useful heuristic for unifying a broad range of discursive tendencies not through an underlying logic but by their orientation: While Moore's Capitalocene, Haraway's Plantationocene, and Whyte's Indigenous Conservation all operate on distinct narrative frameworks for explaining what the Anthropocene ultimately "is," they are unified by a shared distrust of the anthropocentrism of the liberal humanist subject and an orientation toward better situating human on the planet. The tensions that emerge in their areas of discursive overlap (i.e., the diffraction pattern that their overlapping discourses produce) are productive precisely because they are oriented toward a shared terrestrial situation. Conversely, Erle Ellis's *Ecomodernist Manifesto* operates on a paradigmatically *anti-terrestrial* orientation, as evidenced by its more or less uncritical acceptance and even celebration of the liberal humanist subject as the de facto centre of planetary environmental dynamics. In that sense, the question isn't one of locating the definitively correct narrative or logic with which to address the Anthropocene, but rather to orient that narrative toward the terrestrial.

My usage of the term "terrestrial" echoes its recent appearance in the work of Bruno Latour, who, in his book *Down To Earth* explicitly positions the terrestrial (or, *le terrestre*) in opposition to anthropocentrism: As he describes, "[w]hat makes the idea of a choice for or against anthropo*centrism* quite implausible is the assumption that there is a centre, or rather two, man and nature, between which one supposedly has to choose…It is perhaps time, in order to stress this point, to stop speaking about humans and refer instead to terrestrials" (86). The turn to

the terrestrial, for Latour, effectively resolves the antithetical relationship between the liberal humanist subject and "nature" by challenging the assumptions through which that distinction would arise in the first place: what makes Latour's move here so effective is that he's not just switching focus from the human subject to the environment (thus implicitly reifying the ontic distinction between those two focal points) but actually drawing attention to the more generalized situation on which that distinction is ultimately contingent. For Latour, the term terrestrial designates the emergence of the planet itself as an active participant in public life, rather than the background of human action. As he describes, "[i]f the Terrestrial is no longer the framework for human action, it is because it participates in that action… Today, the decor, the wings, the background, the whole building have come on stage and are competing with the actors for the principal role… Humans are no longer the only actors, even though they still see themselves entrusted with a role that is much too important for them" (*Down* 42-43). In this sense, the Anthropocene can be understood as the moment in which humans, once assured of their sovereignty over a flat and static nature world, are forced to become terrestrial, and thus resituate themselves amongst the agentive and heterogenous set of beings alongside whom they populate the planet.

Importantly, the move here is not to simply substitute a human subject with a terrestrial one, but to fundamentally reorient the discursive framework of environmentalism somewhere beyond the subject and toward the conditions under which that subject emerges. As Timothy Clark argues, our status as terrestrial beings serves as a kind of epistemic limit case for self-understanding as such: "*Terrestriality*, defined as that 'normal' prereflexive sense of scale inherent to embodied human life on the Earth's surface, forms a kind of transcendental, one that

both underlies and exceeds any view that it is merely our social context that determines our understanding of ourselves" (33). This sense of the terrestrial remains an important feature of Latour's usage of the term as well. As Tristan Gleason points out, "Latour's project is not to move towards some new political center, but to redefine our political orientations in such a way that social and environmental progress are no longer positioned antithetically" (982). In this respect, Latour actually ends up aligning himself with one of the major theoretical projects of critical posthumanism, which, as Karen Barad describes, aims to "account for the how the distinctions between 'nature' and 'culture,' 'human' and 'non-human,' and 'science' and 'society' are produced [and] what that production entails"(131). The turn to the terrestrial, in this sense, like much of Latour's work, does not take for granted the pre-existing ontic distinction between these pairings, but instead provides a new vantage from which to apprehend how and why they came to be understood as distinct in the first place.

The turn to the terrestrial also forces a paradigmatic shift in Western modes of knowledge production, as the liberal humanist subject is forced "to learn to cohabit with those whom they used to deem archaic, traditionalists, reactionaries, or simply 'locals'" (*Down* 43). In this respect, the terrestrial offers a corrective to the taxonomic systematization of the environment that has been the dominant epistemological paradigm in Western knowledge since the 17th century, which positioned the liberal humanist subject outside of the natural world he was attempting to catalogue. As Mary Louise Pratt argues, the project of "natural history" (as best exemplified in the taxonomic structure of Carl Linneaus' *Systema Naturae*) is not so much a description of the world itself, but rather the production of a new kind of world: one

characterized not by chaotic and unmappable entanglements but rather a rationally organized set of things, each of which is rendered fully knowable by virtue of the quantifiable data points that constitute their respective taxonomies. It produces a narrow simulacrum of a world wherein the entangled phenomena of Nature are pinned in place by austere Latin binomials. This correspondence between the name of the thing and the thing itself gives Natural History its power: As Foucault observes in *The Order of Things*, "[n]atural history finds its locus in the gap that is now opened up between things and words— a silent gap, pure of all verbal sedimentation, and yet articulated according to the elements of representation, those same elements that can now without let or hindrance be named" (130). The act of naming brings the subject of natural science into direct and unmediated contact with the thing being named.

What's important to keep in mind, though, is that despite its claims to the contrary, natural science is very much beholden to its own material conditions and geopolitical situation. As Pratt observes, "[a]t most, naturalists were seen as handmaidens to Europe's expansive commercial aspirations" (*Imperial Eyes* 34), as the taxonomic data they retrieved had obvious practical value to those interested in exploiting the available resources of the land which they were in the process of colonizing. As she goes on to describe, "[t]he systematization of nature coincides with the height of the slave trade, the plantation system, colonial genocide in North America and South Africa, slave rebellions in the Andes, the Caribbean, North America and elsewhere…For what were the slave trade and the plantation system if not massive experiments in social engineering and discipline, serial production, the systematization of human life, the standardizing of persons?" (*Imperial Eyes* 36) Rather than a neutral and passive instrument for generating objective knowledge, "natural history" represents a highly politicized means of

obscuring the mechanics colonial power, by systematically denying the legitimacy of indigenous knowledges and environmental practices: As Whyte argues, "settler colonialism seeks to erase Indigenous peoples' adaptive capacity and self-determination by repeatedly containing them in different ways, destroying the ecological conditions that are tightly coupled with Indigenous cultural and political systems" ("Colonial Déjà Vu" 7).

What the terrestrial offers, in this sense, is a new means of organizing knowledge production that is not beholden to a single dominant epistemic framework. To extend the metaphor of diffraction that we've been working though over the course of this chapter, if the overlapping discourses of the Anthropocene produce a diffraction pattern, then the surface on which that pattern is rendered is that of the terrestrial: Rather than affirming a single diffractive band as the dominant mode of knowing in the Anthropocene, we can attend directly to the terrestrial as the situation from which each of those modes of knowledge production iteratively emerge. In this sense, the turn to the terrestrial can be seen as a method for taking seriously Haraway's imperative to create "situated knowledges," as the competing narratives of the Anthropocene can be brought into a kind of generative tension with each other from the firm ground of the terrestrial.

Chapter 2: Realisms in the Anthropocene

As the previous chapter demonstrated, interdisciplinary friction has served as a driving force behind the Anthropocene's critical discourse. As such, the competing explanatory frameworks mapping the various problematics of the Anthropocene shouldn't be resolved under a single all-encompassing theorization, but should instead be read diffractively, to allow their productive tensions to generate new insights. This same methodological practice of reading diffractively will carry over to this project's second chapter, which will examine the tensions that emerge at the intersection of the Anthropocene and literary criticism. In particular, this chapter will focus on realism's under-examined role in Anthropocene fiction and make a case for a reorientation toward the terrestrial as part of the growing constellation of peripheral realisms.

Amitav Ghosh's recent nonfiction work *The Great Derangement* makes for a generative jumping off point for this discussion, because while he effectively argues for the inability of "serious fiction" to meaningfully engage with the various problematics of the Anthropocene, his own definition of realism, which he takes to be the hallmark of a work of "serious fiction," is constrained to a degree that would suggest it has sort of outlived its usefulness in the present moment. As Ghosh describes early in the book's first chapter, "fiction that deals with climate change is almost by definition not the kind that is taken seriously by serious literary journals: the mere mention of the subject is often enough to relegate a novel or short story to the genre of science fiction. It is as though in the literary imagination climate change were somehow akin to extraterrestrials or interplanetary travel" (7). Realist fiction, he goes on to argue, is necessarily constrained by a kind of probabilistic normality which forecloses on substantive representation of the "uncanny and improbable events that are beating at our doors" (30). What is important to

note here is the amount of work that the phrase "deals with" is ultimately doing, as it elides a whole range of substantive modes of engagement that can be captured in fiction, which span from the dystopian landscapes of Margaret Atwood's *MaddAddam* series to the relatively subdued (though, importantly, no less uncanny) New York in the wake of Hurricane Sandy depicted in Ben Lerner's *10:04*. While the former seems like a clear example of science fiction[6] the latter seems to push back against Ghosh's argument, as an example of a work of "serious" contemporary autofictional realism that directly "deals with" an anthropogenic storm and its attendant environmental impacts. While Ghosh does raise some important limitations of certain forms of realist representation that will need to be addressed, his broader claim nonetheless fails to meaningfully account for extant examples of realist fiction that directly address the "uncanny and improbable events" that are no longer just beating at our doors but are increasingly an unavoidable feature of the present. In contradistinction to Ghosh, then, this chapter will argue that what is really needed is a more robust schematic of how literary realism has responded to our current moment of erratic environmental change.

Several contemporary theorizations of the relationship between the Anthropocene and literature echo Ghosh's claims to the inherent limitations of realism. Timothy Clark, for instance, notes in passing that "the Leviathan of humanity en masse, as a geological force" cannot be represented "in the realist mode still dominant in the novel [because its] effects are global and non-localizable" (73). Ghosh's denouncement of realism's potential as a means of addressing

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[6] That being said, it's worth noting that her work's status as sf has not precluded Atwood from being taken seriously by "serious literary journals": See for instance Chein-Hung Chen and Calina Ciobanu's recent work on the MaddAddam trilogy as a projected "End of the Anthropocene."

climate change has also found purchase with theorists of science fiction, for many of whom there is already a kind of natural confluence between fiction about climate change and science fiction (or sf) as a whole. This basic attitude was neatly captured by Andrew Milner and J.R. Burgmann, who argue that "contemporary climate fiction is a subgenre of sf rather than a distinct and separate genre" (5). The process by which they derive this claim is worth unpacking, as it offers some instructive insight into the constraints under which the term "climate fiction" tends to operate.

First, they posit that the most visible examples of contemporary climate fiction are written by authors who are already closely identified with the broader sf community: They point to Jean-Marc Ligny's recent sequence of climate crises novels or Kim Stanley Robinson's *Science in the Capital* trilogy as prime examples of contemporary climate fiction produced by sf authors whose work engages substantively with actual climate science. As they describe, "both climate fiction's texts and its practitioners articulate a structure of feeling that accords centrality to science and technology, in this case, normally climate science" (5). This definition of "cli-fi" works for many visible examples of contemporary climate fiction (including those novels that are less comfortably categorized as sci-fi but still engage substantively with climate science, like Ian McEwan's *Solar*, Rivka Galchen's *Atmospheric Disturbances*, or Barbara Kingsolver's *Flight Behaviour*). Notably, though, it's a less useful descriptor for the growing collection of novels, like Ben Lerner's *10:04*, that deal with the dimensions of climate change that do not "accord centrality to science": The alarmist paranoia of Jenny Offill's *Weather*, the regressive fatalism of Guillaume Morrisette's *Original Face*, or the communal perseverance of Thomas

King's *The Back of the Turtle* all explore climate change less as a scientific field of study than an unavoidable feature of the present, whose impacts are felt on every aspect of contemporary life.

With this in mind, I'd argue that Milner and Burgmann's definition of climate fiction actually ends up eliding fiction about climate change with fiction about climate science: While their work offers some compelling insights into the relationship between science fiction and climate fiction[7], its narrow sense of what counts as "climate fiction" ends up foreclosing on a more substantive consideration of the wide range of fiction that is unavoidably about climate change, albeit not quite in the way they seem to anticipate. [8]

Importantly, my aim here isn't to pick a fight with theorists of science fiction, much less to argue that sf doesn't have a substantive role to play in the representation of climate change. Instead, this chapter aims to push back against the suggestion that representing climate change in literature is best understood as a kind of subgenre of science fiction, or is otherwise exhausted at the intersection of literature and climate science. As Adam Trexler argues in his *Anthropocene Fictions,* the inexhaustibility of the Anthropocene as a phenomenon should serve as an impetus to resist looking for a definitive mode through which it can be represented in literature. Trexler usefully reframes the argument to suggest that, rather than trying to determine which genres or literary modes either can or can't represent the Anthropocene as a whole, literary theorists might

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[7] In particular, Milner's chapter "Eutopia, Dystopia and Climate Change" from the recent collection *Ethical Futures and Global Science Fiction,* extends some of Milner and Burgmann's basic premises into a useful typology of climate-focused science fiction.

[8] The limitations of their definition become even more pronounced when one considers its implications outside of the realm of literature: It's difficult to imagine how one might make the case that the quietly devastating realism of Paul Schrader's *First Reformed* is somehow less engaged with climate change than something like Roland Emmerich's sci-fi disaster movie *The Day After Tomorrow*.

more productively consider what aspects of the Anthropocene a given genre or fictional mode might be able to bring into focus. As he describes, his argument

> is not so much that one literary strategy has yielded the perfect climate change novel… but that these approaches deserve interpretation on their own terms, as experimental investigations of social structures responding to climate change. If the political issues of climate change are too big to be dominated by a single academic discipline, they are also too capacious to be contained in a single novel. (122)

With this in mind, this chapter is best understood as an effort to sharpen Ghosh's characterization of the realist novel's relationship to the Anthropocene: While Ghosh figures realism and "serious literary fiction" as representative of the anthropocentric tendencies of Western liberal humanist society, I'd posit that the possibilities of realism are not wholly exhausted by its relationship to liberal humanism, and the discursive constraints that mediate our normative understanding of realist fiction are still able to accommodate the inclusion of the "improbable" extreme weather events that characterize one aspect of the Anthropocene. This chapter will examine how else the particular impulses that animate the realist novel help bring into focus the other aspect of the Anthropocene that Ghosh emphasizes.

The basic contention of this chapter is that the literary mode of realism can be mobilized in response to the central discursive problematic of the Anthropocene. As discussed in the previous chapter, the Anthropocene discourse, through its focus on *anthropos*, tends to either explicitly or implicitly reify the same basic anthropocentrism often identified as the ideological underpinning of much of the environmental degradation that the initial discourse was meant to correct. In contradistinction to Ghosh, this chapter will argue that that literary realism is a

generative mode for addressing climate change, not in spite of its origins as part of the anthropocentric tendency of liberal humanism but rather because of it. As this chapter will hopefully demonstrate, the history of literary realism, if viewed from the appropriate vantage, reveals the process by which the impulse to represent the real has expanded from the narrow interiority favoured by the classical realism of the 19th century and toward a wide range of what have come to be known as "peripheral realisms" in the 20th and 21st century, each of which develop novel mechanisms to map the relationship between individuals and structures of power beyond their direct apprehension within the modal tendencies of realism. In this way, this chapter will aim to position the realist novel as a means of tracing the contours of the societal "crisis of imagination" that Ghosh identifies as a major hurdle for meaningfully addressing climate change.

Realism As Genre, Realism As Mode

There is a basic polyvalence to the term "realism" that has rendered it a difficult concept to pin down with any degree of specificity. As Fredric Jameson observes, when attempting to consider realism directly, "[it] is as through the object of our meditation began to wobble, and the attention to it to slip insensibly away from it into opposite directions, so that at length we find we are thinking, not about realism, but about its emergence; not about the thing itself, but about its dissolution" (*Antinomies* 1). As one might expect, for Jameson, the "wobbliness" of realism as such can be sturdied through dialectical analysis, but I'd like to first stay with his suggestion of its wobbliness in order to steady our understanding of realism's oscillating status as both genre and mode. Importantly, the goal here is less about comprehensively defining realism as a whole, but rather to capture a sense of how the diverse modes of realism deployed in contemporary

literature might help introduce a bit of nuance into Ghosh's relatively broad pronouncements on the limitations of realism as such.

To do that, I'll start by distinguishing genre and mode: a generative schematic for mapping the relationship between genre and mode is offered by Alister Fowler, who argues that the central engine of literary production can be found in and ongoing and cyclical set of phases that rearticulate the relationship "between genre, mode, and abstract formulation" (213), wherein historically discrete genres emerge, develop, and decay, leaving behind fluid, or at least non-historically bounded artistic dispositions that he terms modes. In Fowler's account, "[g]enres, like biological species, have a relatively circumscribed existence in space and time" (207): The biological metaphor here is instructive, as it not only evokes the rigidly taxonomic structure through which a given genre tends to be defined, but also suggests the inherently limited lifespan of a given genre before it "eventually exhausts its evolutionary possibilities" (214) and is subsumed into the fossil record of literary history. Genres, in this account, are distinctly situated literary forms: They emerge within a specific socio-historical context and are inherently marked by that context. As Fowler goes on to describe, genre is "closely linked to specific social forms [and is therefore] apt to perish with them" (214).

Importantly, the historical fixity of genre renders it a comparatively ungainly literary form to transpose onto engagements with incipient social forms as they emerge in the present tense. As Laurent Berlant asks, "[how] do we learn to process *x* happening as an emerging event, and how do the conventional genres of event potentially foreclose the possibility of the event taking shape otherwise, as genres *y* and *z*, which might hover as possibilities but end up being bracketed and stored somewhere until repetitions call them back, if ever?" (6) In contrast to the

historically situated rigidity of genre, Fowler's conception of mode "corresponds to a somewhat more permanent poetic attitude or stance, independent of particular contingent embodiments of it" (214). So where an individual genre remains inherently fixed to its socio-historical context, it can also iteratively produce this free-floating "attitude" which is not contingent on its socio-historical context, but can instead move forward through history and produce new and novel generic forms. This is an attractive schematic, as it helps delineate a fairly clean formal relationship between genre and mode: a genre emerges within a specific socio-historical context and lives a lifespan contingent on the social formation that it iteratively reflects. The genre decays alongside the sociohistorical moment through which it emerged, but it leaves ghostly traces of itself through its mode, which can then go on to engender future generic forms. As Stephanie LeMenager summarizes, "for Fowler, mode is what is left after genre decays" (222). What is left more ambiguous, in Fowler's account, is what the specific content of a given mode may be, and how exactly it reflects the genre from which it emerges. He describes modes as "flexible, versatile, and susceptible to novel commixtures, [which] may generate a compensating multitude of new generic forms" (214), but from this degree of formal abstraction it remains unclear what aspects of a given genre can be said to transfer into its modal form beyond the obscure suggestion of a "stance" or "poetic attitude."

Nonetheless, Fowler's basic schematic offers a solid framework with which to sturdy the wobbliness of modal and generic realism. Importantly, though, what I'm looking to articulate is not only a meaningful distinction between realism as a mode and realism as a genre, but also how the former can come to be deployed without replicating the liberal humanist tendencies often ascribed to the latter. In what follows, I'll make the case that while realism's generic roots

are deeply intwined with liberal humanist anthropocentrism, modal realism can be mobilized to produce new generic realisms, which in turn provide a powerful corrective to this ideological tendency. Fowler's schematic of genre and form provides an illustrative scaffolding for this argument, but what's still needed is a functional account of realism itself, such that its positive characteristics can be isolated and put to work in our own novel commixture.

As cautioned by Jameson above, direct apprehension of realism as such remains a slippery proposition, but Fowler's schematic at least offers a sense of where to start. To uncover realism as a fluid and free-floating mode, I'll first locate it as a historically situated genre. Of course, even this isn't a particularly easy task: One of the major hurdles to developing even a provisionally functional definition of realism as a genre of literature is that the term's obvious proximity to terms like "real" or "reality," which, despite being theoretically loaded terms in their own right, are also words for which most people will already have an intuitive (if somewhat under-theorized) definition. As Luc Herman observes in his introduction to *Concepts of Realism*,

> In the readers' case, the perpetually changing concept of reality turns realism into an extremely relative currency. Even from one generation to the next, the sense of the real may alter so drastically that the reality of the first as already become a cliché in the eyes of the second. As a consequence, *realism* has turned into a rather vague term through which readers merely indicate that they can relate to a specific literary text (1).

However difficult it renders the project of articulating a rigorous theorization of realism, the term's purchase as a synonym for something like "relatability" should not be dismissed out of

hand[9]. So while the goal here is to articulate a sense of realism's modal form that doesn't rely on the specific content of any given generic instantiation, it remains important to note that the content of a given generic instantiation of realism does still matter in so far as it reflects something about what "felt real" to the socio-historical context in which it was produced.

This basic tension between content and form can be traced right back to realism's first emergence in literature in the origins of the novel. As Ian Watt describes, contra the 19th century critics who held that "the 'realism' of the novels of Dafoe, Richardson, and Fielding is closely associated with the fact that Moll Flanders is a thief, Pamela a hypocrite, and Tom Jones a fornicator"(10), realism's true innovation as a generic form is dispositional: "[i]f the novel were realistic merely because it saw life from the seamy side, it would only be an inverted romance; but in fact it surely attempts to portray all the varieties of human experience, and not merely those suited to one particular literary perspective: the novel's realism does not reside in the kind of life it presents, but in the way it presents it" (11). In this sense, realism emerged as a generic tendency not just as a "seamy" counterpoint to romance, but rather as a new disposition toward the "varieties of human experience" through which a broader range of individuated human lives, seamy though they may be, could be rendered visible.

As Watt goes on to describe, the broader range of representation offered by the realism of the 19th century novel has strong ties to the historical situation from which it emerged, specifically through what he describes as the "philosophical realism" of thinkers like Locke and Descartes:

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[9] Incidentally, that realism retains some vague connotations of something to which people can intuitively relate comprises half of Jameson's dialectical definition of realism, through what he somewhat idiosyncratically terms its "affective impulse."

> The general temper of philosophical realism has been critical, anti-traditional and innovating; its method has been the study of the particulars of experience by the individual investigator, who, ideally at least, is free from the body of past assumptions and traditional beliefs…All of these features of philosophical realism have analogies to distinctive features of the novel form, analogies which draw attention to the characteristic kind of correspondence between life and literature which has obtained in prose fiction since the novels of Defoe and Richardson. (12)

What's important to note here is the emphasis on individual experience: While Watt wants to retain a kind of terminological through-line between realism in literature and "philosophical realism," his archive, in particular his reliance on the work of Locke, is an assemblage of foundational figures of liberal humanism, the well-documented anthropocentric tendency of which, as described in the previous chapter, imposes some significant epistemic blind spots of its own. With that in mind, what Watt characterizes as a freedom from "the body of past assumptions and traditional beliefs" is simultaneously the first phase of a reorientation toward the individualized liberal subject, and all of the anthropocentric tendencies that such a reorientation comes to entail.

What I'm approaching here is ultimately a question of the relationship between literature and ideology, and it should be noted that much contemporary critical theory tends to ascribe a good deal more agency to literature than Watt, for whom the novel seems to emerge only in the wake of the "philosophical realists." As Catherine Belsey describes in *Critical Practice*, for example, "the work of ideology is to present the position of the subject as fixed an unchangeable, an element in a given system of differences which is human nature and the world of human

experience, and to show possible action as an endless repetition of 'normal,' familiar action. To the extent that the classic realist text performs this work, classic realism is an ideological practice" (74). Literature, in this sense, not only reflects but actively participates in the construction and maintenance of the infrastructure of ideology, and our historically situated conception of genre can thus be understood as something of a fossil record of literature's participation in the ideological configuration of a given period.

As Belsey goes on to describe, in the case of classic realism, its own "ideological practice" is the in the development of "the transcendent subject of liberal humanism which is the ideological ally of industrial capitalism" (101). The classical realist novel, in its focus on individual experience, is effectively doing the ideological work of naturalizing the liberal humanist subject. Classic realism's role in the development of the liberal humanist subject is important to recognize here because it echoes the naturalized relationship between liberal humanism and the Anthropocene demonstrated by the ecomodernists in the previous chapter. Perhaps more significantly for the purposes of this chapter, though, it also directly acknowledges literature's active participation in the formation of the subject, and thus offers another vantage from which we can apprehend the weirdly knotted problem of realism as both a generic tendency undertaking a specific and historically situated ideological project and, conversely, as a formal mode characterized by a sort of vague disposition toward "feeling real." In Watt's account, these two forms are basically continuous: As he describes, the early novel's centring of individual experience both reflects the ideological framework developed by figures like Locke, and, simultaneously, felt radically "real" to its contemporary audience as part of the text's unique calibration toward what Franco Moretti describes as "the kinds of narrative pleasure compatible

with the new regularity of bourgeois life" (81)[10]. A couple of centuries later, though, the gap between classic realism's ideological project and realism as a mode is much more pronounced, and what was once a radical reorientation toward the minutia of the individual lived experience no longer registers as particularly radical. This isn't to say that contemporary realist novels don't deal in individual experience, but rather that, as I hope to demonstrate, the new experiential frontier that contemporary realism is interrogating is not so much individual experience but rather its limits: Our own increasing awareness of the thin band of reality to which we have direct access renders the liberal humanist conception of the human as the de facto "measure of all things" both myopic and underwhelming. My basic contention here is that the shifting intuition of what "feels real" in literature serves as an index for the decay of a given generic instantiation of realism, which in turn constitutes the impulse toward the production of new generic realisms, each of which are informed by the "poetic stance" of realism in its modal form. In this sense, I'll repurpose LeMenager's insight, following Fowler, that "mode is what is left after genre decays" (222) to suggest that the moments in which the scope and limits of realism as genre are made visible are simultaneously moments in which realism as a mode can be seen most visibly operating as well.

The schematic that we've been developing over the course of this chapter now offers a generative angle from which to reframe what has always been a tricky sort of paradox for theorizations of realism, in which it is seen to both uncover and prematurely resolve the limits of its own situated discourse. This tension is primarily a problem of how exactly one parses the

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[10] As Moretti goes on to describe, classical realism can be characterized by a milder approach to plot and narrative that directly corresponds to the mild pleasures of the bourgeois class that served as its primary audience: "[classical realist novels] are to story-telling what comforts are to physical pleasure: enjoyment pared down, adapted to the daily activity of reading a novel" (81).

potentiality implicit in realism's ability to trace the discursive limits of its own socio-historical situation: As Rosalind Coward and John Ellis describe, "realism is more than a 'natural attitude,' it is a practice of signification which relies upon the limits that society gives itself: certain realist texts…are consequently capable of dramatizing these limits at certain moments" (45). To put it in the terms of our present argument, where realism as a genre is delimited by the discursive framework of the society from which it emerges, realism as a mode reflects the realist text's capacity to dramatize those limits. As Coward and Ellis go on to describe, the parsing and exploration of these dramatized limitations constitutes an affirmative project for literary criticism, which, in their account, is often too quick to try and resolve the text back into a singular meaning. As they describe, "[c]onventional criticism aims at a closure of the troubling plurality: it aims at an interpretation, fixing a meaning, finding a source (the author) and an ending, a closure (*the* meaning). This form of criticism plays the game that the text proposes" (45). In contradistinction to this, they advocate for a mode of criticism that "intends to discover what the rules of this game are (for writers and readers), in order to enter into a more serious and vital play: to find ideology out in the moment that it is produced" (46). The project for literary criticism, in their account, is to examine the moments where the limits of the realist text emerge and, in this way, map its participation in the production of ideology. Ultimately, this is why the distinction between "genre" and "mode" actually ends up serving as a useful means of distinguishing what exactly literary realism offers the Anthropocene discourse: Within the schematic of the present argument, this chapter's interest in realism as a mode is meant to signal exactly this attentiveness to the moments in which the realist text traces its own ideological limitations, where the seemingly unified discursive order of the text is briefly opened up into

something that, while perhaps inarticulable through the ideological framework that its generic instantiation of realism works to sustain, nonetheless feels real.

Peripheral Realisms

This chapter's focus on realism as a mode has thus far served to root out some salvageable features of realism's initial emergence as a literary genre without committing to the mild bourgeois individualism that Ghosh identifies as antithetical to representations of climate change. It's also hopefully offered a bit of nuance to Ghosh's relatively broad usage of the term "realism": Where Ghosh wants to identify bourgeois individualism as a baked in feature of serious literary realism as such, I'd contend that he's actually characterizing generic features of classic realism, a genre whose decay into mode has led to the proliferation of a wide range of new realisms, many of which, as we'll see, actively resist the individualizing tendency of classic realism.

Importantly, Ghosh is not alone in identifying features of classic realism and applying them to realism more broadly. In part, this is a function of the relatively narrow scope that has been deployed in defining realism as such: As Joe Cleary describes, "[m]any of the magisterial histories of realism, those on which most contemporary criticism still scavenges, were actually produced in the twentieth century, but these works tracked the development of a specifically European realism from its classical or medieval antecedents or bourgeois beginnings to the early twentieth-century crisis of realism that we now call modernism" (255). This was fairly explicit in Watt's work discussed above, but it's also a limit of other canonical theorizations of realism, such as Lukacs' *Historical Novel* or Erich Auerbach's *Mimesis*: despite their theoretical differences, both works are focused on the looming collapse of a conception of realism that is

both geographically and temporally quite narrow, or what Cleary goes on to describe as "the disastrous and potentially terminal crisis of European realism provoked by modernism"(255). This is not to suggest that these limitations render the insights developed by these theorists somehow out of bounds for the present discussion (in fact, elements of Lukacs' theorization of realism will be examined in some detail below). Instead, what I want to signal here is that while much of what is seen as foundational in the discourse of realism as such has been either implicitly or explicitly focused specifically on the realism of Europe or the" West," that same foundation has produced a wide range of realisms, each of which mobilize the realist mode in response to their own unique socio-political context. The project of this section will be to better situate the conception of realism that this chapter has thus far been examining as the product of a geographically narrow archive, in order to consider how our schematic might be further refined by accounting for realism's relationship to a broader geographic range.

With this project in mind, what follows might best be understood as part of a broader turn in literary criticism toward situating realism in its global context. As Jed Esty and Colleen Lye describe in their introduction to *MLQ*'s special issue on Peripheral Realisms, the "curricular and canon-making institutions have already begun to recognize new realist objects in the literary periphery, a process contemporaneous with recent methodological changes one might describe as a "new realist turn" in criticism" (276). As one might expect, the contours of this turn are broad, but like many of the theorizations of the Anthropocene discussed in the previous chapter, they share a kind of generalized distrust of the exclusionary anthropocentric tendencies of liberal humanism that inform the generic constraints of classical realism. The totalizing logic that governs the liberal humanist tendency of classical realism was already described, in slightly

different terms, by Edward Said, as one of the central mechanisms of colonial power. As Said argues,

> [t]he crucial aspect of what I have been calling the novel's consolidation of authority is not simply connected to the functioning of social power and governance, but made to appear both normative and sovereign, that is, self-validating in the course of the narrative. This is paradoxical only if one forgets that the constitution of a narrative subject, however abnormal or unusual, is still a social act *par excellence,* and as such has behind or inside it the authority of history and society.(77)

What I have thus far been terming the "work" of literature in "producing" ideology is here described as the "consolidation of authority," which much more directly addresses the extent to which literature is implicated in the relationship between liberal humanism and colonialism described in the last chapter. Already, then, we have the suggestion of what lies beyond the borders of our too-clean schematic of realism, or what kind of authority realism's "ideological work" is being deployed to marshal. Accordingly, I'll offer a slight revision to the schematic of realism I've been slowly developing over the course of this chapter: The decay of generic into modal realism is a function not only of history but also of geography. That is to say, the failure of classical realism to meaningfully describe something like lived experience begins to lose purchase not only over time, but also on the periphery of the imperial centres from which it was initially derived. According to our schematic, the decay of genre leads to the emergence of realism as mode, which in turn gives rise to new realisms. But, as this chapter will demonstrate, these new realisms are employed in their own "ideological work" in a wide range of geopolitical contexts, both in support of and in resistance to the colonial impulse of liberal humanism.

One of the most stark examples of the kind of "ideological work" realism can be deployed to accomplish is the Soviet Union, where "Socialist Realism" was codified by the 1934 Soviet Writer's Congress as the official artistic genre of the U.S.S.R. What's interesting about this legislation, for the purposes of the present writing, is that the proceedings from the congress boil the work of literary theory down to its most fundamental ideological elements. The basic formula underlying Socialist Realism, succinctly articulated by head of the Central Committee's Propaganda and Agitation Department Andrei Zhdanov as "a combination of the most matter-of-fact, everyday reality with the most heroic prospects" (Clark 34), constitutes what Katerina Clark describes as a kind of "modal schizophrenia" (37), or oscillation between the realist impulse to represent some aspect of the lived experience and a mythic or utopian impulse toward describing how things ought to be. Interestingly, this basic formulation is not all that far removed from the classical realist project described above, wherein the classical realist novel is understood to both capture the lived experience of individual people while simultaneously resolving any contradictory discursive elements into a singular liberal humanist logic. This is not to suggest that the classical realist novel was intentionally calibrated as a kind of propagandistic cultural product (at least, not in any sense that was ever codified into law), but what I do want to highlight here is the extent to which both of these realisms are at least partially aspirational: Whether it means situating the lived experience within "a point of view from which everything becomes obvious" (MacCabe 16) or to "endow secular literature with the power of myth" (Clark 42), part of both classic and socialist realism's representation of lived experience is constrained generically by some mappable ideological project toward which it is attempting to guide its reader. In part, this is a necessary corollary of the slippage that exists between representation and

the thing being represented: while realism as a mode is oriented toward representing the lived experience, there is always going to be a kind of gap between experience as such and its translation into literature. Thus, what *does* get represented is a choice, and that choice, either implicitly or explicitly, is where we see ideology coming into play. The case of the Soviet Union is instructive insofar as that ideological project was explicitly codified, but as we'll see, that same kind of selective representation as a means of transmitting some kind of ideological content will remain a constant of realism as a mode.

As one might expect, the sheer bureaucratic weight of a standardized method of literary production was not exactly conducive to artistic flourishing. As historian Brandon Taylor argues, "[p]overty, imprisonment, and even death at the hands of Party in the late 1930s were not unknown, and there is no escaping the verdict that, taken as a whole, Socialist Realism emasculated the imagination of dozens of creative artists and writers from this time up to the end of the cold war in the 1980s" (153). In spite of this, the development and codification of socialist realism provided a model for many of the emerging socialist and communist movements of the 20th century. As Joe Cleary points out,

> wherever strong communist cultures were forged, their writers tended to favor realist modes of one form or another. The Chinese critical and social-realist narrative traditions associated with Lu Xun, Mao Dun, and Ding Ling; the All-India Progressive Writers' Movement; Italian *neorealismo*; the British New Wave or working-class realisms; and South American *testimonio* are just some of the more notable expressions of this broader relationship of realism with communist or left-subaltern politics in the twentieth century (262).

There is a surface level tension here that our schematic of mode and genre can help us resolve: While realism first emerges as a genre closely associated with the rise of liberal humanist individualism, by the late 20th century it has fractured into an array of peripheral realisms that actually deploy some aspect of modal realism back against this liberal humanist tendency. In the context of our schematic, the aspirational dimension of modal realism can here be seen to become disentangled from the generic roots from which it emerged and operate as a mode available to new generic instantiations.

The tension is neatly captured in Jed Esty's characterization of the wide range of modal realism's global generic instantiations as "the site of struggle between norms of finite social description and half-articulate dreams of expansive political projection" ("Realism Wars" 317). This struggle is evident in the fictional production of a range postcolonial nations, where emerging realisms are often explicitly positioned as a response to dominant (Western) generic forms: Writing on India's Dalit (or "Untouchable Caste") literature, Toral Gajarawala argues that "the stark realism of contemporary Dalit texts…dismissed the modernist 'call to consciousness' and its focus on subjectivity in favour of a communitarian, collective ethos where consciousness is always already given by the condition of caste subjection" (331). Rather than offering an anachronistic return to the classical realism's individuated interiority, Dalit literature shifts away from the individual entirely, in order to produce "a peripheral realism that suggests a new temporal and spatial diagram of revolt along with a critique of the long-dominant progressivist universalism of Indian literary radicalism" (Gajarawala 331). Similarly, Samah Selim examines the particular manifestation of realism in the context of contemporary Arabic literature, where new forms of realism, previously dismissed as "illegitimate fictions"(110) when measured

against the Eurocentric canon of the 19th and 20th century, now appear "as a strategic articulation of specific yet very different social values and attitudes" (124). For both Garajawala and Selim, these new realisms share a distrust of the liberal humanist's instance on representing the individual as a unified and self-contained point of subjectivity. As Selim describes,

> Novelistic subjectivity or interiority is not some natural effect of the progressive evolution of human narrative practice, but rather the finite product of a specific moment in the history of modern societies. In Europe, this was the moment, in the eighteenth century, when a mercantile, and later, an industrial bourgeoisie began to come into its own as a dominant national and imperial class. Similarly, in Egypt, the "artistic" novel emerges at the point when a properly nationalist bourgeois intelligentsia begins self-consciously to articulate its role as a powerful and exclusive political and cultural vanguard (118-19).

In this sense, the reemergence of realism as an object of critical inquiry in the 21st century is coming from a significantly different angle than the 19th and 20th century's critical interrogation of the generic dyad of realism and modernism: As Jed Esty goes on to describe, where the tension between realism and modernism can be (somewhat reductively) framed as a "long contest over literary interiority" (322), the growing critical interest in global peripheral realisms signals "a turn in critical appetite or interest away from the long lineage of novels centred on liberal individualism and deep interiority" (322). Rather than simply rehashing the relative merits of Henry James' introspective realism against the modernist stream-of-consciousness of Virginia Woolf, the new realist turn's global perspective forces a recognition of the broad range of generic

instantiations of modal realism, and a rejection of the assumed centrality of the liberal humanist subject as the *de facto* focus of its representation.

The new realist turn has also significantly reshaped how realist novels contend with the institutions that enable their production: Rachel Sagner Buurma and Laura Heffernan describe what they term the "novel of commission," a genre of realism that "consider[s] the institution's presence in the writing process…to reimagine rather than evade their institutional bonds" (88). Buurma and Heffernan argue, for instance, that Sheila Heiti's 2010 novel *How Should a Person Be?*'s metafictional engagement with the "feminist theatre company" that funded its production drastically rearticulates the relationship between realist fiction and the possibilities of institutional critique: the novel, which follows a thinly fictionalized version of Heiti, "unfolds as the story of how Sheila moves away from her reified idea of her work of art and her paralyzing relationship with the commissioning institution by joining her everyday life...with the preparation for writing her novel" (91). The realism of the novel of commission, in this sense, extends not only to its content but also a self-consciousness of its form and production, as it balances its own literary ambitions against an awareness of "the problematically differential power relations involved in the social production of artistic and literary value" (Buurma and Heffernan 96). Rather than allowing the novel to exist purely as a text that reflects some "real" aspect of the world, the novel of commission forces the novel itself to exist in the world and account for the institutional structures through which its production was facilitated[11]. In a similar vein as Gajarawala's examination of Dalit literature, the novel of

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[11] Buurma and Heffernan also discuss Ben Lerner's first novel, *Leaving the Atocha Station*, as an example of a realist "novel of commission." This work will be examined in conjunction with Lerner's second novel in this project's third chapter.

commission's emphasis on institutional power shifts the scale on which the new realist turn operates: its realism is no longer only evident in its reflection of human subject position and the attendant contours of human interiority but is now a feature of how that human subject interfaces with structures of power.

In this sense, one of the defining characteristics of the new realist turn is this impulse to capture the individual's relationship to structures of power that are never fully apprehensible on the scale of the individual. Here again we can see realism's utility as a kind of index for the anxieties of the moment it aims to represent: As Jed Esty describes,

> now that some of the derealizing effects of neoliberalization and financialization have been absorbed and familiarized, perhaps we are ready to read and write the social, political, and economic present as contemporary history. If so, then new realisms and historical fictions represent a literature of our time that moves beyond metaphors and analogies between local and global and focuses attention instead on interrelated and trackable links leading all the way from intimate family life to world systems ("Realism Wars" 337).

Esty's insistence that the connection between the individual and systems of power is being represented literally rather than as "metaphors and analogies" is an important one, as it identifies a bifurcation in the critical registers through which the problematics of scalar relationality can be approached, especially in relation to postcolonial literatures: Esty's emphasis on the literal, here, can be positioned in contrast to Fredric Jameson, who first argued for the necessarily allegorical nature of "third-world" literature in his 1985 essay "Third-World Literature in the Era of Multinational Capitalism," and has continued to make the case as recently as 2019's *Allegory*

and Ideology, where he argues that "Third-world texts, even those which are seemingly private and invested with a properly libidinal dynamic— necessarily project a political dimension in the form of national allegory" (165). While Jameson offers a compelling read of the utility of allegory as a method of engaging with postcolonial fiction, Esty's focus on the literal here helps to articulate the extent to which allegory does not exhaust fiction's representational potentiality: For example, as John Marx argues in his examination of Chimamanda Ngozi Adichie's *Half of a Yellow Sun*, in Adiche's realist engagement with Nigeria's Biafra War, "the domain once called 'private life' is hardly separated from politics, not because the home is thought of as figuring national aspirations but because it is so thoroughly assimilated as part of a story about professional self-determination" (66). That is to say, the private becomes political not through the lens of metaphoric or allegorical symmetry but from the literal insertion of Nigeria' uncertain political futures on every aspect of the novel's characters lived experience.

In this sense, the new realist turn, which maps a growing constellation of "peripheral realisms," is best understood not as a kind of recursive turn to the liberal individualism that characterized classical European realism, but rather as an adaptive modal impulse that works to represent the dynamics of power that are increasingly beyond the scale of the individual. As the following chapters will demonstrate, realism's flexible adaptation to both the literal and allegorical registers of a text provide one of its most significant contributions to the representation of the Anthropocene in literature.

Toward A Terrestrial Realism

With this more nuanced conception of realism mind, this final section will examine the particular qualities of realism that render it a generative mode for engaging with the Anthropocene. As

hinted at above, this will involve an examination of the conception of realism described by George Lukacs, which Jed Esty and Colleen Lye identify a major theoretical pillar of the new realist turn. For purposes of this project, Lukacs offers a useful account of realism that positions it as a mode of resistance to the superficial unity offered by the dominant ideological structure of the present, and instead orients itself toward a representation of what he terms "totality" ("Balance" 33). As Esty and Lye go on to describe,

> Lukács is best appreciated for having located a text's realism in its aspiration to totality, with 'totality' defined not as something out there but as the demand to consider interrelations and interactions between disparate phenomena...On this account, reality is by definition not what it seems, or else it could be comprehended by mere description; a realistic mode of representation is meant not to reproduce reality but to interrupt the quasi-natural perception of reality as a mere given (277).

There are two important points about Lukacs' theory of totality and its relationship to realism that are worth unpacking here a little more deliberately.

The first is that his usage of totality is not being presented as an absolute or complete account of reality but rather a disposition that strives to articulate something beyond reality's immediate or surface level appearance. In "Realism in the Balance," Lukacs argues that "[i]f literature is a particular form by means of which objective reality is reflected, then it becomes of crucial importance for it to grasp that reality as it truly is, and not merely to confine itself to reproducing whatever manifests itself immediately and on the surface" (33). Importantly, Lukacs directly links his own conception of totality to Lenin, who sees totality not as a realizable goal but rather as a kind of precaution against epistemic stagnation. As Lenin writes,

> Firstly, if we are to have a true knowledge of an object we must look at and examine all its facets, its connections and "mediacies". That is something we cannot ever hope to achieve completely, but the rule of comprehensiveness is a safeguard against mistakes and rigidity. Secondly, dialectical logic requires that an object should be taken in development, in change, in "self-movement" (as Hegel sometimes puts it). This is not immediately obvious in respect of such an object as a tumbler, but it, too, is in flux, and this holds especially true for its purpose, use and *connection* with the surrounding world (94).

Following this notion of the object as both never fully apprehensible and constantly in flux, Lukacs' conception of totality is best understood as an aspirational project whose primary utility is one of a kind of epistemic disjuncture or open-endedness: in taking seriously the inexhaustibility of the thing as such, Lukacs depiction of realism emphasizes the extent to which realist representation is never absolute or objectively complete, but instead must constantly rearticulate itself against and alongside a fluctuating world that it can never wholly capture.

To signal an impending point of consolidation in this project's increasingly diffuse theoretical archive, it's worth directly noting the connection here between Lenin by way of Lukacs and the work of Nils Bohr by way of Karen Barad, from whom I borrowed the notion of diffraction in the previous chapter: Both Lenin's dialectical logic and Bohr's philosophy-physic leverage the inexhaustibility of the their respective objects of inquiry as a means of characterizing the open-ended nature of knowledge production as such. This open-endedness is inherited by Barad, whose agential realist project argues that "the primary ontological unites are not 'things' but phenomena— dynamic topological reconfigurings…of the world" (141). We see

a similar turn to phenomena in Lukacs, who argues, for instance, that "[the] profundity of the great realist, the extent and the endurance of his success, depends in great measure on how clearly he perceives— as a creative writer— the true significance of the phenomenon he depicts" (33). The point here is not so much to position Lukacs as a kind of proto-posthumanist thinker, but rather to begin to suggest a point of confluence between the previous chapter's diffractive, open-ended methodology for describing the Anthropocene discourse, and this chapter's characterization of realism: In both cases, there is a degree of self-consciousness that what is being produced is not a closed or absolute reflection of some fixed state of affairs but rather a contingent account from a limited perspective.

The second sense in which Lukacs is important to the new realist turn is a corollary of the first: The epistemic disjuncture that his notion of totality evokes is meant to be inherently disruptive to the smooth operation of ideology. If Lukacs' realism describes the impulse to engage directly with the messy ideological contradictions of the moment that it aims to reflect, then the failure to engage with these contradictions reflects a more general retreat from reality as such. Lukacs here builds his own conception of realism on an analogous failure to confront reality identified by Marx, who in the third volume of his *Theories of Surplus-Value* describes the process by which (capitalist) economists work to reify their own epistemic framework as "in accordance with nature" and therefore beyond reproach:

> just as a scholastic is familiar with God the Father, God the Son, and God the Holy Ghost, so are the vulgar economists with land— rent, capital—interest, and labour— wages. For this is the form in which these relationships appear to be directly connected with one another in the world of phenomena, and therefore they exist in this form in the

> thoughts and the consciousness of those representatives of capitalist production who remain captive to it. The more the vulgar economists in fact content themselves with translating common notions into doctrinaire language, the more they imagine that their writings are plain, *in accordance with nature* and the public interest, and free from all theoretical hair-splitting. (503, italics his)

Lukacs characterizes this retreat from reality as a form of ideological decay symptomatic of a "cowardly and compromising liberalism" (*Essays on Realism* 119) that refuses to meaningfully engage with the contractions of the present. This decay amounts to a substantive burden for what he terms the "authentically realist" author[12], who must resist the dominant discursive tendency to avoid ideological conflict: As Lukacs writes, "the further this general ideological decay progresses, the greater are the intellectual and moral demands placed on the writer if he is to avoid failing into decadence and seeks to tread the path of genuine realism" (*Essays on Realism* 166). The realism that Lukacs is describing, in this sense, should be understood to function in direct contrast to the "classical realism" described above, neatly captured by MacCabe as the representational attitude in which "everything becomes obvious." For Lukacs, a "genuine realism," is best understood as one that resists the gravitational pull of the normative ideological discourse and instead pushes toward a representation of the present moment in its totality: While by definition this totality cannot be definitively achieved, an orientation toward totality becomes

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[12]While it's outside the scope of the present writing to fully explicate how well this particular claim applies to the specific authors that Lukacs will identify as "authentically realist" (Thomas Mann, Balzac), his proposition that realism operates in resistance to the pull of the dominant ideological discourse will be a recurrent theme of the texts analyzed in the following chapters.

a means through which realism can check itself against the ideological foreclosures and anthropocentric tendencies of contemporary liberalism.

With that in mind, Lukacs' conception of realism offers a useful mode for engaging with the Anthropocene: As discussed in the previous chapter, if we take seriously Timothy Morton's positioning of the Anthropocene as a hyperobject, then Lukacs' insistence on realism's drive toward totality offers a generatively open-ended disposition for dealing with the Anthropocene's phenomenal inexhaustibility. Similarly, his characterization of realism as a refusal to retreat from ideological conflict offers a useful corrective to the dominant liberal humanist framing of the Anthropocene described in the previous chapter.

Finally, then, we're beginning to see the broad contours of how the present writing will respond to Ghosh's critique of literary realism's relationship to climate change. Still though, while these features might help bridge the gap between realism and the Anthropocene as workably overlapping concepts, what is still needed is a theorization of how the Anthropocene actually comes to be figured in a work of realist fiction: As the last chapter hopefully demonstrated, the term "Anthropocene" itself serves as a stand-in for an increasingly broad range of global environmental problematics, which, as one might expect, renders it correspondingly difficult to experience as a singular thing or event: from the uncannily quotidian fallout from an environmental catastrophe's explored in Thomas King's *The Back of the Turtle* and Ben Lerner's *10:04*, to the ambiently looming environmental anxieties captured by Jenny Offill's *Weather* or Kingsolver's *Flight Behaviour*, the problematics of the Anthropocene manifest in realist literature in a range of unexpected ways.

The interaction of the broad problematics of a particular moment and the production of literature has been theorized by Mikhail Bakhtin, whose work examines how the socio-historical conditions that produce a given moment are reflected in that moment's novels. For Bakhtin, the novel as a whole is a kind of mutable generic formation: As he describes, the novel "renews itself by incorporating extraliterary heteroglossia and the 'novelistic' layers of literary language, they become dialogized, permeated with laughter, irony, humor, elements of self-parody and finally— this is the most important thing— the novel inserts into these other genres an indeterminacy, a certain semantic open-endedness, a living contact with unfinished, still evolving contemporary reality (the open-ended present)" (7). The novel, in Bakhtin's conception, is an index of its particular location in space and time, effectively forcing an historicization of its conditions of production. Importantly, this move does risk reductively positioning the novel as another byproduct of its historical situation: As Fredric Jameson argues in his *Antinomies of Realism*, Bakhtin's theorization of the novel "is weakened by its insertion into a cyclical temporality which domesticates and 'anthropologizes' it" (287). Importantly, then, what we're borrowing from Bakhtin is not his sense of literature as a kind of anthropological artifact of its particular socio-historical moment: As described above by Catherine Belsey, literature is most productively understood as an active participant in the cultural moment that it describes, as a means of either resisting or reinforcing its moment's ideological commitments. Still, though, what Bakhtin's account of literature does offer is a compelling mechanism for mapping the novel's relationship to the "unfinished, still-evolving contemporary reality" from which it emerges.

So where Jameson cautions against Bakhtin as an anthropologist, for the purposes of the present writing what I'm after is something like Bakhtin as an armchair quantum physicist, or the Bakhtin who finds himself approaching literature less as an anthropological artifact than as a cross-section of a narrow slice of space-time: The "semantic open-endedness" that Bakhtin identifies as a central feature of the novel is captured in his notion of the chronotope, a term he self-consciously appropriates from quantum physics: As he describes,

> [w]e will give the name chronotope (literally, "time space") to the intrinsic connectedness of temporal and spatial relationships that are artistically expressed in literature…In the literary artistic chronotope, spacial and temporal indicators are fused into one carefully thought-out, concrete whole. Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise, space becomes charged and responsive to the movements of time, plot and history (84).

Bakhtin's binding of time and space in the chronotope actually offers a useful rejoinder to the tension between classical realist interiority and the peripheral realist cognizance of structures of power that I've been tracing throughout this chapter: as Jameson points out, "time governs the realm of interiority, in which both subjectivity and logic, the private and the epistemological, self-consciousness and desire, are to be found. Space, as the realm of exteriority, includes cities and globalization, but also other people and nature. It is not so clear that language always falls under the aegis of time (we busily name the objects of the spatial realm, for example), while as for sight the inner light and literal as well as figurative reflection are well-known categories of introspection" ("The End of Temporality" 697). The chronotope, as a kind of literary crystallization not only of a historical moment but rather a slice of historical space-time, brings

these two dimensions together through a single mechanism: the chronotope of a given moment is situated both temporally and spatially.

The notion of the chronotope, in explicitly linking literature with the socio-historical conditions of its production, helps gain purchase on the wobbly nature of realism as such, whose claims to authentic representation of some aspect of reality are always going to be historically contingent. As Bakhtin argues,

> the process of assimilating an actual historical chronotope in literature has been complicated and erratic; certain isolated aspects of the chronotope, available in given historical conditions, have been worked out, although only certain specific forms of an actual chronotope were reflected in art. These generic forms, at first productive, were then reinforced by tradition; in their subsequent development they continued stubbornly to exist, up to and beyond the point at which they had lost any meaning that was productive in actuality or adequate to later historical situations (85).

This is why, for example, when viewed in retrospect, the introspective tendency of classical realism feels, if not exactly unreal, then at least kind of claustrophobically narrow in scope: The previous chapter's turn toward the terrestrial, in this sense, names a reorientation that is aligned with the emerging chronotope of the present, as shifting socio-historical conditions force a perspectival shift away from the individual toward the scale planetary. It's with this shifting socio-historical condition in mind that Mary Louise Pratt suggests that "[t]he Anthropocene creates a new chronotope with a multipolar time-space configuration. The human in the present imagines a subject who, long after humans are gone, reconstructs our era through what it will have left behind" (G170-71). While Pratt cautions against the rise of an

"Anthropocene chronotope [that] leaves humans, modern, Occidental humans, at the center of the narrative" (G173), the open-ended nature of the concept of the chronotope itself leaves the defining characteristics of the present generatively indeterminate. As Pratt goes on to describe, "The writers of the Anthropocene... are seeking the meaning machines and desiring machines through which the dramatic, unknowable trajectory on which we are embarked can become a story and be lived" (G173).

Pratt's identification of Anthropocene's unknowability is an important one, as it further points to the role that artistic representation (and in this case, specifically, realist literature) can play in the Anthropocene. As Jameson describes, if

> the Anthropocene [is to be] given its due, it is in terms of its production of reality and not its transformation into an aesthetic image…Not the knowability of things-in-themselves, then, but the functioning of airports, with their thousands of personnel and their their intricately differentiated and synchronized processes…These new posthuman environments are unknowable only in the sense that they are so far unrepresentable; and the political questions about their expansion or their modification are inseparable from those—perhaps more artistic— omens of their representability (*Allegory and Ideology* 36).

Jameson's claim here can be read diffractively against Morton's positioning of the Anthropocene as a hyperobject: In both cases, the Anthropocene's unrepresentable non-locality is not being taken up as a shrug in the direction of metaphysics or the Kantian *ding an sich*. Instead, what the Anthropocene offers is an opportunity for new modes of representation to emerge, to grapple with its inexhaustible complexity.

The question that this raises, then, is how does one meaningfully characterize the chronotrope of a society that is grappling with the kind of extinction event currently being posed by the looming threat of the Anthropocene? How might the serious fiction of a society shift after its assumed autonomy over a flat and mute natural world is challenged by the rise of unpredictable and violent nonhuman planetary animacy? As the first chapter worked to demonstrate, the term "Anthropocene" is not so much a singular event or problematic but instead has increasingly served as an academic keyword for a wide range of ideologically diverse theory and criticism about a similarly diverse range of issues. In that chapter, the basic move was to introduce the terrestrial as a different way of organizing that increasingly unwieldy and diverse body of writing: As an orientation, the terrestrial weaves together a broad range of work without forcing it to organize around a singular logic or narrative. In part, this was meant to solve a methodological problem; As that chapter hopefully made evident, the Anthropocene discourse's breadth generates a good deal of critical tension, as competing disciplinary factions vie to position their own explanatory narrative for some narrower environmental problematic as a synecdoche for the Anthropocene as a whole. By shifting to the terrestrial, this project aims to draw attention not on a singular issue or problematic constellating around the Anthropocene keyword, but rather focus on the singular situation—the literal "common ground"—from which these problematics emerge.

In the following three chapters, the term terrestrial will be deployed to describe a similar reorientation in contemporary realist fiction. Unlike Ghosh, for whom realist fiction is irretrievably subsumed by the anthropocentrism of liberal humanism, I posit that the looming threat of environmental catastrophe occasioned by the Anthropocene paired with the increasingly

apparent inability of our normatively functioning political and social institutions to offer any substantive response has actually served as grimy fertile ground for the emergence of a new realist mode in contemporary fiction that I've termed terrestrial realism. Stated as broadly as possible, terrestrial realism names the impulse in contemporary fiction away from the narrow, individualizing anthropocentrism of liberal humanism and toward the as-yet unnamed mode of planetary cohabitation that is in the process of emerging. Because terrestrial realism does not describe a genre so much as a mode of fiction, it should not be understood to be synonymous with generic signifiers such as climate fiction (or "cli-fi") described above. Instead, terrestrial realism names a specific fictional mode through which the dominant ideological commitments of liberal humanism are challenged through a realist representation of the lived experience of the Anthropocene. Thus, where cli-fi serves as a broad subgeneric umbrella for fictional works that, as Milner and Burgmann, are centrally focused on climate science, terrestrial realism describes contemporary realist fiction's direct intervention into the individualizing and anthropocentric tendencies of liberal humanism. The remaining three chapters of this project will serve to substantiate how terrestrial realism actually operates through a series of readings of contemporary fiction that demonstrate how the terrestrial realist mode is being productively mobilized in contemporary fiction to situate, dissemble, and rearticlulate the human alongside the rest of the planet.

Chapter 3: Anthropocene Allegories of Scale: Kingsolver and Lerner

Since Dipesh Chakrabarty's influential essay "The Climate of History: Four Theses," the problematics of scale have been a central focus of the discourse of the Anthropocene. As Chakrabarty describes, the notion of the Anthropocene forces us to address the human in two distinct registers, as both a set of individuals as well as a species whose aggregate activity is being etched into the geological record. In this way, he argues, the Anthropocene poses a direct challenge to "the artificial but time-honoured distinction between natural and human histories" (206), as we become unable to sustain the liberal humanist fantasy of the ontic distinction between humans and the rest of the planet.

Importantly, for Chakrabarty, there's a useful parallelism between the inaccessibility of the climate crisis as such and the scalar differential between human individuals and the human species as a whole. His frequently cited claim that "[w]e experience specific effects of the crisis but not the whole phenomenon" (221) follows a lengthy examination of a different kind of experiential gap. As he argues,

> We can only intellectually comprehend or infer the existence of the human species but never experience it as such. There could be no phenomenology of us as a species. Even if we were to emotionally identify with a word like *mankind,* we would not know what being a species is, for, in species history, humans are only an instance of the concept species as indeed would be any other life form. But one never experiences being a concept (220).

For Chakrabarty, this means that the challenge of representing the Anthropocene might actually be best understood as a kind of discursive wedge through which we can trace the limits of human experience as such: As he describes, representations of climate change can serve to "produce

affects and knowledge about collective human pasts and futures that work at the limits of historical understanding" (221). As this chapter will work to demonstrate, this tension between individual experience at the limits of historical understanding is not only a corollary to Chakrabarty's broader claim about the collapse of the distinction between human and "natural" history, but also a generative site for the emergence of terrestrial realism, as the effects of climate change on the planetary scale become increasingly evident on the experiential scale of the local. In this chapter I will examine how contemporary fiction leverages the scale of the Anthropocene as an opportunity to better situate the human (both on the scale of the individual and species) in relation to the rest of the planet, and then offer readings of two novels, Barbara Kingsolver's *Flight Behaviour* and Ben Lerner's *10:04*, which both deploy realism as a means of dealing with the scale of climate change.

The scalar slippage between the local and the global, or what Timothy Clark usefully describes as the "derangements of scale" (148), has been a major point of incoherence behind much of the popular discourse about climate change and environmentalism. As Clark describes,

> One symptom of a now widespread crisis of scale is a derangement of linguistic and intellectual proportion in the way people often talk about the environment, a breakdown of "decorum" in the strict sense. Thus a sentence about the possible collapse of civilization can end, no less solemnly, with the injunction never to fill the kettle more than necessary when making tea. A poster in many workplaces depicts the whole earth as giant thermostat dial, with the absurd but intelligible caption "You control climate change." A motorist buying a slightly less destructive make of car is now "saving the planet."(150-51)

Importantly, this incoherence is not wholly reducible to the capitalist fantasy of ethical consumption, or neoliberal self-policing of one's own carbon footprint (though this is definitely part of the problem and will be examined more directly below). What Clark is pointing to here is the mechanism through which the fantasy of ethical consumption is leveraged: it's a kind of cynical mistranslation of the local to the global, where individual human behaviours and consumption are clumsily scaled up in a manner that suggests a direct and linear correlation between individual humans and humanity in aggregate, or the excess water in your kettle and humanity's global geological impact, the obvious scalar disjunction of which, as Clark goes on to describe, can serve only to contribute to "a general but unfocused sense of delegitimization and uncertainty" (151), the basic contours of which should be familiar to anyone who has even a cursory familiarity with the sheer volume of climate change misinformation currently circulating on social media websites like Facebook or Twitter: A recent study by communications theorists Myanna Lahsen et al. drives home how this sense of uncertainty serves to generate a significant gap between scientific and popular explanations of extreme weather events. As they argue, "[i]nterpretations that get social and political traction are not necessarily the ones that are most scientifically robust, and scientific uncertainty enhances the space for divergences in interpretations" (215).

This isn't to suggest that there is no correlation between individual human behaviour and the global geological impact of humanity as a whole, but rather to point to the inherent difficulty of mapping that correlation. While individual actions do obviously bear some kind of relationship to the climate, to describe each of those actions as a discrete form of "control" over climate change fundamentally obscures rather than clarifies the relationship between individuals and the planet as a whole: What is needed is a conception of the interplay between the local and

global that can meaningfully account for these translational derangements. As Derek Woods argues, "[u]nderstanding the subject of the Anthropocene means tracing the distribution of agency across scale domains in nonsmooth, nonrepresentational ways" (137). Rather than the kind of linear upscaling that overstates the significance of each individual consumer choice, what is needed is a framework for mapping the relationship between the local and global scale that takes seriously the "nonsmooth" and emergent characteristics of individual behaviours when apprehended from the scale of the global.

It's in the mapping of these moments of scalar disjuncture that this chapter will demonstrate the utility of terrestrial realism. As Roman Bartosch points out, fiction serves a particularly useful role in negotiating these moments of scalar disorientation, where "there is no need to choose orientation over disorientation, or vice versa... both mechanisms are relevant and can be described with regard to the cultural-ecological potential of fiction" (15). Similarly, Claire Colebrook argues that the human and geological timescales can be negotiated by reading fiction through what she terms "inhuman time," wherein "we might imagine human texts, not as expressions of a single, intending expressive individual whose thoughts can be conveyed through time, but as having emerged from events that have a complexity beyond individual persons" ("Archive").

Importantly, though, the contours of these fatal repercussions will be registered differently in different cultural contexts: As Kyle Powys Whyte observes,

> [i]t would have been an act of imagining dystopia for our ancestors to consider the erasures we live through today…Yet we do not give up by dwelling in a nostalgic past

> even though we live in our ancestors' dystopia. My friend Deb McGregor[13] (Ojibwe, Whitefish River First Nation) always points out to me that we are really living in just the tiniest sliver of Anishinaabe history. The vast majority of our history precedes the campaigns that have established states such as the United States and Canada. Our conservation and restoration efforts are motivated by how we put dystopia in perspective as just a brief, yet highly disruptive, historical moment for us— at least so far ("Dystopia Now" 208).

As Whyte's evocation of the dystopian might suggest, the problematics of scale seem to pose another instance in which there is a kind of natural affinity between the Anthropocene and science fiction, an affinity that has been more explicitly theorized by Ursula K. Heise, who has convincingly argued, for instance, that "telling stories of entire species, on a planetary scale of space and on a geological scale of time, has been part of what has distinguished science fiction as a genre over the course of its history" (282). As the previous chapter worked to demonstrate, though, the diffractive methodology under which this project operates presupposes that the inexhaustibility of the Anthropocene would foreclose on positioning any single genre as the de facto "correct" one for addressing any aspect of the Anthropocene: With that in mind, the relevant question to this chapter is less about which literary modes or genres are potentially best suited to the scalar problematics of the Anthropocene, and more focused on examining what an engagement with those scalar problematics has produced in modal tendencies that have historically resisted the impulse to meaningfully represent scales beyond the human.

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[13] Notably, McGregor's own work maps the recent paradigmatic shift in Canadian geographic research and resource management toward traditional indigenous knowledges that envision "relationships not only to what we see around us, but also to what came before (our ancestors), to what will come after (those yet to be born), and to the spirit world"(171).

What this means, ultimately, is that the question of how to narrativize the Anthropocene remains generatively open-ended: Ben Richardson has argued for the importance of what he terms “anthropocene micro-narratives,” which, as he describes, thread desperate global perspectives into "a mosaic capable of representing the distributed, transnational experience of modern subjectivity and its interconnected ecology.” Similarly, Rob Nixon points to the need for fiction that captures the vast timescales over which the violence of climate change is gradually inflicted and registered: “To confront slow violence requires…that we plot and give figurative shape to formless threats whose fatal repercussions are dispersed across time and space.”(*Slow Violence* 10). For both Richardson and Nixon, the narrativization of climate change pushes beyond the individual human and toward something that can be registered on the scale of the planetary.

As it turns out, the increasing permeability of the distinction between human and geologic histories has served as a particularly fruitful site for contemporary fiction across a wide range of genres: As Kate Marshall argues, a “growing body of literary fiction published in this decade understands itself within epochal, geologic time and includes that form of time within its larger formal operations” (524). She goes on to describe how the increased attention to humanity’s aggregate impact on the planet has resulted not only in new genres of fiction (such as the climate fiction or “cli-fi” characterized in the previous chapter as a sort of subgenre of science fiction) but in the emergence of a unique mode of contemporary fiction that is increasingly preoccupied with situating the human relative to the planet as a whole. The distinction here is an important one: to return briefly to the schematic of genre and mode described in chapter two, this chapter is less invested in concretely identifying something like the “genre of scale,” but rather in highlighting how an increasingly cognizance of geological time

and space is contributing to a process of generic decay or transmutation that is observable across generic forms. This generic decay is neatly characterized in Marshall's suggestion that "the self-described contemporaneity" of contemporary fiction that engages with the problematics of scale is not a function of their adherence to any specific genre, but rather "lies in their status as new novels of a newly self-aware geological epoch" (524). In the terms of the present writing, the concretized parameters of genre have begun to give way to a new modal tendency: an open-ended disposition that seeks to make sense of human life on the scale of the geological that I've termed terrestrial realism.

The shift in focus from specific genre and toward mode has useful methodological consequences for criticism, as generically diverse pairing of novels such as James Bradley's *Clade* and Rachel Kushner's *The Flamethrowers* can be unified through a sort of shared modal commitment to this scalar problem, as they both explore the Anthropocene's problematics of scale through individuals seeking to locate themselves against both planetary magnitude and geological time: Kushner's künstlerroman *The Flamethrowers* follows a young artists whose artistic practice focuses on photographing the residue of human action on landscapes (or what she terms "the detritus of an experience" (138)) suggests a similar struggle to make sense of individual human agency in relation to the planet as a whole, or the aspects of landscape "not meant for the scale of the human" (266). Similarly, Bradley's sci-fi epic *Clade* abstracts this tension even further through a kind of recursive narrative structure comprised of discrete episodes in which individuals (a climatologist named Adam, or nearly a century later his grandson, an astronomer named Noah) grapple with nearly identical problems of their own minor participation in humanity's millennia-long project of situating itself alongside or against the rest of the natural world through different modes of knowledge production. Here too, the individual

struggles of characters are explicitly framed on geologic timescales, as members of different generations wonder "if they are not simply the latest stage in a process that goes back millennia" (101). For both Kushner and Bradley, the discursive boundaries of anthropocentric liberal humanism are being pushed in a manner that does not, as Ghosh might expect, exceed the possibilities of the novel as such: instead, the modal realism of each novel becomes an essential feature of its exploration of liberal humanism's limits, as each of these characters grapple to negotiate their own situation within planetary scales of space and time in terms that exceed the discursive limitations of liberal humanism toward what Jameson would term the "global waves of generalized sensations" (*Antinomies* 28) that characterize the not-yet discursively codified project of becoming terrestrial.

If mapping the scalar derangements between the individual and the planetary is best understood as the primary project of representing the Anthropocene, then allegory has emerged as the primary tool through which that project can be achieved. As Elizabeth DeLoughrey describes, "It is precisely at this disjuncture between our awareness of the planet as a totality and our experience of embedded place that allegory plays a vital role. When faced with the rupture between the space of the planet and local space, allegory appears as a mode that best engages their antinomies" (11). Ling Ma's recent *Severance*, for example, follows the rise and aftermath of the fictional Shen Fever pandemic, a fungal infection that turns humans into zombies and ultimately results in the collapse of civilization. Interestingly, Ma's characters remain uncannily self-aware of the allegorical function of the zombie narrative around which much of the text is structured. Early in the novel, Bob, the "self-appointed leader" (4) of a group of survivors fleeing New York, explicitly describes their current predicament in terms of its allegorical function, "let's think about the zombie narrative. It's not about a specific villain. One zombie can be easily

killed, but a hundred zombies is another issue…This narrative, then, is not about any individual entity, per se, but about an abstract force:…You can't see it. You can't forecast it. It strikes at any time, whenever, wherever, like a natural disaster, a hurricane, an earthquake" (29). Despite this self-aware nod, *Severance*'s zombie narrative does effectively serve as an allegory for the "abstract force" of global capitalism and the slow degradation it inflects on the planet: As Aanchal Saraf describes, many of the novel's characters' "initial response to the news of the apocalypse is to continue business as usual, a response not unlike our own in the face of impending global climate change and other large scale and seemingly unstoppable disasters that capitalism itself has helped begat."(19).

Of course, viewed through the lens of the COVID-19 pandemic, *Severance*'s zombie sci-fi is simultaneously an eerily prescient work of pandemic fiction, and has undergone a second life of its own through its inclusion in a growing array of "quarantine reading" lists two years after its initial publication. *Severance*'s dramatization of faltering globalized capitalism, racialized anxiety over restricted travel, and the premature knee-capping of conventional modes of activism are now simultaneously allegorical symbols of a not-quite-visible late capitalist malaise and uncannily literal depictions of present moment. Even outside of the context of the global pandemic, the most affecting register of Ma's novel is not allegorical but literal: Writing in *The Baffler*, Jess Bergman inscribes *Severance* within a growing "literature of relentless detachment" that she terms "denuded realism," a kind of inverse of James Wood's "hysterical realism" that, as Bergman argues, is characterized by its "listless narration [that] renders pain an abstraction… [and in doing so,] sidesteps the challenge of depicting the effects of alienating forces on people who do not already live in artificial isolation—who exist at the nexus of various social, familial, and professional relationships." Thus, while allegory's basic structure as a literary device would

seem to render it at odds with modal realism, which, as described in the previous chapter, is at its core a literary tendency premised on *feeling real*, or capturing some aspect or texture of the lived experience of the moment in which it is situated, as Bergman suggests, Ma's *Severance* achieves this realist impulse toward a totality through the this tense but functional co-operation of the allegorical and literal registers.

In a basic sense, then, what allegory offers is a literary tool through which some as yet unrepresentable dimension of the present can find at least partial symbolic representation. Importantly, As Jameson argues in his recent *Allegory and Ideology,* the resurgence of allegorical interpretation of fictional representation emerges specifically in historical contexts where such unrepresentability becomes impossible to ignore. As he describes, "allegory raises its head as a solution when beneath this or that seemingly stable or unified reality the tectonic plates of deeper contradictory levels of the Real shift and grate ominously against one another and demand a representation, or at least an acknowledgement, they are unable to find in the *Schien* or illusory surfaces of existential or social life" (34). Notably, Jameson's own metaphor of allegory emerging through the tectonic shifting of a "seemingly stable" reality rhymes nicely with Lukacs' description of realism as a kind of perpetual destabilization of normative discursive modes in an endless and irresolvable pursuit of totality, as described in chapter two: Like Lukacs' notion of realism, Jameson's conception of allegory positions it in response to a kind of representational failure. Also like Lukacs' realism, Jameson's notion of allegory does not aim to resolve that failure, so much as recontextualize it: As Jameson goes on to describe, "Allegory does not reunify those incommensurable forces, but it sets them in relationship with one another in a way which…can lead alternately to ideological comfort or the restless anxieties of a more expansive knowledge" (34). Both allegory and realism, then, might best be understood in the context of this

chapter to emerge as strategies for responding to the "derangements of scale" that Clark describes as a central feature of literature in the Anthropocene.

Importantly, this is not to suggest that Lukacs' realism is actually somehow synonymous with Jameson's conception of allegory, or that realist fiction is inherently allegorical or vice versa. But, as the rest of this chapter will work to demonstrate, the scalar discontinuities that realist fiction reaches out toward can often be described in terms of their allegorical resonances. Though, as Jameson reminds us in the final clause of the quote above, it's not simply the case the allegory resolves those scalar discontinuities: Instead, allegory is deployed in order to fill in the gaps that emerge as part of the process of scalar translation from the local to the global. How those gaps are filled becomes a question of the work's ideological interpretation, which can either affirm the dominant ideological mode (i.e. provide "ideological comfort") or challenge it (i.e., engender the "restless anxieties of a more expansive knowledge"). Thus, just as Katherine Yusoff[14] positions the liberal humanist conception of man as the "ideological distraction and legitimating centre to the haphazard reorganization of the geochemical fabric of Earth" ("Geologic Realism" 21), so too might liberal humanism serve as an "ideological distraction" in the project of better articulating the human on both the individual and planetary scale: In the context of the present writing, the binary that Jameson points to between "ideological comfort or the restless anxieties of a more expansive knowledge" (34) broadly corresponds to whether a given fictional work's allegorical dimension reaffirms or resists the

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[14] While I share Yusoff's assertion of the Anthropocene as a kind of epistemic horizon forcing a more critical engagement with the liberal humanist conception of the human, my own conception terrestrial realism should be distinguished from her terminologically similar "geologic realism," which ends up functioning as a sort of ontic claim about the irrevocable reality of the geological scale that leans on the theoretical insights of the philosophical discipline of speculative realism, without really digging into the connotations of the term "realism" in the context of literary representation. Notably, almost all of the works that she examines in the essay itself (including J.K. Jesmin's *The Fifth Season*, J.G. Ballard's "Terminal Beach," *The Planet of the Apes*) are science fiction.

ideological tenets of liberal humanism. As the remainder of this chapter will explore through a pair of extended close-readings, the ideological valence of a given text can be seen to directly correspond to how it deploys allegory as a means of negotiating the scalar gap between the local and the global.

Flight Behaviour

On its face, *Flight Behaviour* is a novel that can be neatly categorized as climate fiction: Like Jonathan Franzen's *Freedom* or Brian Kemberling's *Snapper, Flight Behaviour* is a novel that is built in part around a realist representation of some seemingly discrete phenomenon that demonstrates how the planet is being impacted by the climate change. But where *Freedom* and *Snapper* gain purchase on the problematics of climate change through protagonists that are themselves already directly involved in some kind of explicitly scientific discourse and its climatological dimension (through birdwatching environmentalist Walter Berglund and ornithological research assistant Nathan Lochmeuller, respectively), *Flight Behaviour*'s protagonist stumbles upon her own aspect of the climate discourse more or less accidentally: the novel opens with Dellarobia Turnbow, a 28-year old mother of two, trekking through the undeveloped mountainside at the back of her husband's family's property to meet a man and begin an affair that she knows will lead to the end of her unfulfilling marriage. It's on this trek that she first encounters a roost of monarch butterflies, who, it turns out, have been forced from their traditional winter migration patterns as the result of the changing global climate. Importantly, when Dellarobia first encounters the monarchs, she sees them not as monarchs at all, but rather as "trees turned to fire, a burning bush," (14) which she in turn interprets as a kind of sign from god directed specifically at her: "The burning trees were put here to save her. It was the strangest conviction she'd ever known, and still she felt sure of it" (16).

Dellarobia's conviction that this "burning bush" will serve as a kind of turning point in her own life turns out to be correct, though not quite in the way that she anticipates.

In this sense, *Flight Behaviour* dramatizes the uncanny intervention of the terrestrial into human life at both the global and local scale simultaneously. Dellarobia is not a climate scientist or an environmentalist, but climate change is making itself a felt presence in her life nonetheless: What she first encounters as a sign from god will eventually become an opportunity for tourism revenue for her family, a site of pilgrimage for a wide range of environmental activists, and an object of study for Ovid Byron, an entomologist who travels to the Turnbow property to study the monarch's sudden appearance. Importantly, though, until the end of the novel, the monarch roost is never fully subsumed into any of these positions, but rather incompletely occupies all of them simultaneously. In this way, the monarchs are never fully reducible to a single narrative, but instead remain a kind of open-ended signifier, the interpretation of which is not fully exhausted by its signification to a particular discourse, scientific or otherwise.

The polyvalent significance of the monarchs is echoed in Kingsolver's resistance to characterize climate denialism as ignorance or cowardice in the face of overwhelming scientific consensus, but instead as a sort of cultural issue: When Ovid tells Dellarobia that individual responses to climate change come down to a choice between "[facing] up to a difficult truth, or [running] away from it" (322), Dellarobia argues that "[t]hese positions get assigned to people… If you've been called a bad girl all your life, you figure you're already paying the price, you should go on and use the tickets. If I'm the redneck in the pickup, fine, let me just go burn up some gas" (323). The choice, for Dellarobia, is not so much one of pro- or anti-science, but one of acceptance of one's social positionality: Her reluctance to discuss climate change with her husband or mother-in-law is less a function of her own resistance to "face up to a difficult truth"

than it is a desire to avoid further escalating the already tense relations of her home life. In this way, Kingsolver offers some important nuance to the problematics of climate denialism: Rather than positing denial as an individuated choice that hinges wholly on whether one believes the scientific consensus, Kingsolver highlights the inextricably social dimensions of scientific or academic knowledge itself. While Ovid tries to claim that in matters of public discourse "academics are the referees [who can] talk to every side" (323), Dellarobia counters by pointing out that what Ovid is trying to characterize as a kind of officiation is in practice a kind of retreat: "You're always telling me that you're not even supposed to care, you just measure and count" (323). Here, Dellarobia confronts Ovid with a different kind of "difficult truth": Despite his attempts to position the work of science as a politically neutral set of measurement practices, his own work is nonetheless inscribed within the domain of the political. Even Dellarobia, who holds Ovid and his work in high esteem throughout the novel, picks up on his failure to grasp the inherently political dimension of scientific knowledge, noting to herself that "he knew more about butterflies than people" (323).

Through the dynamic between Dellarobia and Ovid, Kingsolver demonstrates the utility of literary representations of climate change that resist the impulse to fully inscribe the changing global climate within the realm of climate science: By reframing climate denialism not so much as an issue of faith in climate science but rather as one feature of a tense socio-political assemblage, Dellarobia dramatizes the limits of climate science as a mechanism for producing social change. Importantly, this bears some strong resemblance to recent work on the drivers of climate denialism: As Gerrard et al. observe in their recent book *Climate Change Scepticism*, "the risk of ostracism…is far greater and more salient than any probability, immediate climatic or economic risk to the individual— especially if stigmatizing, polarizing language continues to

be the norm in climate activism and sceptical counter-activism" (211). This is not to suggest that climate science does not play a significant role in the public discourse on climate change, but rather that climate change is not wholly reducible to its description by the field of climate science, and that one's stake in the climate change discourse is informed not only by one's trust in the projections of climate scientists, but rather an emergent feature of a whole network of socio-political factors.

Flight Behaviour's most effective intervention into the climate change discourse is in Kingsolver's interrogation of the limits of "ethical consumption" as a mode of resisting climate change. This intervention demonstrates the utility of realism as a means of representing the vast scalar dynamics of environmental phenomena on a literal level: As Adam Trexler observes, "*Flight Behavior*'s realism complicates the oppositional politics of other climate change novels, showing the many parties to climate change in a small town, as well as the influence of national news media, science, activism, and party politics on local situations" (228). The literal scale emerges in the narrative through the polyvocality of the "many parties," as the monarch swarm is presented as a multidimensional phenomena whose global impacts are represented in a very literal sense. As Mehnert describes, "*Flight Behavior* succeeds in illustrating these far-reaching consequences, shedding light on the multiple layers and large-scale effects of global warming, while at the same time providing insights on the transformation of the local—Dellarobia Turnbow's home—by global forces." (69). In this way, *Flight Behaviour* captures an intersection of evironmentalism and poverty, exemplifying what Trexler describes as "anthropocene economics for the working poor" (228). As Debra Rosenthal argues in her "ecopoverty" reading of *Flight Behaviour*, "The Turnbow family exemplify the lower class that produces a lower-impact carbon footprint and is taught that climate change is a hoax, but

who then suffer more from the extravagances of the upper-class's proclivity to burn fossil fuels" (278). The impact of Dellarobia's poverty on her relationship to environmentalism is demonstrated through her conversation with Leighton Akins, an activist who travels to the Turnbow farm to raise awareness for a "sustainability pledge" initiative, or, as he describes it: "[it's] a list of things you promise to do to lower your carbon footprint…[to] relieve the damage of carbon emissions to the planet" (326). Dellarobia listens as he runs through the various items of the pledge, only to reveal that none of the environmentally conscious lifestyle alterations he's suggesting bear any meaningful resemblance to her own life. She is already unknowingly following several of the pledge's suggestions: She doesn't drink bottled water and hasn't eaten at a restaurant in years. Conversely, though, she outright refuses Leighton's recommendation to "reduce the intake of red meat in [her] diet," claiming that "mac and cheese only gets you so far"(327), before beginning to recognize the extent to which the pledge is encouraging her to practice a mode of ethical consumption that is far outside her actual budget: recommendations to "upgrade to energy-efficient appliances" or "switch some of [her] stocks and mutual funds to socially responsible investments" (328-29) anticipate a degree of financial flexibility far beyond her actual means.

Ironically, Leighton interprets her bafflement with some of his suggestions as a kind of implicit refusal of his project more generally and takes it as an opportunity to admonish her that "there's only one planet! We all have to share" (329). This superficial acknowledgement of a "shared" planet sits in obvious tension to the vastly different worlds of consumption that Leighton and Dellarobia occupy. In this way, Kingsolver dramatizes the naturalization of what Peter Dauvergne terms the "environmentalism of the rich," which, as he describes, "surfaces as a belief in the power of eco-consumerism and small lifestyle changes as forces of progressive

change—walking a recycling bin to the curbside, taking shorter showers, and buying eco-products—even as overall consumption continues to rise" (4). Leighton's sustainability pledge is effectively advocating for an ecologically conscious consumer who is able to maintain a high degree of consumption, augmented only by further consumption of the right kind of "ecologically friendly" products. Conversely, Dellarobia (along with the rest of her family) are relegated to somewhere outside of Leighton's conception of ecological consciousness as a function of her poverty, as she is either excluded from consumption practices entirely, or forced to buy cheap, unsustainably produced consumer goods. Her exchange with Leighton dramatizes the uncanny nature of the interface between these two modes of consumption, as it results not in a direct ideological confrontation or argument but rather a kind of mutual nonrecognition.

Interestingly, though, Dellarobia's consumption of cheap, unsustainable consumer goods actually serves to connect her to a different kind of planetary interconnectivity: While Dellarobia and Cub shop for Christmas gifts for their children at the local dollar store, Dellarobia is struck by the global circulation of cheap consumer goods "[Dellarobia] looked over the bins of tinselly junk and felt despair, trying to find one single thing that wouldn't fall apart before you got it home…there had to be armies of factory workers making this slapdash stuff, underpaid people cranking out things for underpaid people to buy and use up, living their lives mostly to cancel each other out. A worldwide entrapment of bottom feeders" (159). As Rosenthal observes, Dellarobia's reflections in the dollar store "[twin] ecologic and economic injustices by contrasting the circulation of the monarchs to the circulation of cheap crap that threatens to "naturalize" as timeless and ahistorical the bottom-line market profit of disposable plastic trinkets" (280). At the dollarstore, then, the localized scope of the novel gives way to terrestrial realism, and Dellarobia is actually led to see herself as a kind of participant in a planetary

system, though it's not exactly the "shared" world that Leighton Akins described. Instead, she catches a brief glimpse of herself as a nodal point in a network of exploitation on a planetary scale.

Kingsolver offers another unexpected intervention of the global scale when Dellarobia's initial interpretation of the monarchs is complicated by a visit from the family of one of her son's classmates: Josefina and her parents, who recently emigrated from Michoacán, explain that they were forced to move to the United States after a flood wiped out both their town and the surrounding forests that had previously served as the winter home for the monarchs, effectively destroying the town's tourism industry. As Josefina describes, "Everything was gone…The houses. The school. The peoples…The mountain. And the *monarcas* also" (102). Dellarobia is taken aback by the revelation of the global impact of the monarchs, which she had previously understood only in terms of their symbolic relationship to herself: "Dellarobia leaned forward, hands pressed between her knees, strangely dreading what might come next. Miracle or not this thing on the mountain was a gift. To herself in particular, she'd dared to imagine. Not once had she considered it might have been stolen from someone else" (101). In this way, Josifina's family forces another emergence of the terrestrial: The monarchs did not appear from nowhere to serve as a symbol in Dellarobia's life but are rather a precarious and fleeting component of a continent-spanning assemblage, whose movements have become increasingly erratic as a result of the changing global climate.

Josefina's family dramatizes another important facet of the climate change discourse that is not wholly reducible to the field of climate science. Their emigration from Mexico as the result of massive flooding effectively positions them as climate refugees, and Kingsolver makes clear in the author's note appended to the end of the text that the flooding that Josefina describes is

based on a specific event: “In February 2010, an unprecedented rainfall brought down mudslides and catastrophic flooding on the Mexican mountain town of Angangueo. Thirty people were killed and thousands lost their homes and livelihoods” (435). A 2012 geological study of the event (Alcantara-Ayala et al.) explicitly connected the regional increase in rainfall to Anthropogenic climate change, and concluded by noting that “in view of the high vulnerability levels of the population and the lack of adequate strategies for disaster prevention at the national level, in addition to climate change, landslide disasters are likely to increase in the coming years” (268). In this way, Kingsolver offers a useful counterpoint to the popular notion the climate refugee crisis is a looming future threat, the effects of which will be felt in the coming decades: While it is no doubt the case that the climate refugee crisis will be exacerbated in the coming decades, it is most usefully understood as a slow moving event that is already very much underway.

Similarly, the clear cutting of the trees on the Turnbow's mountain offers a short-term path toward partial debt relief, balanced against the potential damage that the loss of the trees could cause at some point in the future: As Dellarobia cautions, “It just seems short-sighted…If we cut the mountain, then the trees are gone, but the debt isn’t. Does it make sense to turn everything upside down just to make one payment? Like there won’t be another one next month, and the month after that?…And meanwhile our house might get buried in mud, that’s the deal?” (171-72). The calculus here is a rough analogical mapping of environmental economics examined by Jason Moore: the short term economic gains of the clear-cutting need to be balanced against the more abstract notion of long term environmental stability. The analogical weight of the situation is compounded by the fact that, while the Turnbows choice to clear cut is not compelled by force, their decision is driven not so much by careful scrutiny of all available

options but rather negotiated through a series of on-the-fly arguments, where the broader tension between the economic and ecological often seems less important than the narrowly domestic context in which the argument is taking place: Cub's regressive deference to his father's opinion (who advises that he "take the money and run"(173)), the strain of the argument itself on Dellarobia and Cub's marriage, or the potential that the clear cutting money might help them better provide for their children. As Cub argues, "You tell me. If you want [the kids] to have a computer and stuff, we need the logging money. Or…we can keep our trees. And be hicks" (174). Importantly, though, the decision to cut or not also faces the external pressure of the literal environmental changes that they are experiencing: the sudden migration of monarchs and the unseasonably rainy fall are both directly positioned as a result of rising global temperatures, again forcing a recognition of the literal and direct influence of global forces on the local scale.

Given the extent to which the narrative of *Flight Behaviour* is repeatedly diffracted through and against the literal intervention of the global scale, the allegorical dimension of the text actually ends up feeling kind of underwhelmingly localized. While Kingsolver makes space for the literal significance of the monarch migration on both the local and global scale, the monarchs also play a significant role as an allegory for the domestic drama that is really the crux of the novel: Just as the changing environmental conditions trigger the monarchs to find a new winter home, Dellarobia's own changing environment creates a disjuncture that pushes her to end her stable but unfulfilling marriage to Cub.

This foregrounding of the monarchs' allegorical dimension serves to undercut (or at least severely delimit) the resonance of the novel's conclusion, in which Dellarobia, after explaining to her son that they're going to be moving, without his father, to nearby Cleary, where she's been

enrolled in a community college program, she turns to see the monarchs on the move once again, where they "would gather on other fields and risk other odds, probably no better or worse than hers" (433). There's an uneasy conflation here not so much between the local and global but between the human individual and nonhuman aggregate: the migration of the monarchs, which the novel has thus far carefully posited as a literally existential threat to the species as a whole, is here unevenly balanced against the more personal stakes of a coming-of-age narrative, where Dellarobia is taking a much different kind of risk by leaving her marriage and comparatively stable home life in order to pursue a more fulfilling career. This is not to argue that the monarchs are fully resolved into a kind of secondary allegorical position, but as Axel Goodbody suggests, the ecological phenomenon at the centre of *Flight Behaviour*'s plot "turns out to owe less to the cultural conventions of the sublime, the apocalyptic, or even the pastoral…than to the *Bildugsroman*" (11). Viewed from this perspective, the novel's conclusion figures the monarchs less as a literal environmental phenomenon but rather as an allegorical figure of risk of a more generalized exposure to risk and instability. In this way, the allegory of the novel's final scene doesn't offer the kind of challenge to the anthropocentric humanism that DeLoughry posits as a fundamental utility of allegory in the literature of the Anthropocene, but instead something more similar to the "ideological comfort" (34) that Jameson posits as the antinomy of allegory's potentiality as a means of reorienting literature toward some as-yet unnamable totality. The novel's final scene, in which Dellarobia observes the monarchs "[flying] out to a new earth" (433), is not quite a reorientation toward the terrestrial so much as an allegorical reflection of the novel's residual liberal humanist tendency: a story of personal empowerment in the face of risk.

Crucially, this is not to suggest that the liberal humanism of *Flight Behaviour*'s conclusion somehow nullifies the impact of the insights into eco-poverty and the culture of climate skepticism that the novel's literal dimension offers. What this does demonstrate, though, is that while allegory can offer a means toward better situating the local on a global scale, it can just as easily be deployed to reductively reframing the global back down into the familiar terms of the local. This tendency can be generatively counterposed to Ben Lerner's *10:04*, which deploys allegory not so much as a means of compressing climate change and its effects down onto the local scale, but rather through an engagement with its own autofictional form to examine the conditions under which the individuated subject position on which autofiction is premised is able to emerge.

10:04

As described in the previous chapter, Amitav Ghosh's *The Great Derangement* lays out an argument for the basic incompatibility of realist fiction (through what he characterizes as "serious literary fiction") and the representation of climate change. As part of his justification for this claim, he offers a short personal anecdote about his own experience with "the first tornado to hit Delhi—and indeed the entire region—in recorded meteorological history" (14), arguing that, were he to encounter some version of his own account in a work of "serious literary fiction," he'd find it too improbable to believe:

> What would I make of such a scene were I to come across it in a novel written by someone else? I suspect that my response would be one of incredulity; I would be inclined to think that the scene was a contrivance of last resort. Surely only a writer whose imaginative resources were utterly depleted would fall back on a situation of such extreme improbability (16).

As the essay goes on, though, Ghosh is never quite able to square this sense of improbability with the fact that, as improbable as it may have been, the storm of course did actually happen, and he was able to describe it happening without falling into the tropes of science fiction or melodrama, or stretching the credulity of his readers: In this way, he inadvertently identifies exactly the catastrophically quotidian register in which literary realism can engage with climate change in the present tense. In fact, he goes on to describe how the cyclone that devastates the Sunderbans in the climactic scene of his novel *The Hungry Tide* ended up bearing an uncanny resemblance to the impact of a tsunami that hit the Andaman and Nicobar Islands just months after the novel's publication in 2004. As he observes, "the images that had been implanted in my mind by the writing of *The Hungry Tide* merged with live television footage of the tsunami in a way that was almost overwhelming" (34). Interestingly, Ghosh goes on to point out that, on the Nicobars, the brunt of the damage was borne by the middle-class settlers whose expectation of the "regularity of bourgeois life" (35) lead them to underestimate the potential dangers of building homes on the island's vulnerable shoreline. What he doesn't go on to consider, though, is the extent to which the tsunami itself would challenge and perhaps even reshape this expectation of regularity.

What Ghosh is identifying here, in the unsettling convergence of what was once the unrealistic fodder for sci-fi catastrophe and the bleak realism of present-day life under climate change, is not a limit case for the representative potential of literary realism, but rather a generative point of tension through which realism is actively rearticulating itself. While Ghosh argues that "serious literary fiction" can only ever render the environment as a flat and static background for an anthropocentrically scaled human drama, he's unable to meaningfully account for the proliferation of extreme environmental events that have been directly processed through

realist novels: the gritty realism of Hurricane Katrina and its aftermath described Jesmyn Ward's *Salvage The Bones*, or, as this section will examine, Ben Lerner's *10:04*, a work of realist auto-fiction bookended by Hurricanes Irene and Sandy. As with the monarch migrations in Kingsolver's *Flight Behaviour*, Ben Lerner's *10:04* demonstrates realism's potential as a mode of addressing the kind of extreme environmental events that are becoming increasingly common under climate change, and in particular how those events can be mobilized to examine the increasingly permeable boundary between the local and global scale.

The gap between the individual and global scale is a recurrent theme in Lerner's work, and how he attempts to bridge that gap offers some instructive insights into realism's relationship to the global scale: his first novel, *Leaving the Atocha Station*, is a similarly autofictional account of the 2004 Atocha station train bombings in Madrid, where Lerner (lightly fictionalized in the novel as Adam Gordon) was living after receiving a "prestigious fellowship" (36). In the novel, his experience of the aftermath of the bombings is awkwardly juxtaposed against a much smaller and more immediate relationship drama that had thus far been the primary focus of the novel:

> I sat on a bench and watched the wind in the old-world trees and said to myself that I would not go to Teresa's apartment or the gallery. I swore that I would wait for her to come to me and if she never came, so be it. But then I said to myself that History was being made and that I needed to be with Spaniards to experience it…I knew I was only elaborating an excuse to see Teresa. I tried to justify my pettiness by meditation on the relation of the personal to the historical but my meditations did not go far. (*Leaving* 132)

Lerner's narrator's recognition of "History…being made," however nominally true that may be, is being self-consciously evoked only as a sort of ad hoc justification to see Teresa and find some kind of closure to the ambiguously romantic relationship that has constituted the bulk of the

novel's narrative weight thus far. In this sense, the sudden intervention of capital-H "History," in the form of a terrorist attack with global reverberations far beyond the relatively constrained local scale of the novel thus far, forces some kind of negotiation of the gap between the local and global. Here, Lerner resolves this gap much in the way Ghosh might anticipate: after some elided "meditations" on the gap itself, Lerner's narrator ends up going to see Teresa anyway. In this way, *Leaving the Atocha Station* bumps up against exactly the kind of formal limitation that Ghosh identifies, acknowledges it as a limitation, and moves on.

In his second novel, though, Lerner confronts this same gap from a slightly different angle: *10:04* follows a fictionalized version of the author living in New York during the summer of 2012, and is framed by his experiences during the twin hurricanes Irene and Sandy. The impending threat posed by these two storms is registered in the text not only through Lerner's stark descriptions of the storms themselves, but also through the quotidian moments between the storms, when daily life is functioning more or less normally: One of the novel's several loosely related narrative threads follows Lerner as he volunteers to work on an after school project with a third-grade student named Roberto. The project, which examines "the scientific confusion regarding the brontosaurus" (11), forces in Lerner a similar negotiation between the individual and geologic timescale. Lerner describes,

> in the nineteenth century a palaeontologist put the skull of a camarasaurus on an apatosaurus skeleton and believed he'd discovered a new species, so that one of the two iconic dinosaurs of my youth turns out not to have existed, a revision that, along with the demotion of Pluto from planet to planetoid, retrospectively struck hard at my childhood worldview, my remembered sense of both galactic space and geological time (11).

Here, Lerner captures what will become a running theme of the novel, in the awkward transition between the localized and quotidian scenes that structure the novel's plot and the much vaster temporal scale of the planetary or geological.

This scalar transition pushes against the conventions of the novel form itself: As Caleb Klaces describes, "Lerner begins to make climate change thinkable by deranging the form of the novel...The book's combination of poetry, prose and images can be understood on the level of the spatial and temporal coordinates of literature" (5). Lerner's lightly fictionalized version of himself here functions less as a conventional novelistic protagonist than as a kind of incidental fulcrum for this oscillation between scales, pulling the reader from the local to the global through his "remembered sense of both galactic space and geological time." As Klaces goes on to argue, this derangement is self-consciously framed as an effort to dissolve the novelistic expectation of a clearly delineated foreground and background: "The formal challenge that *10:04* defines for itself… is how to shape the imaginary world of the novel when the distinction between foreground and background in reality breaks down."(5) In this sense, the realist mode in which Lerner's *10:04* operates is less mimetic than it is compositional (in the Latourian sense described in this project's first chapter), pulling apart the classical realist naturalization of the human scale as the de facto scale of the novel and replacing it with a sort of scalar composite of the human and geologic timescales that the Anthropocene forces into the foreground. It's this turn to a kind of compositional realism leads Mitchum Huehls to describe *10:04* as a "Post-theory theory novel," or, a novel that uses "the well-known tropes of poststructural theory as the tools and building blocks for various forms of unreal realism, for speculative fictions that contribute to the composition rather than the deconstruction of the world" (283). That is to say, *10:04* offers a kind of real-time dramatization of the decay of generic form into mode described in this project's

second chapter. As theorist Sourit Bhattacharya describes: "if form is a commitment to understanding how historical processes and historical crisis take place and how the world can be registered in a work, it is mode that offers the framework to do so, retaining the heterogeneity of perspectives and the element of self-reflexivity in fictional writing" (18).[15]

At the outset of the novel, the threat of an "unusually large cyclonic system with a warm core" (16) approaching New York seems to have a kind of unifying effect over the city as a whole. As Lerner's narrator describes, "[f]rom a million media, most of them handheld, awareness of the storm seeped into the city…the city was becoming one organism, constituting itself in relation to a threat viewable from space, an aerial sea monster with a single centered eye around which tentacular rain bands swirled" (17). The diction here is instructive, as it negotiates the gap between the individual and planetary scales through metaphor: the single organism of the city fending off the chthonically monstrous storm. Interestingly, this allegorical image is paired with a moment that places Lerner's narrator in a global context through the more literal mechanism of the global supply chains that enable his access to commodities: While stocking up on groceries for the impending storm, he pauses for a moment in recognition of the complex global networks through which a can of instant coffee is made available to for him to purchase:

> I held the red plastic container, one of the last three on the shelf, held it like the marvel it that it was: the seeds inside the purple fruits of coffee plants had been harvested on Andean slopes and roasted and ground and soaked and then dehydrated at a factory in Medellín and vacuum sealed and flown to JFK and then driven upstate in bulk to Pearl

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[15] While Bhattacharya's own conception of what he terms "catastrophic realism" is calibrated for examining the realist literature of postcolonial India, his characterization of realism as "capacious and expansive, manufactured by the demands of history and society" (19) is an insight that holds true for the texts examined in this chapter as well.

> River for repackaging and then transported back by truck to the store where I now stood reading the label. (19)

Here, the same sense of the individual situated within a scale beyond their perception is achieved not through allegory, but through a cumbersomely literal transcription of the global supply chain. This network becomes visible only when the normative function of the system itself begins to breakdown. As Lerner goes on to describe, "it was as if the social relations that produced the object in my hand began to glow within it as they were threatened…the majesty and murderous stupidity of that organization of time and space and fuel and labour becoming visible in the commodity itself now that planes were grounded and the highways were starting to close" (19). Importantly, that "murderous stupidity" is not a function of the breakdown of the system but rather a feature of the system itself, the same planetary network of cheap commodities and exploitation that Dellarobia Turnbull glimpses at the dollar store in *Flight Behaviour*. In this sense, climate change is simultaneously positioned as both a threat to the normative functioning of daily life as well as a point of rupture through which the inequalities and "murderous stupidity" of that normative functioning can be apprehended. The extreme weather events, here, occasion an emergence of the terrestrial, pulling the individual out of their normative position as an individuated consumer and forcing a recognition of the planetary networks of exploitation through which that consumption is enabled and sustained.

10:04's engagements with scales beyond the human are presented not only through the looming threat of environmental catastrophe, but seem to permeate even the most calm and quotidian moments of his life. Lerner's narrator describes walking home from a shift at a local co-op:

> I breathed in the night air that was or was not laced with anachronistic blossoms and felt the small thrill I always felt to a lesser of greater degree when I looked at Manhattan's skyline…It was a thrill that only built space produced in me, never the natural world, and only when there was an incommensurability of scale— the human dimension of the windows tiny from such distance combining but not dissolving into the larger architecture of the skyline that was the expression, the material signature, of a collective person who didn't yet exist, a still-uninhabited second person plural to whom all the arts, even in their most intimate registers, were nevertheless addressed (108).

This moment captures what is essentially the focal point of much of the narrative's tension, as the narrator's own introspection balanced against his vague desire for some kind of collectivity is oriented toward this as-yet unoccupied second person. As Hari Kunzru describes,

> For a writer-narrator who aspires to being a Whitmanesque poet of collectivity, there's a melancholy quality to this inability to focus on anyone but himself, and to his neurotic need to govern how he and his work are perceived...In Lerner's diagnosis, this possible "you," the you of realized community, has been assaulted by the fierce ideological individualism of neoliberalism.

What Kunzru is identifying here is one of the central tensions of the text itself, as Lerner's narrator (who is always already a kind of self-conscious stand-in for his own authorial perspective) drifts between the neoliberal atomization of his daily life and moments of anticipatory collectivity, where Lerner's authorial atomization actually gives way to something else: the text's narrator is no longer wholly identifiable as Lerner, but rather as a kind of expression of this collective subject, perceiving and transcribing the world not from the narrow perspective of the atomized neoliberal subject but rather from the scale of the terrestrial.

The anticipatory quality of this "collective person" is built directly into the formally innovative relationship to temporality exhibited by the novel's structure. While bookended by Hurricanes Irene and Sandy, *10:04* is also self-consciously constructed around the narrative of its own composition: the book opens with a fictionalized version of Lerner and his agent having dinner to celebrate having secured "a 'strong six-figure' advance based on a story of [his] that had appeared in *The New Yorker*." While this opening scene positions the novel in what Arne De Boever describes as "the future-oriented temporality of the promise and the project" (154), the next chapter, which actually republishes the *New Yorker* story itself, retells elements of the previous chapter through a slightly different fictionalized lens: Lerner's authorial and narrative "I" transitions to a third-person perspective that is still closely identified with Lerner himself: the unnamed protagonist of the New Yorker story is only ever referred to as "The author" (61), and the narrative itself references issues in the narrator's life that mirror aspects of Lerner's first-person narrator described later in the novel. More interestingly, both the protagonist of the *New Yorker* story and the first person narrator of the rest of *10:04* share an uneasy cognizance of the inherent slippage between the lived experience and the possibly of language to fully capture it: In the final scene of the *New Yorker* story, the author takes a cab home from a dental surgery with his friend Liza, and is unable to convey to her his awareness that, thanks to his post-surgical sedation, he won't remember any of what he is currently experiencing:

> He wanted badly to describe this situation to Liza but couldn't: his tongue was still numb; he count even ask her to remind him of what the drugs would erase…That he would form no memory of what he observed and could not record it in any language lent it a fullness, made it briefly identical to itself, and he was deeply loved to think that this experience of presence depended upon its obliteration (81).

Of course, the irony of these drug-induced revelations is that he, meaning Lerner, *does* record them into language, and publish them, first in the *New Yorker*, and then again in *10:04*. As the author reflects in the story's final sentence (notably switching into the first-person), "I remember it, which means it never happened" (81).

This self-conscious examination of the gap between lived experience and its transcription into prose is mirrored in *10:04*'s conclusion, which features a similar pronominal shift, this time reorienting the text toward the "collective second-person" of the global scale, as Lerner's narrator walks through the aftermath of Hurricane Sandy:

> Sitting at a small table looking through our reflection in the window onto Flatbush Avenue, I will begin to remember our walk in the third person, as if I'd seen it from the Manhattan Bridge, but, at the time of writing, as I lean against the chain-link fence intended to stop jumpers, I am looking back at the totalled city in the second person plural. I know it's hard to understand/ I am with you, and I know how it is." (240).

While *10:04* is self-consciously positioned as a work of autofiction, throughout the text Lerner repeatedly engages with and deconstructs the form itself, through metafictional nods to the slippage between the narrative "I," the authorial "I," the semi-authorial third-person of "the author" in the New Yorker story, and the possibility of this collective "you." In this way, Lerner is able to carve out a relationship to the allegorical that is seemingly unique to autofiction. The allegorical dimension of *10:04* is not fully contained within the frame of the text itself, but rather in the slippage between the narrativized subject position and the actual authorial perspective to whom that subject ostensibly corresponds: the "I" of Lerner's protagonist becomes an allegorical figure for Lerner himself, a symbolic stand-in for a lived experience that oscillates between the narrowly focused self-reflexivity of the scale of the individual and a more open-ended,

anticipatory potential of a collectivized second-person of an as-yet unrealized planetary community.

In this sense, *10:04* is what it might look like for a novelist to take seriously Rob Nixon's imperative to "convert into image and narrative the disasters that are slow moving and long in the making, disasters that are anonymous and star nobody" (3). In *10:04*, Lerner's protagonist is not the "star" of either disaster, but rather a kind of incidental, nearly arbitrary focal point through which the twin storms are tethered to their broader geological and temporal context, self-consciously grappling with the perspectival shifts required to meaningfully represent these "[a]ttritional catastrophes that overspill clear boundaries in time and space" (Nixon 7).

10:04 offers an alternative means of deploying allegory in the negotiation of the scalar gap between the individual and the global: Where *Flight Behaviour*'s allegory resolves comfortably back into the scale of the human, as the migratory monarchs stand in as an allegory for Dellarobia's own migratory leap into an uncertain but hopeful future, Lerner's allegorical dimension points to the inherent instability of the narrative prospects of the individual subject position. The "auto-" of Lerner's autofiction increasingly corresponds less to a single individual human life but instead a broad gesture to a vast terrestrial network on a planetary scale, of which the individual is an active but my no means central participant. The uneasy self-consciousness of Lerner's narrator, in this sense, dramatizes what Jameson calls the "restless anxieties" (Allegory 34) of an allegory that refuses to resolve into the ideological comfort of individuated liberal humanism. Instead, where Lerner's novel leaves us is the open-ended promise of an as-yet-unnamable collectivized perspective in which "I am with you, and I know how it is."

Chapter 4: Settler Terrestriality and Anthropocenic Responsibility: Offill and King

The previous chapter examined two texts in which the threat of climate change was dramatized by specific observable events that were interpretable as effects or consequences of a changing global climate: The twin storms of *10:04* and the displaced monarchs of *Flight Behaviour* were both "events" in a fairly typical sense of the word, and thus figure as a kind of synecdoche through which the changing global climate could become a plot point in their respective novels. One benefit of this narrative strategy, at least for theorists of the environmental humanities, is that it provides an opportunity for the novel to feature people thinking about or talking to each other about climate change, as the novel's characters are more or less forced to respond to both the event and its causes, thus providing a kind of wedge through which the novel effectively becomes a participant in the broader climate change discourse. The monarch storm allows Kingsolver to explore the small town Tennesseans' views on climate science without it feeling like a contrivance, as the monarchs themselves serve as a kind of disruptive force that needs to be addressed and examined from all of its angles. Similarly, without the specific threats posed by Hurricanes Irma and Sandy, Lerner's protagonist's self-conscious reflection on his own vulnerability to the changing global climate wouldn't hit with the same urgent degree of immediacy.

Of course, an important corollary to this claim would be that without such a disruptive event, direct and extended discussion of climate change and its consequences would end up feeling at least a little contrived in the context of a realist novel. Importantly, though, this is not to say that realist fiction without threatening environmental events cannot engage with climate change: In fact, what this chapter will work to demonstrate is that realist fiction's most effective engagements with climate change emerge when the threat of the global changing climate is not in

the foreground of the text at all, but instead a kind of omnipresent threat woven into the texture of the quotidian. Without a specific event around which to organize climate discourse, the changing global climate makes itself felt on individuals' lives in strange and unexpected ways: Idle moments of self-reflection, career choices, and hobbies are all reorganized around a vague cognizance of one's vulnerability to the changing environment, and the pressures that those changes might exert on existing social structures.

With that in mind, this chapter will examine the particular utility of realist fiction in mapping individual responses to the looming threat of climate change through close readings of Jenny Offill's *Weather* and Thomas King's *The Back of the Turtle,* two novels in which anxieties over the changing climate are registered not through singular events but rather through their intersection with the structures of the settler colonial state.

Weather

Like Lerner's *10:04* and Kingsolver's *Flight Behaviour*, Offill's *Weather* offers an oblique perspective on the individual's relationship to climate change, in which it figures less as a scientific phenomenon than as an ominous and half-understood fixture in one's daily life. As Offill describes in an interview with *Publishers Weekly*, the book is an effort to "write atmospherically" (Lefferts). Where Lerner and Kingsolver's novels are both preoccupied with the fleeting moments and discrete events in which the scalar gap between the individual and the planetary can be briefly bridged, *Weather* focuses instead on the quotidian aspects of life under a changing global climate, in which the weight of climate change is registered as a looming individual burden demanding some kind of individual response. In this sense, it's not quite right to describe *Weather* as a book "about" climate change. Instead, I'd posit that Offill's novel is a book in which climate change and its attendant discourses have been metabolized by the

narrative as just one of a whole set of worrying conditions: The book darts nimbly between the 2016 US presidential election, the narrowing of the academic job market, the collapse of small business under the weight of tech industry monopolization, a vague sense of guilt over the legacy of settler colonialism in the United States, and ambient anxieties over the changing global climate, with each discrete issue bleeding into the next. Where Lerner's novel's engagement with climate change is rendered most visible through the text's direct mediations on the scalar gap between humans and the planet (as described in the previous chapter), Offill's protagonist's engagement with climate change is best examined less in the moments in which she confronts the impacts of climate directly but rather the idle moments in which a kind of preoccupation with some vaguely defined "coming chaos" impedes on her participation in the actual immediate drama of her life. Where Lerner's *10:04* is built around two specific climate change-related disasters, *Weather*'s relationship to climate change is a little more abstract: The novel follows Lizzie, a lapsed PhD candidate who works first at a university library and then as an assistant to her former dissertation advisor, Sylvia, who hosts a popular climate change podcast called *Hell and High Water*. Throughout the novel, Lizzie apprehends climate change not so much through any specific or discrete event that demands a direct and immediate response, but rather as a looming and uncertain presence in her own daily life. Thus, while she is mostly able to strategically avoid directly thinking directly about climate change beyond its relatively narrow conscription as the discursive focus of a podcast, its effects manifest in her behaviour in strange and unexpected ways: As she describes,

> There's a period after every disaster in which people wander around trying to figure out if it is truly a disaster. Disaster psychologists use the term 'milling' to describe most

> people's actions when they find themselves in a frightening new situation...That's the name for what we're doing, Sylvia says (118).

For Sylvia, the claim that people are directionlessly "milling" through a crisis has clear moral and ethical stakes. As she describes during one of her lectures:

> What it means to be a good person, a moral person, is calculated differently in times of crisis than in ordinary circumstances...Suppose you go with some friends to the park to have a picnic. This act is, of course, morally neutral, but if you witness a group of children drowning in the lake and you continue to eat and chat, you have become monstrous (21).

The question of responsibility (or more specifically, "how to respond") becomes a central moral question of the text, but while there is no immediate event like *10:04*'s twin hurricanes or *Flight Behaviour*'s roost of monarchs to force Lizzie to respond to this question directly, her "answer" can still be inferred through her behaviour.

Importantly, that the novel is populated by characters that are directionlessly milling about during a climate emergency can be juxtaposed against the novel's epigraph, pulled from the minutes of a 1640 town meeting in Milford, Connecticut, which reads:

> Voted, that the earth is the Lord's
> and the fullness thereof; voted,
> that the earth is given to the Saints;
> voted, that we are the Saints (1).

This epigraph situates the text that follows within the ongoing project of the colonization of the Americas: The "fullness" of the earth belongs to God, and he has granted it to "us" (i.e., the colonists) to do with as "we" see fit. In the case of Milford Connecticut, this meant claiming the

ancestral lands of the indigenous Paugusset people, who had been decimated by the smallpox epidemic before Milford was settled in the late 1630s. As archeologist Lucianne Lavin describes in her history of the region, the English colonists of Connecticut took the belief that the whole of the Earth's bounty had been granted to them by God quite literally: "English colonists unashamedly admitted to stealing from their Indian [sic] neighbours...when local Indians refused to sell corn to the settlement at Saybrook, colonists trespassed into Indian fields and stole it." (320). This self-justifying sense of entitlement can be extended as a kind of parallel to Sylvia's picnic analogy: In both cases, the enjoyment of or entitlement to the earth and its "fullness" can only be seen as an ethically neutral act if it is absolved of its context.

Significantly, though, while this same sense of entitlement carries forward into the present, what has been lost is a coherent sense of a collectivity to whom the phrase “We are the saints" can be definitively applied. So while much of Offill's novel operates in the shadow of its epigraph's nod toward this history of colonial dispossession and environmental entitlement, there is a kind of breakdown in the logic of who exactly is entitled to what, as the unified "We" of the early colonists of Connecticut gives way to a kind of unevenly distributed nationalism: For instance, Lizzie travels with Sylvia throughout her speaking tour, and notes how Sylvia's podcast attracts anxious crowds of people who still see environmental outcomes in explicitly nationalistic terms. As she describes, "One thing that's becoming clear on our travels: people are really sick of being lectured to about the glaciers...'Listen, I've heard all about that,' says this red-faced man. 'But what's going to happen to the American weather?'" (73). Like the Milford colonists before him, this "red-faced man" maintains that his status as an American has afforded him a unique relationship to the environment, that his own climatic outcomes are somehow governed by a

different set of rules than those of the rapidly melting icecaps, a nationalistic fantasy to which neither Lizzie, nor presumably the reader, can so readily accept.

Importantly, though, while the idea of "American weather" is being presented here as a kind of punchline, there is a self-assured bluntness to both the Milford town meeting and the red-faced man's line of questioning that sits in contrast with the resigned and vaguely guilty quietude that characterizes much of the novel. While Lizzie can dismiss the outright nationalism, she is never entirely sure how to mobilize that dismissal into meaningful change. As she reflects, “I keep wondering how we might channel all of this dread into action. One night Ben and I go to a meeting about justice at the Unitarian church down the street. Good people all around, making plans, assisting-- so why do I feel so embarrassed?"(137) Lacking a collective "we" around which to orient herself, or a project around which that potential “we” could even be oriented, Lizzie’s good intentions resolve into a kind of embarrassment. As Lauren Oyler describes *Weather* “endeavours to show how, these days, every aspect of everyone’s life feels threatened, and how every decision seems to presage a duel between individual survival and collective action…when the time comes, choose individual survival but feel very bad about it.”

Instead of collective action, then, what Lizzie falls back on is a kind of individualist survivalism, staying up late and "googling prepper things" (147). Through Lizzie's gradual turn toward the prepper movement, Offill's novel again bumps up against America's colonial history: As Mark O'Connell observes in his *Notes from an Apocalypse*, "preppers were involved in the ongoing maintenance of a shared escapist fantasy about the return to an imagined version of the American frontier...This reactionary fever dream arose not out of any real understanding of the present or the future, but rather out of the historical trauma of America's originary apocalypse: the dehumanization and near-annihilation of indigenous peoples and their cultures"(27). While

Lizzie is able to shrug off the more overt nationalist fantasies espoused by listeners of Sylvia's podcast or her Trump-supporting neighbour, she nonetheless finds herself engaging in a kind of escapist nationalism of her own: Lizzie's turn toward the prepper movement can be understood as a response to her growing awareness of the vast scale of the changing global climate that, without a viable collective organization through which some better future could be achieved, turns toward the survivalist individualism of the past. As sociologist Allison Ford observes, the prepper movement "allows participants to reconcile American individualism with the lived experience of dependence on untrustworthy institutions, that expose them to global, impersonal risks" (1). While Lizzie is never quite able to articulate what the "coming chaos" will look like, the prepper skills that she learns (including how to "Start a Fire with Gum Wrapper and a Battery" and "What to Do If You Run Out of Candles"(148)) seem to suggest a kind of radical and almost archaic form of individualism, in which she will be forced to fend for herself for even the most basic human needs. While it's never entirely clear how this particular dystopic future is meant to come about, Lizzie's sudden investment in survivalist skills is instructive as a dramatization of an emergent trend that, while not wholly reducible to any kind of rational schema, is nonetheless a fairly successful coping mechanism. As Ford goes on to describe, "failure to acknowledge the role of emotions in shaping cultural practices (and their environmental outcomes) is a barrier to our understanding of why people adopt the practices they adopt—not because they are willfully selfish, disinterested, or irrational, but because they are scared, discouraged, uncomfortable, or overwhelmed." (4).

Lizzie's inability to directly address climate change's impact on her life also has serious implications for the novel's structure: Without the clear causal relationship of a conventional novelistic plot, the looming threat of climate change is not so much a driver of the plot but rather

forms part of the half-obscured anxieties around which the novel's fragmented events slowly orbit. As Ismail Muhammad describes, "the book's power builds through the patient, hypnotic percolation of motifs, until the reader feels as over-whelmed by gloom as Lizzie does. Offill is exploring the surprising ways that affect circulates, and how a sense that society is on the cusp of disaster takes hold." (112). In effect, climate change is made manifest in the narrative not as a plot device but through its affective impact, as the disjoined quotidian moments of Lizzie's life obliquely register the increasing weight of global environmental collapse.

Muhammad's invocation of affect here is important, as it positions Offill's work as an instructive counterpoint to environmental affect theorists like Maria Puig de la Bellacasa, whose work traces the "affective engagement" (199) through which humans can negotiate their relationship to the nonhuman. In her work on "soil care," which outlines recent calls in the agricultural discourse to "connect the economic, political and ethical value of soils to matters of human survival" (169), Puig de la Bellacasa advocates for affect as a means of negotiating the relationship between the human and nonhuman without relying on "anthropocentric timescapes"(195). As she describes, to engage with the environment affectively is to become cognizant of a present that is "dense, thickened with a multiplicity of entangled and *involved* timelines rather than compressed and subordinated to the linear achievement of future output" (203, emphasis hers). While Offill's novel shares this sense of thickened and entangled timelines, the tangles are not comprised of the loamy nonhuman actors that de la Bellacasa identifies. Instead, *Weather* is dense with a multiplicity of strange and alienating figures that are all decidedly human: Through her job as Sylvia's assistant, Lizzie confronts a seemingly endless parade of red-faced climate deniers, end-of-days evangelicals, and wonkish environmentalists, each processing the weight of climate change through their own idiosyncratic lens. As Sylvia

describes, her email inbox has begun to feature "lots of questions about the Rapture mixed in with ones about wind turbines and carbon taxes" (26). Reflecting on the different types of email that she receives from listeners of Sylvia's podcast, Lizzie observes,

> I swear the hippie letters are a hundred times more boring than the end-timer ones. They are all about composting toilets and water conservation and electric cars and how to live lightly on the earth while thinking ahead for seven generations. "Environmentalists are so dreary," I tell Sylvia. "I know, I know," she says.

Here, Offill dramatizes the affective impact of what Nicole Seymour[16] describes as the "gloomy paradigm" (3) of contemporary environmentalism, whose narrow discursive register of "guilt, shame, didacticism, [and] prescriptiveness" (4) has an ironic tendency to foreclose on further engagement, leaving its audience feeling both chastised and hopeless.

Importantly, though, if we stay with Seymour's prescription of an environmental discourse that occupies a broader affective spectrum, Offill's novel itself poses an interesting challenge: *Weather* is a funny novel that actively resists the dour didacticism that Seymour identifies as a central failure of more conventional works of environmentalism, but it doesn't leave readers feeling particularly hopeful. Instead, *Weather*'s juxtaposition of humour and environmentalist discourse pushes the novel closer to feeling like a social media feed, a medium in which humour and gloom are deployed in equal measure to comment on the locally quotidian and globally catastrophic. As Lauren Oyler goes on to argue, "though experiments in Twitter

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[16] While it's outside the scope of the present project to examine the broader argumentative thrust Seymour's *Bad Environmentalism*, I'll note that while her project does offer some useful and compelling insights into the efficacy of humour, irony, and other discursive approaches that are not usually associated with the popular environmental discourse, I'm skeptical of her project's broader suggestion that "it is possible to 'do' environmentalism...without knowledge" (5). As this chapter will hopefully demonstrate, humour and irony provide useful supplements to the affective range deployed in response to climate change, but they don't need to be positioned in opposition to "knowledge," scientific or otherwise.

fiction were never executed particularly well on the platform itself, a novel that truly reflected Twitter would be a lot like *Weather*. A pithy yet depressed first-person narrator unspools various narrative threads through stray musings, daily anecdotes, and stuff she's read." For Oyler, this is meant as a kind of condemnation of *Weather* as a betrayal of the novel form as such. As she goes on to describe,

> [i]n replicating the experience of being online, Offill conveys the paranoiac mood of the present, but she ignores the strength of the novel as a mode, which is its ability to reflect a mind that is contained in a body that exists in the world, a mind that may be hyperaware of its time but is not actually trapped in it.

To reframe this criticism within the terms of the present writing, I'd argue that Offill's *Weather* offers an uncomfortable perspective on what Mary Louise Pratt terms the "Anthropocene chronotope." As the second chapter of this project argued, realism's open-ended modal tendency offers a means of mapping what Pratt describes as the "multipolar time-space configuration" (G170) of the Anthropocene, through which one might dramatize the "unknowable trajectory on which we are embarked"(G173). In this sense, *Weather*'s hyperaware paranoia does not reflect an avoidable foreshortening of realism's representative capacity, but rather an effort to use realism to map the experiential foreshortening of individual responsive capacity: Lizzie's implicit refusal to look at climate change directly, or to see only as a kind of prompt for survivalist fantasy, does not eclipse the pull of the terrestrial, but rather reinforces its position as part of the unacknowledgeable centre around which the novel's episodes loosely orbit.

As this reading works to suggest, throughout *Weather*, the signature of the Anthropocene is registered not so much as a singular and discrete event, but is rather felt as a looming and

omnipresent feature of her daily life. As such, the pressures that it exerts on Lizzie's life are never quite as obvious as they were for the respective protagonists of Lerner's *10:04* or Kingsolver's *Flight Behaviour*, in which the hurricanes and monarch swarm demand some kind of direct and conscious response, which can then synecdochially stand in for the larger threat of the changing global climate. For Offill, conversely, there is no "event" through which the impacts of climate change can be rendered. It boils just below the surface, exerting a quiet pressure on Lizzie's behaviours and attitudes but never quite rising to a level that she needs to consciously address.

Of course, in this sense Offill's rendering of the Anthropocene bears a generative formal similarity to the mechanics of settler colonialism, which, as Patrick Wolfe famously described, is not properly understood as an "event" either. As Wolfe argues, "Settler colonies were (are) premised on the elimination of native societies. The split tensing reflects a determinate feature of settler colonization. The colonizers come to stay— invasion is a structure not an event" (*Transformation* 2). For this reason, then, it's not surprising that the structural pressures of settler colonialism are made present in *Weather* through a similarly indirect register, as it poses another set of problems that Lizzie is vaguely aware of but mostly able to avoid: At a conference with Sylvia, for instance, Lizzie notes that there are "lots of people who are not Native Americans talking about Native Americans" (31), and transcribes an instructive anecdote from an audience member:

> *The Shuswap region was considered by the local tribes to be a beautiful and plentiful land. There were salmon and game in the warm months and tubers and roots in the cold ones...But the elders saw that the tribes' world had become too predictable and the challenge had gone out of life. Without challenge, they counselled, life had no meaning.*

> *So after a few decades, their custom was to advise that the entire village be moved to another place. All of them went to a different part of the Shuswap territory and by starting over life regained its meaning. There were new streams to figure out, new game trails to learn. Everyone felt invigorated.*
>
> This person has done something similar. For a long time, she lived in San Francisco, and now she has moved to Portland. (31-32)

On the surface, this exchange operates in a familiar register for the novel: Here, we're presented with another conference, featuring another conference attendee with more of a comment than a question. And while the dry punchline offered here is all Offill is willing to explicitly say about the Shuswap people, the broader resonance of this moment is difficult to avoid: Yes, moving to a new city and changing your routine can be invigorating. As it turns out, a change in routine is exactly what Lizzie is looking for. And so the broader point that this conference attendee is making will ring true to both Lizzie and the reader. But the evocation of the "local tribes" of the Shuswap region in the past tense renders Lizzie's (and, presumably, the reader's) recognition with this insight in an embarrassing light: While this woman is (ostensibly) drawing on an indigenous practice as a model for her own behaviour, she's simultaneously obfuscating the more recent history of the indigenous peoples of the Shuswap— already a colonial mispronunciation of *Secwépemc*— region. Importantly, this obfuscation can be read against a similar lacuna in the historical archive. As anthropologist Andie Diane Palmer observes,

> [f]ew materials can be found outside of the Canadian National and British Columbia Provincial Archives that provide any indication of how Secwepemc people, with whom no treaties were negotiated by the British Crown, the Canadian government, or the Province of

British Columbia, found themselves only recognized by those governments as having some claim to tiny patches of land in their vast territories (27).

So beyond the irony of a colonizer modelling her actions on the practices of a historically nomadic tribe now dispossessed of their land[17], this anecdote simultaneously serves to highlight the absence of any kind of historical accounting of how "the local tribes" of the "shuswap" region came to occupy the receding past tense in which the woman's anecdote positions them. While Lizzie is only going to smirk in the direction of this irony, the novel itself, with its recurrent reference to early American colonists, registers the conspicuous absence of these obscured histories of colonial dispossession.

As suggested above, the obscured colonial histories in turn inform the reader's understanding of Lizzie's escapist "prepper" fantasies as an expression of a fundamentally colonial impulse. Her "list of requirements for our doomstead" (194), for instance, is primarily focused on the control of territories: As she describes, she will need "arable land, a water source, access to a train line, high on a hill. Are we on a hill for floods or defence? Both" (194). In this way, Lizzie's half-serious turn toward the prepper movement can be seen to express the intersection of the twin pressures of climate change and settler colonialism: If the changing global climate serves as the looming threat of some kind of social collapse, then the colonial impulse toward the claiming of new and strategically useful territories serves as a kind of fantastical escape hatch: Lizzie's relationship to the land continues to be informed by a settler-colonial history in which more territory is always available to be claimed.

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[17] Ss Palmer goes on to describe, "[t]he combination of the flood of incoming miners and settlers, dwindling game, disease, and alcohol reduced the numbers of the [Secwepemc] people and their ability to defend the territory they had previously controlled by agreement or force" (41), necessitating a transition to permanent villages, and eventually reservations.

This subtle turn toward the land itself reflects a basic tenet of the settler-colonial state. As Wolfe goes on to argue, "[w]hatever settlers may say— and they generally have a lot to say— the primary motive for [the elimination of indigenous populations] is not race (or religion, ethnicity, grade of civilization, etc.) but access to territory. Territoriality is settler colonialism's specific, irreducible element." ("Elimination" 388).

This focus on the territory itself as the organizing focus of the settler colonial state has been taken up by Glen Coulthard as a means of critiquing the dominant liberal discourse of reconciliation through mutual recognition: Contra the liberal "politics of recognition" theorized by figures like Charles Taylor, Coulthard argues that

> the colonial state and state society...does not require recognition from the previously self-determining communities upon which its territorial, economic, and social infrastructure is constituted. What it needs is land, labor, and resources. Thus, rather than leading to a condition of reciprocity the dialectic either breaks down with the explicit *non*recognition of the equal status of the colonized population, or with the strategic "domestication" of the terms of recognition leaving the foundation of the colonial relationship relatively undisturbed (40).

The centrality of territory to the logic of settler colonialism introduces a new wrinkle to the conception of the terrestrial that I've been developing over the course of this project. As I've described above, the terrestrial names an orientation toward the common ground of planetary life, the uneven pressures of which structure our individual experience of and relationship to the broad set of discursive problems gestured toward by the term "Anthropocene." In the previous chapter, terrestriality could be seen to emerge in both *10:04* and *Flight Behaviour* through both novels' respective protagonists' brief recognition of their own positionality within a global

network of exchange: Both Lerner's autofictional stand-in and Kingsolver's Dellarobia catch a fleeting glimpse of these networks through their own respective positions as consumers within them, at moments in which they are actively participating in those networks. Through her indirect engagements with the logics of the settler-colonial state, Offill introduces another dimension of this terrestrial situation: While Lizzie is also certainly a participant in the same global networks of commodity exchange, *Weather* is not a novel that is particularly interested in any kind of "active" participation at all: As such, Lizzie own anxious preoccupation with societal collapse orients her toward the terrestrial not by way of a singular event, but rather a sort of idle passivity, the contours of which are informed by the structure of settler colonialism. Her daydreams of bartering BIC lighters in exchange for supplies that she can bring home to her strategically situated doomstead don't require any active affirmation of her status as a settler or the legitimacy of the settler colonial state, because they are already affirmed as if by default.

In this way, Offill dramatizes the naturalized logics of the settler colonial state, which, as Aileen Moreton-Robin argues, "are operationalized within discourses to circulate sets of meanings about ownership of the nation, as part of commonsense knowledge, decision making, and socially produced conventions" (xii). As Lizzie's half-serious survivalism demonstrates, even the idle fantasies of settlers are informed by this assumption of possession, which is built into the basic materiality of settler cities themselves. As Moreton-Robin goes on to describe,

> [settler colonial] cities signify with every building and every street that this land is now possessed by others; signs of white possession are embedded everywhere in the landscape. The omnipresence of Indigenous sovereignties exists here too, but it is disavowed through the materiality of these significations, which are perceived as evidence of ownership by those who have taken possession (xiii).

That is to say, Lizzie's vision of a future post-apocalyptic landscape is still fundamentally structured by the assumption of territorial possession that is a central feature of her present settler colonial landscape. Here we can derive a kind of corollary to Patrick Wolfe's paraphrase of Deborah Bird Rose, that "to get in the way of settler colonization, all the native has to do is stay at home" ("Elimination" 388). As Offill demonstrates, to reproduce the basic structure of settler colonization, all the settler has to do is stay at home as well.

So while Offill's *Weather* examines the seeming impossibility of articulating a coherent individual response to the planetary threat of climate change, the novel's recursive and under-acknowledged relationship to the colonial history of its setting suggests the degree to which the structure of settler colonialism constrains the formulation of that response. Lizzie's pre-emptive embarrassment at the notion of community organizing speaks not only to the primacy of the individual, but also the degree to which any kind of substantive collective organization would require a serious engagement with the contested territory upon which that community iteratively emerges: To meaningfully situate herself within a community would mean accounting for the displacements of people that her continued presence is predicated upon.

Still, though, *Weather* is not wholly reducible to a kind of irresolvable settler guilt: Lizzie's half-serious vision of fending for herself in a post-apocalyptic future figures her not only as a settler-colonial subject but as a vulnerably embodied being on a planet. In these moments, Lizzie offers a different kind of response to the planetary threat of climate change, in which she is not the disembodied subject of liberal humanism, but rather a participant in a network of terrestrial relationality, a network that she can never fully apprehend but to which she is still compelled to fleetingly respond. That is to say, while her survivalist fantasy is structured by a relationship to territory that is in turn informed by her status as a settler, that she is having the

fantasy at all suggests an anxiety over the changing global climate against which her status as a settler cannot fully insulate her. In this way, Offill dramatizes the interplay between the twin structures of climate change and settler colonialism: An orientation toward the common ground that I've termed the terrestrial means an orientation toward the structures of settler colonialism that continue to inform the dynamics of power on that ground itself.

The Back of the Turtle

Where *Weather* gestures toward the structural influence of settler colonialism through Lizzie's inability to meaningfully acknowledge the subtle pressures that it continues to exert on her life, we can find a more direct approach to this same basic problematic in Thomas King's *The Back of The Turtle*: The novel is set in the wake of a chemical spill that destroyed an Indigenous community living on a reservation in northern British Columbia and follows two divergent narrative threads. While the bulk of the novel follows the community and its struggle to sustain itself in the wake of the spill, a secondary thread of the novel follows Dorian Asher, the CEO of the chemical company responsible for the spill, as he deals with the fallout. While in one sense Dorian is the closest thing the novel has to an antagonist, King's portrayal of the chemical company CEO follows him through a series of quotidian moments from his life after the spill: The narrative spends a surprising amount of time dryly recounting Dorian's speaking engagements at universities, dinner with colleagues, and a viewing of a second home in Florida, which are all accompanied by a sense of "general malaise" (76), the exact source of which he's never quite able to articulate. While this series of brief, vaguely connected vignettes does not exactly make Dorian a more sympathetic character, they do offer King an opportunity to examine how powerful individual actors process their relationship to large scale environmental devastation. In the context of this chapter, what King's portrayal of Dorian Asher provides is

another dramatization of an individualized response to a changing environment, but with an important twist: where Offill's Lizzie can only be said to be "responsible" for her climatological situation in the broadly distributive sense of her consumption-heavy lifestyle that is largely contingent on the extractive processes that in turn serve as a major driver of climate change, Dorian Asher's sense of responsibility is a little more direct: Not only is Dorian a beneficiary of a culture of resource-heavy consumption (an exorbitant amount of Dorian's narrative is set in the interior of a limousine, idling in downtown Toronto traffic), he's also the CEO of the company that produces the defoliants used in clearing out wildlife before the construction of oil pipelines. While the problematics of environmental degradation are evoked primarily through the aftermath of a chemical spill, it becomes clear over the course of the novel that Dorian's role as CEO is almost entirely one of managing environmental degradation as quietly and efficiently as possible.

In the aftermath of the chemical spill, Dorian does appear to be genuinely impacted by a kind of vague sense of responsibility, as he spends his days attending meetings and shopping for watches, actively looking to distract himself from thinking about the damage that his company's malpractice has caused. Importantly, though, his own sense of guilt is ironically juxtaposed with the much more substantial struggle for survival that his actions have imposed on the Indigenous community. In this way, King is able highlight and deconstruct the unequal distribution of consequences in the Anthropocene: While it may be the case that climate change threatens everyone on the planet, the ironic juxtaposition of Dorian and the Indigenous community he's destroyed demonstrates the vast inequality in how those threats will be made manifest.

King's foregrounding of this uneven distribution offers a useful foothold for challenging the kind of universalizing discourse that an uncritical embrace of the term "Anthropocene" might suggest, or what Eve Tuck and K. Wayne Yang describe as "a set of evasions, or 'settler moves to

innocence', that problematically attempt to reconcile settler guilt and complicity, and rescue settler futurity"(1) by avoiding the actual and lasting material impact of imperialism and colonization. While the basic outline of this argument was touched on in the first chapter of this project as one of an expanding set of non-exhaustive frameworks for understanding the Anthropocene, the particularities of imperialism as a point of intersection between colonialism, racism, and capitalism have rendered it a sharply generative lens through which to examine the intra-population dynamics of the Anthropocene: As Vishwas Satgar describes,

> not all humans are creating the catastrophe of the climate crisis...central to the logic of imperial domination has been the tendency towards ecocide, that is, the destruction of conditions that sustain life such as ecosystems, the commons, as well as the destruction of actual human and non-human life forms (55).

Importantly, then, to not foreground the significant dynamics of which lives and life forms are most directly confronted with this destruction risks positioning the Anthropocene as a kind of universalized wake-up call that no one could have seen coming, or what Kathryn Yusoff describes as the troubling

> newly found consciousness that permeates Anthropocenic scientific and social scientific discourse...that humanity has failed to understand the violent repercussions of colonialism, industrialization, or capitalist modes of production and that these violences were an unforeseen byproduct or excess of these practices and not a central tenet of them (*Billion* 26).

With this in mind, King's novel serves to dramatize an important corollary to the uneven distribution of climate change's impacts, as those who reap more of the benefits but see less of the consequences are (occasionally) forced to explain to themselves why that might be the case:

From the outset of the novel, Dorian works to assuage his sense of responsibility for the chemical spill by accounting for the vastly distributed networks of production and dissemination in which his company is just a single node. As he reflects:

> Of course, there was really no way Domidion could keep track of every virus and bacterium that the corporation shipped around the world. Cultures sold to the Japanese for research might be resold to the Italians, who might trade them to the Saudis for oil, and from there no one knew where they went. Not the corporation's fault that product occasionally fell into the hands of madmen...Certainly not the corporation's responsibility (18).

Here, Dorian is backing himself into a conception of distributed agency that is not far off from the new materialism described by theorists like Jane Bennett, who in her book *Vibrant Matter*, observes, "[i]n a world of distributed agency, a hesitant attitude toward assigning singular blame becomes a presumptive virtue...Outrage will not and should not disappear, but a politics devoted too exclusively to moral condemnation and not enough to a cultivated discernment of the web of agentic capacities can do little good" (38). For Bennett, this notion of "distributive agency" is meant to describe the aggregate impact of what she terms an "agentic assemblage," or a diffuse network of human and nonhuman "actants," none of whom can be said to be fully in control of the outcome of any specific action.

While this new materialist framework has proven to be a generative heuristic for describing climate change, its radical rearticulation of agency runs into some real problems when trying to explain a new materialist conception of responsibility: As Timothy James LeCain argues, for instance, climate change is the "result of the partnerships humans formed with powerful material things whose potentialities often pushed them into directions they neither

envisioned nor intended...to therefore conclude that humans alone were responsible for the course of events that resulted from burning coal [is] nonsensical" (20). The new materialist framework is a response to what LeCain describes as the "unapologetically anthropocentric" (3) tendency of contemporary environmentalist discourse[18]. To shift the focus toward matter as such, then, is a kind of corrective gesture which aims to "see how analyses of political events might change if we gave the force of things more due" (Bennett viii). As the first chapter of this project hopefully made clear, I'm sympathetic to this general aim, and my own critique of the anthropocentric tendency of much of the anthropocene discourse pulls from a similar archive as the new materialists[19]. But what I want to point out, here, is the extent to which the new materialist project of trading out the conventional (anthropocentric) conception of agency for its own conception of agentive networks of human and nonhuman beings risks eroding the means through which any coherent sense of responsibility can be assigned. As Andreas Malm argues, Bennett's conception of agency "inaugurate[s] a conception of human agency as definitionally incapable of ever having anything other than intended consequences, since whatever else happens is the doing of some other agency (or actor or actant)...The notion of 'unintended consequences'— so critical for all issues of ecological crisis— here crumbles away, for it presumes the centrality of one agent who acts with a certain intention and thereby unleashes a chain of events that are her doing, although not one with her initial goal" (94). In other words, to

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[18] LeCain makes these claims in service of a critique of the notion of the "Good Anthropocene," which, as described in this project's first chapter, names the kind of utopian impulse to lean into geo-engineering practices as a possible means of mediating the impacts of climate change. As argued in that chapter, the problem with the "Good Anthropocene" discourse is that it effectively argues that a particular subset of the human population is right to continue intervening into nature however they see fit. While I generally agree with LeCain's assessment of the inherent anthropocentrism of that discourse, it's not entirely clear how absolving humans of their responsibility for the unintended consequences of their past environmental interventions is meant to correct that anthropocentrism.

[19] Bennett, for example, pulls the term "actant" directly from Latour just as I've been borrowing "terrestrial."

position the human as a single nodal point whose explicit intentions are effectively in competition with the (seemingly unknowable) intentions of a diffuse network of nonhuman actants actually obscures the extent to which certain discrete actions of specific humans do in fact have global environmental consequences that are in fact deserving of "moral condemnation," even and especially if their impact was not "intended."

The import of Malm's critique is dramatized fairly cleanly in Dorian's post hoc justification of the chemical spill, as he refuses to acknowledge his own responsibility for what happens to his chemicals as soon as they leave the immediate sphere of his direct control and enter the vast agentive network of global trade. Here, Dorian is able to evade personal accountability through a shrug in the direction of a complex assemblage of human and nonhuman actants, whose own desires and intentions are effectively unknowable to him, and for which he is necessarily not responsible. So while Dorian remains keenly aware of the threatening unintended consequences of his corporation's research, noting that "it was one of the small ironies of biology than an organism designed to increase crop production could also be modified to destroy nations" (22), he is never actually responsible for this destructive potentiality.

Without a clear sense of individualized responsibility for the unintended consequences of his actions, Dorian is able to adopt and publicly advocate for a narrow conception of individual motivation structured entirely around immediate self-interest. During a question-and-answer session at one of his speaking engagements, he's asked

> if agricultural research pursued solely for profit would inevitably lead to environmental disasters. It was a question he was always asked, and he answered it as he always did. "Everything we do, all of us," Dorian told the audience, “is in pursuit of profit." (79).

There's an insidiously clean rationality operating here that papers over Dorian's individual agency, suggesting that his actions, like the action of "all of us," are constrained by the narrow pursuit of profit, further insinuating Dorian as a functionally interchangeable cog within the complex machinations of distributed agency.

Even in the immediate aftermath of the spill, tracing culpability is obfuscated not by an unawareness of the risk but rather by the number of oil companies in the immediate proximity that are involved in identically risky practices. As Dorian's assistant points out, "Syncrude, Imperial, Royal Dutch Shell, Suncor all have holding ponds along the river...There are over sixty companies in the immediate area...so it will be difficult to determine where the problem originated" (114). Here, the apprehension of the diffuse network of human and nonhuman actants does serve to create what Bennett would call a "hesitant attitude toward assigning singular blame," but it's not immediately clear why this should be seen as a "virtue," given that the apprehension of nonhuman agency has not seemed to produce less destructive environmental outcomes. The chemical spill is presumed to be seepage from the tailing ponds, which collect chemical runoff from tar-sand extraction, which has been a running problem for Domidion. As Dorian reflects, this spill would be just the latest in a series of environmental disasters caused by Domidion's involvement in tar-sand extraction: "In 2008, more that 1,600 ducks had been killed when they landed on one of the tailing ponds. In 2010, another 350 ducks died in the same manner. There were the public figures. In actual fact, Dorian knew, the numbers were much higher"(113). In this sense, what Bennet would call Dorian's "cultivated discernment of the web of agentic capacities" is clearly a mechanism for personally distancing himself from his company's involvement in a clear pattern of environmental devastation that he has no interest or stake in rectifying.

To her credit, Bennett does reluctantly admit that her conception of distributed networks of agency might be cynically deployed in exactly the manner that King dramatizes through Dorian and suggests that it might be useful in such situations to "persist with a strategic understatement of material agency in the hopes of enhancing the accountability of specific humans" (38). But it's not quite clear who, exactly, is meant to be doing the strategic understating here, given that the agentive capacity to withhold information has already been ceded to an assemblage that would necessarily include actants like Dorian, who effectively derives the new materialist worldview independently as a means of avoiding personal accountability.

While the idea of "strategically understating" the implications of one's theoretical insights is a less than satisfying conclusion to a project that had explicitly positioned itself as an intervention into the unexamined anthropocentrism of the dominant conception of agency, I'm not unsympathetic to Bennett's position here, nor am I aiming to suggest that the broader new materialist project of wholly displacing anthropocentrism from our conception of agency is inherently futile. Perhaps unsurprisingly, anthropocentrism is easy to critique but difficult to evade and replace, and as Bennett and the new materialists correctly suggest, the anthropocentrism of liberal humanism has obscured the extent to which nonhumans and inanimate matter constrain and influence the actions of humans. But as Malm usefully responds, “[t]he particularities of human agency as a source of— and potential remedy to— ecological destruction should not fall out of sight" (114). While Dorian’s narrative arc usefully dramatizes a cynical reappropriation of the new materialist project, *The Back of The Turtle*’s deployment of traditional Anishinabeg narratives provides a powerful model for responding to environmental disaster that takes seriously the role of the nonhuman without evacuating the unique agentive capacity of the human.

An alternative ethics to Dorian's individualism is presented in the creation myth of the "Woman Who Fell to Earth," which features as a recurring motif throughout the novel. Crisp, a member of the Samaritan Bay community devastated by the chemical spill, describes it as "a story that comes with the land, and the two are forever wedded" (222). As Crisp delivers it, the story begins with "our woman…falling through time and space [until] off in the distance at the edge of reason and sight," (224), she sees the "small blue dot" of the earth, where she is rescued by a cadre of water birds and hoisted onto the back of a turtle. From here, the woman "calls all the creates together and announces a contest…A diving contest in which all are welcome to participate. The first to reach the bottom and bring up a ball of mud wins" (232). During the contest, the woman gives birth to a pair of twins, who take the collected balls of mud and craft them into mountains and valleys, turning the "tiny blue dot" into a landscape suitable for human and nonhuman habitation. For Crisp, the story is a kind of counterpoint to the biblical narrative of the Garden of Eden: "In [the Bible], we starts with a gated estate and are thrown into suburbia, because we preferred knowledge to ignorance. In our story, we begins with an empty acreage, and together, the woman, the animals, and the twins creates a paradise what gets pissed away" (237). The story of the Woman Who Fell to Earth is also featured in King's Massey Lectures, *The Truth About Stories*, in which he again compares it to the Biblical creation story of the Garden of Eden. As he describes, "whether you read the Bible as a sacred text or secular metaphor, the elements in Genesis create a particular universe governed by a series of hierarchies —God, man, animals, plants— that celebrate law, order, and good government, while in our native story, the universe is governed by a series of co-operations— [the woman], the Twins, animals, humans— that celebrate equality and balance." (23-24). This tension between Western and Indigenous epistemic frameworks produces what Ana Maria Fraile-Marcos describes as "a

dialectical space…where Indigenous epistemologies and Euro-Western thinking interfere" (6), but King is careful never to fully resolve this dialectic, instead allowing the two creation narratives to sit in tension with each other.

In *The Back of the Turtle*, Crisp relays the story of the Sky Woman to Gabriel Quinn, an Indigenous scientist, formerly employed by Domidion and responsible for the development of the spilled chemical, who had travelled to Samaritan Bay to commit suicide. Over the course of the novel, though, Quinn's plan to end his own life is repeatedly postponed through his further entanglement with the Samaritan Bay community, eventually leading to him to confess his own role in the chemical spill: This confession is itself an act of storytelling not so much meant to absolve Quinn of his responsibility but rather to come clean about situating himself within the disaster that he helped create. After confessing to Mara, Quinn tells her, "I'm still responsible," to which she responds, "All right…Then do something about it" (501). In this sense, the confession is not an end in and of itself but rather a means of accounting for his own capacity for agency. While he is not the sole actor or "actant" behind the chemical spill, his increasing entanglement with the Samaritan Bay community forces him to acknowledge the role that his actions inadvertently played in the community's devastation. As Susie O'Brien observes, the conception of storytelling exemplified by both Crisp's narrative of the Sky Woman and Quinn's confession is radically different than the self-preservational narrative of diffuse agential networks and PR-friendly deflections of responsibility offered by Dorian. As she describes, "In *The Back of the Turtle*, storytelling helps to create the conditions for living on in the years to come, which start with responsibly inhabiting the devastation of the present. It offers a vision of resilience strikingly different from the dominant conception, held by Dorian, which combines devotion to self-preservation with conviction in the inevitability of capitalist resource exploitation"(50-51).

Where Dorian evokes the nonhuman as a means of deflecting his own responsibility for the consequences of his actions, both Crisp and Quinn's narratives both describe a relationship to the nonhuman that actually heightens the responsibility of the individual human. In Crisp's creation story, the woman who falls to earth is not the sole actor (or "actant") but is rather an active and conscientious participant in the creation of an environment and is therefore responsible for that environment's co-occupants as well as the environment itself. Similarly, Quinn's confession builds on a recognition that science is not a neutral act of knowledge production for its own sake but is always operating within a broader continuum of power relations. As he reflects, "Science was supposed to have been the answer. World hunger. Disease. Energy. Security. Commerce. Biology would save the world. Geology would fuel the future. Physics would make sense of the universe…How had he come to such a fantasy, that there was a benign purity in scientific inquiry?" (446). Here, he acknowledges that his work for the Dominion chemical company, while narrowly focused on a kind of neutral scientific inquiry, is better understood to have this potential for environmental destruction baked into it from the outset, and there is a direct link between his seemingly benign research and the Samaritan Bay chemical spill. As Crisp asks while the two men survey the environmental damage, "It's the rare man what gets to see the results of his genius…what think ye of your handiwork?" (388). In both stories, there is an underlying recognition that one's embeddedness in an environment forces a sense of accountability to that environment.

In conversation with Naomi Klein, Leanne Betasamsake Simpson, whose book *Dancing on Our Turtle's Back* also deals with Anishinaabeg stories, observes that the Sky Woman is a story of responsibility: "we all have that responsibility to get off the log and dive down no matter how hard it is and search around for that dirt. And that to me was profound and transformative,

because we can't wait for somebody else to come up with the idea." In this sense, Sky Woman's story stands in sharp contrast to the evasion of personal responsibility that Dorian practices throughout King's novel, and offers a model for the human's relationship to the rest of the planet that doesn't require the new materialist evacuation of the notion of human intentionality, nor does it fall back into the conventional conception of Western anthropocentrism: Where Bennett's new materialist conception of responsibility, evacuated of the residual anthropocentrism can only tentatively suggest that "[p]erhaps the ethical responsibility of an individual human now resides in one's response to the assemblages in which one finds oneself participating" (37), Simpson's interpretation of the Sky Woman story is much less passive: As she suggests, our responsibility for our human and nonhuman co-inhabitants emerges as a function of our relationship to the terrestrial, a relationship that demands not only recognizing our own situation but actually getting our hands dirty in an effort to produce a better, more sustainable environment. Here again it's useful to recall Jed Esty's description of peripheral realism as "the site of struggle between norms of finite social description and half-articulate dreams of expansive political projection" ("Realism Wars" 317). Like the Dalit literatures examined in this project's second chapter, King and Simpson here deploy traditional narratives as a direct challenge to the dominant ideological structures of colonial oppression. As Daniel Heath Justice describes, Indigenous literatures

> are part of our cultural, political, and familial resurgence and our continuing efforts to maintain our rights and responsibilities in these contested lands. They are good medicine. They remind us about who we are and where we're going, on our own and in relation to those with whom we share this world. They remind us about the relationships that make a good life possible (6).

Similarly, as Susie O'Brien argues, in *The Back of the Turtle*, "stories are not static repositories of ideas or representations of events in the past. They work, rather, to bind history, present and future together, honouring ancestors and offering templates for navigating an uncertain future… storytelling is a material practice that implicates listeners and readers in roles of active responsibility for the stories' meaning" (45).

An example of how stories like the Sky Woman provide a "template" for navigating an uncertain future is provided by *The Back of the Turtle*'s final scene, in which the Anguis, a missing Domidion barge loaded with more toxic chemicals, washes up on the shores of Samaritan Bay, threatening to catalyze a second environmental disaster on the local community. In response to the sudden appearance of the barge, the community, including Quinn, gathers on the beach and attempts to push the barge back out to sea. While Quinn initially laughs off Crisp's suggestion that a handful of people would be capable of moving the barge, he eventually commits to the project after Mara tells him "It's not about moving…It's about community" (498). As Quinn joins the others in pushing on the hull of the ship, King's depiction of the ship drives home the allegorical function of this final scene: "The hull was cold and hollow, and great rivers of rust ran down its sides, as though the beast had been wounded and bled" (498). The mixing of metaphors here, positioning the ship itself as both a living "beast" as well as a landscape carved by "rivers," echoes the turtle's back that becomes the landscape in the story of the Sky Woman. Despite the seeming impossibility of the task, the group does successfully send in the barge back out to sea, in large part thanks to the rising tide: "[t]he seventh wave was enormous, taller and more massive than anything Gabriel had ever seen. It slammed into the hull, set the Anguis afloat on the tide, and sucked the ship into the fog" (500). The symbolism here is a fairly literal dramatization of the relationship between the human and

nonhuman described by the story of the Sky Woman: The Samaritan Bay community actively working in conjunction with their environment (in this case, the rising tide) to avert further environmental destruction.

In this way, the communal victory of the Samaritan Bay community provides attractive alternative to the individualized responses that this chapter has thus far been mapping: Whether it's Lizzie's half-serious survivalism in *Weather* or Dorian Asher's forlorn self-pity, the novels examined over the course of this chapter work to trace the near impossibility of formulating a response to climate change on the scale of the individual that provides any kind of actionable plan for responding to climate change not just as a discursive formation but as an actual set of problems directly impacting people's lives. What the motif of the Sky Woman presented in *The Back of the Turtle* offers, conversely, is a model of environmental engagement that takes seriously the individual's responsibility toward the environment in which they are irrevocably embedded, and the relations that that sense of embeddedness inevitably fosters.

Chapter 5: Terrestrial Tensions and Collective Kinship in Richard Powers' *The Overstory*

In the previous chapter's final section, I outlined how Thomas King's *The Back of the Turtle* dramatizes what might best be understood as two distinctive epistemic frameworks for understanding the individual's relationship to the terrestrial: The first, as exemplified by the chemical company CEO Dorian Asher, I described as a kind of cynical appropriation of the new materialist conception of the agential network, where human responsibility becomes obscured or otherwise subsumed by the distributed agentive capacity of the nonhuman world. In this conception, Dorian is able to avoid any sense of culpability for his role in the chemical spill by chalking it up to a diffuse network of human and nonhuman agents, a move that even new materialism's most vocal advocates can refute only by suggesting that new materialism's ethical implications can be avoided through "strategic understatement" (Bennett 38). The second, as exemplified by the Samaritan Bay residents and the creation story of Sky Woman, shares the new materialist impulse to shift focus away from anthropocentrism and toward a kind of situated collectivity, but rather than dissolving human agency into a vast network of competing "actants," it suggests that our situatedness in an environment actually forces us to take responsibility for our environmental co-inhabitors. In the story of the Sky Woman, the human actually becomes *more* responsible for her relations in the environment that they collaboratively construct together. While both epistemic frameworks describe a world in which individual humans take seriously their embeddedness in an environment, they resolve into vastly different conceptions of how the individual becomes responsible for that environment.

As I hopefully made clear in that chapter, though, my criticism of the new materialist framework's conception of human responsibility is not intended to dismiss out of hand the

insights of theorists like Jane Bennett and Timothy LeCain, or otherwise signal some kind of terminal futility in the broader anti-anthropocentric theoretical turn. As much of this project has worked to demonstrate, a crucial component of meaningfully responding to the challenges posed by the Anthropocene is a recognition of the wide range of ways in which the nonhuman world impacts and constrains the actions of humans on both an individual and aggregate scale. That being said, what I want to highlight is the recurring tendency in anti-anthropocentric theory toward a kind of residual humanism. Rosi Braidotti runs into a similar problem in her influential work *The Posthuman:* The bulk of the book is structured around a careful and precise examination of the ways in which the liberal humanist conception of the human "spells out a systematized standard of recognizability—or Sameness— by which all others can be assessed, regulated and allotted to a designated social location" (26). However, in the book's final pages, when she attempts to offer some direct and prescriptive advice for how her anti-anthropocentric conception of the human might actually be put into practice in modern universities, she ends up self-consciously reverting to a kind of humanism herself:

> We need a university that looks like the society it both reflects and serves, that is to say a globalized, technologically mediated, ethnically and linguistically diverse society that is still in tune with basic principles of social justice, the respect for diversity, the principles of hospitality and conviviality. I am aware but do not mind the residual Humanism of such aspirations, which I take at best as a productive contradiction (183).

Productive or not, this is a serious contradiction, and sits in jarring contrast to the staunch anti-anthropocentric tendency that informs the rest of her work. As Marcus Morgan observes in a review of *The Posthuman*, "whilst [Braidotti's] attention to the paradoxes of posthumanism… is commendable, too often the reader is left with a sense that the theoretical project she is

proposing is condemned to the futile efforts of a shadow attempting to flee its object" (204). That posthumanism lives in the shadow of humanism need not be understood as a terminal problem for the field,[20] but this is a criticism that looms large over critical posthumanism and the anti-anthropocentric turn more generally, for reasons that in some sense should be obvious: stated bluntly, critical posthumanism (alongside other anti-anthopocentric theoretical projects like New Materialism or Object Oriented Ontology) is scholarship produced by humans for an exclusively human audience, and is therefore always already in a kind of methodological tension with the theoretical project of challenging the notion of "human exceptionalism." I point this out not to be glibly dismissive of Braidotti's anti-anthropocentric theory, much of which informs the present writing, but rather to emphasize the tension that seems like an intractable feature of anti-anthropocentric theory. While I am broadly in agreement with the critical posthumanist aim of "decentering the human," or dislodging the exclusionary conception of the human individual from its assumed position of centrality in contemporary Western thought, it must also be acknowledged that this aim risks producing a kind of agential vacuum that is either filled by dissolving human agency into a vast network of "actants" (as Bennett describes) or, conversely, simply reverting back into a kind of apologetically contradictory mode of promising but vaguely inclusive humanism, as Braidotti's call for a university that operates under a "respect for diversity" might suggest.

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[20] This is a fairly dense problem in and of itself, and while it's outside the scope of the present writing, I've written previously about the relationship between humanism and posthumanism, arguing that

> the goal of posthumanism, like the shadow of an object, is to provide the depth of field necessary to fully account for the contours of the object to which it is tethered (i.e., humanism). With this in mind, the project for critical posthuman theorists is not to flee from or otherwise abandon humanism, but rather to engage with it from a critical distance, such that we can productively employ its virtues...while at the same time remaining responsive to (and thus resisting an uncritical embrace of) the Euro- and anthropocentric assumptions that humanism too frequently entails (Shaw 40-41).

With this problematic in mind, the final chapter of this project will engage with the notion of kinship, which operates within a similarly tense problematic: While kinship has itself become a kind of generalized keyword within the Anthropocene discourse used to refer to a wide range of relational modes between human and nonhuman life beyond the narrow constraints of liberal humanism, its generality actually serves to obscure a wide range of models for how the human (on both the individual and global scale) is meant to respond to their nonhuman kin: The aim of this chapter, then, will be to examine the various conceptual iterations of "kinship" currently circulating in the Anthropocene discourse, and consider how their wide ranging proposals for "decentering the human" actually describe vastly different roles for the human. Here, we find ourselves trailing the theoretical footsteps of Donna Haraway, whose own conception of "kinship" is explicitly framed in opposition to the narrow modes of relationality available under the ideological constraints of liberal humanism. For Haraway, normative modes of liberal humanist relationality tend to privilege anthropogenic, heteronormative relationships in a manner that obfuscates the "assemblages of organic species and of abiotic actors" ("Making" 159) alongside whom we iteratively populate the planet. Thus, Haraway's own project of "making kin" is best understood as an effort to rearticulate normative modes of relationality to more inclusively account for our nonhuman planetary coinhabiters. As Haraway evocatively describes, "we require each other in unexpected collaborations and combinations, in hot compost piles. We become-with each other or not at all. That kind of material semiotics is always situated, someplace and not noplace, entangled and worldly" (*Staying* 4). At first glance, then, Haraway's "Making Kin" positions itself as an analog for what this project, following Latour, has termed "becoming Terrestrial." In both cases, the normative ideological commitments of liberal humanism are being challenged through a more robust accounting of humanity's planetary

situation: no longer uncritically positioned as the de facto "measure of all things," humans become situated participants in a complex and heterogenetic planetary system.

What I want to highlight here at the outset, though, is that while Haraway's notion of kinship offers a useful critique of liberal humanism and its narrowly constrained and anthropocentric modes of relating to the nonhuman world, there's an ambiguity to Haraway's conception of "kinship" that is both generative and precariously open-ended, available to be deployed as a means toward a wide range of ideological projects: Haraway's "hot compost piles" of planetary co-inhabitors spontaneously erupting into "unexpected collaborations and combinations" (*Staying* 4) feels like a hopeful or even celebratory register with which to anticipate an environmental discourse freed from the anthropocentric tendencies of liberal humanism, but it could just as easily describe the various human and nonhuman "oddkin" implicated in an oil spill, as described in the previous chapter's reading of King's *Back of the Turtle*. Importantly, then, while the notion of kinship does productively loosen the grip of liberal humanism's exclusionary conception of the human, it doesn't actually mean that the exploitative and damaging behaviours and relations that liberal humanism served to produce will necessarily change as a result.

In part, this ambiguity is a necessary precaution. If liberal humanism is as deeply rooted into the epistemic frameworks of Western critical theory as Haraway argues, then any effort by a Western critical theorist to offer a clearly articulated vision of what lies *beyond* liberal humanism should be met with skepticism. What Haraway does make clear, though, is that whatever lies beyond is rapidly approaching, and it is the job of critical theorists to usher whatever it is along as quickly as possible. As she describes. "I along with others think the Anthropocene is more a boundary event than an epoch, like the K-Pg boundary between the Cretaceous and the

Paleogene. The Anthropocene marks severe discontinuities; what comes after will not be like what came before. I think our job is to make the Anthropocene as short/thin as possible and to cultivate with each other in every way imaginable epochs to come that can replenish refuge" ("Making" 160). As Isabelle Stengers notes, though, the project of integrating the nonhuman into the political sphere is not simply a matter of a more conscious recognition of the function or utility that nonhumans play in public life. As she observes, "nonhumans were never cast out of the political fold, because this political fold mobilized the very category of humans, and this category is anything but neutral as it entails human exceptionalism at its crudest—reducing…what causes humans to think and feel to human productions"(7). That is to say, the bifurcation of the "human" and "nonhuman" spheres is itself a kind of obscured political project that is implicitly evoked through any direct address to "the human" which, as Braidotti reminds us, is itself an unstable and exclusionary category.

Similarly, as Kim Tallbear observes, the question of which relations will be able to flourish in this uncertain future should be read diffractively through the racialized history through which it will emerge: "white bodies and white families in spaces of safety have been propagated in intimate co-constitution with the culling of black, red, and brown bodies and the waste landing of their spaces. Who gets to have babies, and who does not? Whose babies get to live? Whose do not? Whose relatives, including other-than-humans, will thrive and whose will be laid to waste?" ("Making Love" 147). The concern here then is that Haraway's notion of kinship is less behavioural than it is dispositional, offering an intervention into the anthropocentric liberal humanist conception of "the human" while stopping short of any concrete claims as to how this newfound sense of kinship with our nonhuman planetary co-inhabitants is meant to curb the

environmental damage that this conception of the human has already served to produce, and one can become "kin" with one's nonhuman relations by reorienting yourself toward them.

This attitude is crudely satirized by Ottessa Moshfegh's *My Year of Rest and Relaxation*, which follows a depressed young woman during a period of prolonged social isolation and prescription drug abuse (a practice she half-jokingly refers to as "hibernating" (3)). Late in her isolation, she observes that having a trash chute in her apartment building "made me feel important, like I was participating in the world. My trash mixed with the trash of others. The things I touched touched things other people had touched. I was contributing. I was connecting" (115). This sense that simply generating trash constitutes a form of contribution to the world and connecting with others is a bleak parody of the broad language of interconnected planetary co-habitation advocated by figures like Haraway, and neatly dramatizes the risks imposed by the open-ended nature of kinship discourse. While an awareness of one's kinship to the terrestrial is an important first step, it remains a fairly open-ended question as to how that kinship can be productively mobilized to effect change. To put that a little more directly, the question is whether becoming "kin" with one's terrestrial co-inhabitors is simply a default condition that one simply needs to come to understand, or whether understanding that default kinship actually serves as the catalyst for some kind of change in one's engagement with one's terrestrial kin.

As Nils Bubandt goes on to argue, while the Anthropocene may provide this opportunity for a radical rearticulation of human relationality toward open-ended kinship bonds with our nonhuman planetary "messmates" (in Haraway's terminology), the unfortunate fact of the matter is that the radical climatological precarity that has resulted from anthropogenic intervention has

already engendered a form of interspecies kinship between humans and nonhumans, as we find ourselves all exposed to the violence of our increasingly erratic climate. As Bubandt describes, the Anthropocene forces humanity to see itself not only in the present, but also from the perspective of the future, as a geological event that catalyzed the extinction of a vast swath of planetary life:

> The Anthropocene… invites us to imagine a world in which an alien geologist from the future detects in the strata of the ground evidence of the presence of humans long after we have gone extinct. This science fiction–like character of the concept of Anthropocene opens up to a retrospective reading of the current moment, a "paleontology of the present" in which humans themselves have become geological sediments or ghosts. In the Anthropocene, life is already geologic. In this geological ghost vision, the present proceeds from the future, because the possibility of co-species survival depends crucially on what we humans are going to do now, in the midst of an increasingly given fate of ruination and extinction (g135-36).

From this perspective, humans in the present find ourselves in an odd form of kinship with the nonhuman forms of life on the planet, as we are unified by a shared exposure to this uncertain extinction event. As with Haraway's account, the Anthropocene is here being figured as a kind of boundary event, but where Haraway's articulation of this event emphasizes its liberatory potential as an opportunity to forge new modes of relating to our planetary co-inhabitants, Bubandt emphasizes the degree to which this liberatory potential is couched within a planetary extinction event that is already underway, the impacts of which have already served to impose a new sense of precarious exposure to violence on a planetary scale.

In this sense, Bubandt's argument offers a kind of posthumanist rearticulation of Mbembe's influential essay "Necropolitics," in which he describes the fundamental organizing principle of society as a shared exposure to violence and death. Importantly, though, where Mbembe situates the sovereign as the figure through whom this exposure to death can be sublimated (which, ultimately, is the source of the sovereign's power), in the Anthropocene no such sublimation is possible. As Bubandt describes:

> The Anthropocene presents us with the geological possibility that humans are the graptolites of the future, fossil colonial animals that are engineering our own demise. This shift in perspective is important. If modernity dreamed of the future, the Anthropocene dreams of the present as seen from the future, a perspectival shift that makes our necropolitics apparent to ourselves in the starkest of lights. (g137)

In Bubandt's account, exposure to the anthropogenic extinction event signified by the Anthropocene unifies humans and nonhumans in a shared and uncertain exposure to climatological violence. As he describes, "In the Anthropocene, necropolitics operates under the sign of metaphysical indeterminacy rather than certainty, unintended consequences rather than control" (G124). So where Mbembe's conception of necropolitics emphasizes the extent to which societies are organized around a centralized monopoly on violence, Bubandt suggests that the novelty of the Anthropocene is in its radically decentralized violence, and the uncertainty that this decentralization serves to produce. A shared exposure to this environmental uncertainty is best understood as a kind of grim counterpart to Haraway's notion of kinship, bringing the human and nonhuman together through a shared exposure to the violence of the increasingly erratic environment, and driving home the importance of making sense of our relationship to the nonhuman others alongside whom we populate the planet.

Picking up on this relationship between the Anthropocene and the looming exposure to violence that it imposes, Eben Kirksey further develops Haraway's notion of interspecies kinship to offer his own alternative nomenclature for the present geological epoch in the "Wolbachaicene," so named for Wolbachia, a genus of parasitic microbes that, as Kirksey describes, “live in garden variety insects – including ladybird beetles, ants, and fruit flies – as well as more unusual animals – like amphipod crustaceans and isopods – subtly shaping the behavior and ecology of diverse forms of life” (200). For Kirksey, thinking of the present epoch through the perspective of Wolbachia provides a means through which the human can recontextualize the Anthropogenic mass extinction event that is currently underway as an opportunity to look beyond human history and imagine the novel forms of life that might flourish after we’re gone. As he describes, “[as] Anthropos races towards a possible catastrophic future, lively multispecies communities are already emerging in the wreckage of industrial civilization. Diverse forms of life are running wild beyond the limits of human ethics, hopes, dreams, and schemes" (199). From this perspective, human extinction (or, more specifically, the project of producing an environment that is inhospitable to human life) is not necessarily something to be lamented: As Kirksey suggests, "A sense of tragedy...is not the only way to tell stories about our current historical moment" (199). Instead, he argues, we can view the extinction event that is currently underway as an opportunity to "voyeuristically" observe the new forms of microbial life that will thrive in our terrestrial ruins: “Voyeuristically gazing into the entangled worlds of Wolbachia it is possible to appreciate the love stories of others from a tactful distance" (200). This conception of love builds on the queer polyamourous community's notion of “compersion,” which Ani Ritchie and Meg Barker define as "the feeling of taking joy in the joy that others you love share among themselves, especially taking joy in the knowledge that your beloveds are

expressing their love for one another' (595)." For Kirksey, this conception of love functions as a powerful tool for connecting the individual human to a timescale far beyond their own lifetime, suggesting a kinship relation build not so much on a sense of concurrent planetary co-habitation, but rather a sense of kinship to the forms of nonhuman life that will thrive in the planetary conditions that our extractive practices helped to create.

Implicitly, both Bubant and Kirksey's work raises the question of what, exactly, kinship is for: Is fostering a sense of kinship with our present and future terrestrial planetmates intended to serve as a kind of coping mechanism, meant to ease the psychological weight of the inevitable and impending extinction of the human? Or is kinship meant to foster new relations and modes of being in the world in the present tense? While Kirksey's work offers some suggestive prescriptions for "refin[ing] our cyborg politics" by "maintaining refuges, spaces for wild and unruly forms of life," and the need to "make sure that homes for inverts and queer microbes are included too" (214), it's never quite clear how or why a voyeuristic mode of interspecies kinship, which is premised on an acceptance of relational modes that will thrive in the wake of human extinction, would work to mobilize any kind of active response at all.

Similarly, for Bubandt, a shared exposure to violence provides a mode of kinship premised on an acceptance of a kind of universalized human precarity. Importantly though, to suggest that there is a shared condition of exposure to environmental violence risks understating the vast differentials of power and insulation from that precarity that exist in our present environmental situation: Rob Nixon's work, for example, describes "a world permeated by insidious, yet unseen or imperceptible violence" (*Slow* 15), arguing that,

> the exponential upsurge in indigenous resource rebellions across the globe during the high age of neoliberalism has resulted largely from a clash of temporal perspectives

> between the short-termers who arrive (with their official landscape maps) to extract, despoil, and depart and the long-termers who must live inside the ecological aftermath and who must therefore weigh differently in time's scales (*Slow* 17).

Far from ushering in a sense of global kinship, the rising planetary precarity has produced two broadly distinct modes of relating to the earth, one driven by the short-term gains of environmental exploitation and the other by the long-term impacts that that exploitation will inevitably engender. In this sense, precarity serves not to generate the kind of empathetic kinship bonds that Haraway seems to anticipate, but rather a kind of panicked and exclusionary mode of accumulation.

While Nixon goes on to suggest that the difficulty of registering this growing divide is that the "long-termers" are faced with a form of environmental violence that is "spectacle deficient" (*Slow* 47), and therefore difficult to meaningfully translate into narrative, Thom Davies argues that the problem is not only a lack of spectacle but also indifference. Responding directly to Nixon's claim that slow violence persists due to its fundamental lack of "arresting stories, images and symbols" (*Slow* 3), Davies argues that

> communities who are exposed to environmental hazards are pregnant with such narratives and testimony. In some instances, entire environmental justice movements are spurred on by stories of suffering, injustice, and ill-health...Crucially, a politics of *indifference* about the suffering of marginalized groups helps to sustain environmental injustice, allowing local claims of toxic harm to be silenced (13).

Both Nixon's conception of slow violence and Davies' politics of indifference can be read diffractively against Bubandt's notion of the "metaphysical uncertainty" (G124) that characterizes Anthropocene necropolitics: While Bubandt rightly points out that the

Anthropocene has served to produce a great deal of environmental uncertainty, Nixon and Davies' work serves to remind us that the impacts of that uncertainty are not evenly distributed, nor do they necessarily serve to produce a sense of kinship with our human and nonhuman planetary co-inhabitants. Instead, as we're already seeing, it generates a kind of environmental anxiety through which those with the means to do so work to accumulate enough resources to isolate themselves from the increasing environmental volatility.

More broadly, though, if the Anthropocene is already underway, then the new modes of kinship that it is meant to inspire should already be emerging: Kirksey, for example, points to the barebacking community as an example of how "Queer communities are making laudable ethical decisions that are helping stem the destructive environmental tendencies of Anthropos on a planetary scale" (208). Following the work of Tim Dean, Kirksey argues that the potential transmission of HIV through these communities is the basis of a queer mode of interspecies relationality: As he describes, this "microbiopolitical action" is expanded by "PrEP – a daily prophylactic pill that prevents HIV infection and enables novel safe-sex practices" (208). For Kirksey, the fetishized transmission of HIV constitutes an ethical decision that takes literally Haraway's imperative to "make kin not babies," as it both foregrounds a queer and non-procreative dimension of sexual activity and describes an emerging kinship relation to nonhuman life. Here, the human immunodeficiency virus becomes a kind of queer relation in its own right, whose transmission can be "voyeuristically" observed (and, through the usage of PrEP, controlled) in a kind of intra-species mode of polyamory.

In this way, Kirksey positions the barebacking community as a model for the kind of interspecies relationality that will help ease the human into extinction through a voyeuristic kinship with the microbial life that will thrive in the ruins we leave behind. But even here, there

is an unspoken global power dynamic informing who will have access to this kind of relationality. As Jean Comaroff notes, the AIDS pandemic "is savagely cosmopolitan, making blatant the existence of dynamic, translocal intimacies across received lines of segregation, difference, and propriety...Coming as it did at the time of a radical restructuring of the axes of a bipolar world, of the liberal-democratic nation-state and the workings of capitalism itself, the disease served as both a sign and a vector of a global order in formation" (198). While the risks of HIV and AIDS can be managed and even fetishized in the global north, the same is not necessarily true globally: As Comaroff goes on to point out, "[i]n many African countries, HIV revivifies scarcely suppressed memories of the violence and medical neglect of times past, jibing with enduring legacies of scientific racism, material extraction, and technological dependency" (202). While HIV and AIDS may serve as an opportunity to recontextualize our kinship relations to viral life, AIDS is also deeply implicated in the demarcation of exclusion and segregation in the global human population.

All of this is to suggest that the inviting and celebratory language that often attends to "kinship" to nonhuman life as a discursive formation can function to paper over dynamics of power that are still deeply rooted within the human population. While Haraway's advocacy of nonhuman kinship is at the centre of a vast and often fruitful discourse on the relationship between the human and nonhuman, she has also positioned herself at the centre of an emerging discourse of antinatalism: Her recent collection *Making Kin Not Population* with Adele Clarke offers some instructive insights as to how her broadly optimistic vision of "making kin" can just as easily give way to a discourse that, as Katharine Dow and Janelle Lamoreaux argue, "places unnecessary and disproportionately distributed constraints on reproductive freedoms and bodily sovereignty as well as the further separation of kin into kinds" (476). Perhaps somewhat

tellingly, Haraway's investment in "non-natalism" follows from a conception of "ecojustice" that has a slippery relationship to ideology as such, noting, for example, that "we must find ways to celebrate low birth rates and personal, intimate decisions to make flourishing and generous lives" because while "ecojustice has no allowable one-variable approach to the cascading exterminations, immiserations, and extinctions on today's earth... blaming Capitalism, Imperialism, Neoliberalism, Modernization, or some other 'not us' for ongoing destruction webbed with human numbers will not work" ("Making" 164n17). Haraway never fully substantiates the assumption that "blaming Capitalism, Imperialism, Neoliberalism" is effectively an effort to hoist the responsibility for climate change onto someone else.[21] As scholars like Kathryn Yusoff demonstrate, the intertwined histories of Capitalism, Imperialism, and Neoliberalism are deeply implicated in anthropogenic climate change, and those histories can be engaged (and in fact ought to be engaged) in a manner that intimately implicates Western academics. To pull from Haraway's own terminological repertoire here, any effort to meaningfully situate the knowledges produced in a Western academic context would absolutely necessitate a critique of Capitalism, Imperialism, and Neoliberalism as the underlying ideological infrastructure of anthropogenic climate change that does not shy away from the fact that Western academia itself is itself a participant in (and frequent beneficiary of) those structures of power.

More broadly, of course, the celebration of "personal, intimate decisions" is itself a central tenet of both Capitalism and Neoliberalism. As I argued in the fourth chapter of this project, offloading the responsibility for climate change onto atomized individuals not only

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[21] Haraway's invocation of an "us" here refers somewhat ambiguously to what she describes in the same footnote as "'our people,' on the left or whatever name we can still use without apoplexy' ("Making" 164n17).

contributes to the scalar derangements that make "climate change" so difficult to meaningfully apprehend, it also obfuscates the actual structures of power through which the bulk of environmental degradation is generated and sustained, and defers the kind of collective organization that any meaningful articulation of "The Left" would need in order to overcome them. The point here is not that Haraway's emphasis on queer or otherwise non-procreative modes of making kin is wrong, but rather that its efficacy is going to be contingent on a cognizance not only of the "personal, intimate decisions" through which alternatives to the dominant modes of relationality are reproduced but also, crucially, the interlocking systems of power through which those personal decisions are influenced and constrained. As Dow and Lamoreaux go on to ask, "[i]nstead of striving to describe and decrease human numbers, what if environmentalists worked to decrease the formal and informal limitations that accompany individualist, racist, sexist and capitalist landscapes in which people live, love, and make kin?" (484).

With that line of questioning in mind, the remainder of this chapter will examine Richard Powers' *The Overstory* to demonstrate how terrestrial realism can be deployed to challenge the narrow mode of relationality inscribed by liberal humanism. Importantly, though, as the novel serves to dramatize, Anthropocene kinship with nonhuman life is not always as playful as Haraway sometimes seems to suggest. Instead, *The Overstory* captures a sprawling collective of human lives that are each reorganized around kinship relationships with trees: here, kinship with the nonhuman is presented as both generative and alienating, as Powers catalogues both the academic, social, and political struggles that nonhuman kinship introduces into his characters' lives. In this way, the novel not only challenges the normative modes of relationality inscribed within the logic of liberal humanism but emphasizes the actual tensions that these challenges

serve to produce. Through this reading, terrestrial realism emerges in the generative friction that non-normative modes of relationality serve to produce.

The Overstory

As the above discussion worked to illustrate, "kinship" has become an inflection point for a dense array of theoretical problematics, with implications for ecocriticism, animal studies, queer and indigenous theorists, biology, and beyond. That being said, though, I don't want to lose sight of the fact that kinship is not wholly exhausted by its status as a kind of interdisciplinary keyword, and that it also corresponds to a cognizance of the nonhuman world that is less theorized than it is directly felt: It's an experience neatly captured by Mark O'Connell in his nonfiction book *Notes From An Apocalypse*, in which, inspired by a growing sense of anxiety over climate change, the author travels to Australia to participate in a "nature solo," or a 24 hour period of isolation in the Australian wilderness. During the solo, O'Connell describes experiencing "a new feeling, a sensation of tenderness...something about the experience of being alone here, with nothing to do but be, and sit, and watch, and listen, had caused me to feel as though I were in some kind of relationship with the place...I was not having a solitary moment and taking in the air, the landscape. In fact I was-- in some strange sense that should by rights have seemed creepy-- not even properly alone" (176-77). Here, a sense of environmental kinship emerges seemingly spontaneously, not through theory but rather a direct apprehension of one's terrestrial situation.

Importantly, this experience is not reserved to those able to drop off the grid for 24 hours at a time. As Bubandt's work reminds us, one impact of our increasingly erratic climate is that our collective terrestrial situatedness is difficult to ignore. As Amitav Ghosh succinctly summarizes, "the uncanny and improbable events that are beating at our doors seem to have

stirred a sense of recognition, an awareness that humans were never alone, that we have always been surrounded by beings of all sorts who share elements of that which we had thought to be most distinctively our own: the capacities of will, thought, and consciousness" (30-31). As described in the second chapter of this project, for Ghosh, this new form of consciousness poses a kind of representational challenge: As he suggests, the "most intransigent way the Anthropocene resists literary fiction lies ultimately in its resistance to language itself," (84) and what is needed is "new, hybrid forms" of representation through which this emerging consciousness can be adequately captured. As this project has thus far worked to demonstrate, in the absence of such "new, hybrid forms," the realist novel has actually proven to be a fairly generative mode through which to grapple with the representational problematic posed by the Anthropocene, which, as Adam Grener points out, "is not just to conceive human activity across multiple, discontinuous scales, but also to understand how that activity works in concert with other types of agency, other forms of life" (51). As the third chapter of this project argued, realist fiction is well positioned to intervene into the scalar discontinuities that the Anthropocene poses: Its unique relationship to the representation of individual experience renders it a powerful mode with which to examine the interface between the individual and planetary scale, capturing what Fredric Jameson describes as the moments in which "the isolated body begins to know more global waves of generalized sensations" (*Antinomies* 28). Along those same lines, the remainder of this chapter will examine Richard Powers' *The Overstory*, a novel that deploys realism as a means of exploring how individual human lives can be shaped by the uncanny, nonhuman vitality of both trees and the novel itself. In this way, Powers demonstrates both the utility of reorienting our attention toward specific kinship relations to nonhuman life, as well as the particular role that realist fiction can play in that process of reorientation.

Richard Power's Pulitzer Prize winning novel *The Overstory* operates within what Nathaniel Rich describes as "the grand realist tradition," (*The Atlantic*) carefully balancing the individual lived experience of its nine protagonists against the broader societal context in which those lives operate. As Grener goes on to observe, "[as] *The Overstory* works at multiple scales in its effort to historicize ecological consciousness, it makes felt the contradictions and discontinuities that emerge when questions of agency, violence, and life itself in the Anthropocene are encountered at different scales" (47). Similarly, Rachel Adams notes that "*The Overstory* is an epic that moves from individual stories that are the typical subject of literary realism to a grand vision of the webbed planetary systems—the environment, the internet, the global economy—in which they are enmeshed" (801). To this end, even Amitav Ghosh, whose claims of realism's inability to represent climate change have become a kind of recurrent motif throughout this project, was forced to acknowledge that Powers' novel was indeed a "major turning point" for the climate storytelling, "not just because it is a great book, which it is, but because it was taken seriously by the literary mainstream" (Quoted in Wallace-Wells). This commitment to nonhuman scale extends to the structure of the novel itself, as a means of negotiating the scalar discontinuities between the individual and the terrestrial.

Importantly, the novel's focus on the nonhuman extends to the formal structure of the novel itself, as the novel's many interweaving narrative threads are mapped through arboreally-labelled sections: "Roots," which introduces all nine of the novel's protagonists through individuated short narratives, "Trunk," which brings together five of the novel's protagonists into a series of environmental actions that culminate in an act of ecoterrorism, "Crown," which traces the dispersal of the group back into their individual lives, and "Seeds," which briefly suggests how the works of several of the novels protagonists might extend beyond the scope of the

narrative itself. In this way, trees are not only a thematic focus of each of the novel's at times wildly disparate narrative threads, but also the structural means through which the overarching narrative trajectory of the novel remains legible. As Adams goes on to argue, "[Powers'] subject is the conventional novelistic one of human lives, but these lives are set within domains so immense and so miniscule they might otherwise seem unconnected to human activity" (801). Thus, while not all the characters that populate the novel's disparate threads directly interact, they are nonetheless held together by the novel's overarching arboreal structure. As Garrett Stewart points out, throughout Powers' novel,

> the conceptual threading and intermesh...are certainly easier to track than the lives actually entwined. Each interknit subplot extends backwards into the childhoods of the divergent characters, then forward into their contingent overlap. If all this seems too much to hold in mind at once, it is...The heavily loaded roster of plot agents seems engineered in this sense primarily to grid, and gird, the intersections and echoes, not of personal psychology, but of language itself (161)

In this sense, the individual characters that populate the novel become less important to the novel than the rhythm through which their narratives intersect and overlap. And it's not merely a superficial stylistic choice that this rhythm is mapped against the roots, trunk, crown, and seeds of a tree: The relationship being drawn here between the novel and arboreal forms provides another example of allegory's utility as a means of fostering a sense of kinship between the individual human life and the vast and seemingly incomprehensible scale of the terrestrial. As Stewart goes on to describe, "[m]atching nature's cyclicity, the tacit circularity is unmistakable, as if a familiar four-volume structure from the English fictional canon (think Dickens's *Our Mutual Friend*) has been turned involute and self-renewing, unrolled like a continuous looped

scroll rather than an eventually closed book: from seeds to the roots of full fruition and back again in dissemination" (162). In this way, the novel form itself is positioned as a kind of analogy for nonhuman vitality in symbiotic relationship with individual human lives. The novelistic form of *The Overstory* itself is consciously positioned as a kind of vital actor in this representational project of making nonhuman kinship visible: As Stewart argues, "characters learn for themselves to devalue the clench of personality in favor of collective being and purpose, and so to merge, if not entirely submerge, troubled personal stories in the vicissitudes of longer-span natural histories" (163). As Powers' narrator describes early in the novel, the characters that populate the narrative "have long been connected, deep underground. Their kinship will work like an unfolding book. The past always comes clearer, in the future" (132). Importantly, that these connections exist "deep underground" is often not at all evident to the characters themselves: As Marco Caracciolo points out, "[f]or a novel that so explicitly centers on an intersubjective configuration, it is significant that the we-form rarely emerges for the group…*The Overstory* implicitly contrasts the impossibility of concerted human action with a far more streamlined form of organization that can be found in the natural world" ("We-narrative" 92). Similarly, that these forms of interconnectivity may become "clearer, in the future" carves out a clear role for the novel form itself, occupying the unique relation toward temporality that allows for the compression and expansion of timescales that are not quite accessible to direct human experience. Here, the novel's overarching project is brought into sharp focus: modes of kinship that exist over vast and at times inaccessible scales of temporality rendered legible through the "unfolding" of a novel.

And unfold it does: the novel opens with Jørgen Hoel, a Norwegian immigrant to the United States in the early 19th century, who travels to "the new state of Iowa, where the

authorities give away land platted yesterday to anyone who will farm it" (6). On his land, Jørgen plants six chestnut trees, only one of which lives to maturity, meaning it is unable to reproduce: "No mates exist for miles around, and the chestnut, though both male and female, will not serve itself. Yet still this tree has a secret tucked into the thin, living cylinder beneath its bark. Its cells obey an ancient formula: keep still. Wait" (9). After Jørgen's death, his eldest son John takes over the farm, and "decides, for whatever years are left to him, to capture the tree and see what the thing looks like, sped up to the rate of human desire" (11). John spends the rest of his life photographing the tree at monthly intervals with a Kodak No.2 Brownie, before passing this responsibility on to his youngest son, Frank, who continues the project more out of a sense of obligation to his father than any concrete understanding of the representational problematic that it was initially undertaken to resolve. This project, which Frank's son Nicholas, who will go on to become one of the five environmental activists at the centre of *The Overstory*'s plot, recognizes as an intervention into the balance between the ancient arboreal dictum to "keep still" and the human desire to render that stillness visible, can be read as a sort of microcosmic blueprint for what will become a recurring thematic of *The Overstory*, as this opening vignette offers a kind of flip book of its own, compressing six generations of the Hoel family drama into around 20 pages of text. In this sense, the chestnut time-lapse photography project becomes a kind of analog for the novel form itself, compressing the vast scales of arboreal time into the register of "human desire."

This temporal compression occurs again in the introductory "Root" story of Douglas Pavlecheck, which describes his own trajectory from his participation in the Stanford prison experiment, to his service in the Vietnam War, to a kind of nomadic life vaguely oriented toward environmental activism. In a particularly dramatic episode during the Vietnam War, Powers

juxtaposes the anthropocentrically scaled immediacy of Pavlicek's aircraft getting shot out of the sky with the arboreally-scaled deep time of the tree that breaks his fall. As Powers' narrator describes, the aircraft "[starts] to drop, like a duck homing in on a lake. Smoke licks out from the back of the cargo bay. The word evacuates Pavlicek's mouth before he know what it means: *Fire*!…They manage to jettison the cargo. One of the pallets explodes on the way out of the plane. Shit detonates as it falls through the air. Then Pavlicek, too, is floating down to earth like a winged seed" (81). The clipped intensity of the diction here is immediately contrasted by a shift in temporal register, as Powers' narrator shifts focus toward the arboreal: "Miles below and three centuries earlier, a pollen-coated wasp crawled down the hole at the tip of a certain green fig and laid eggs all over the involute garden of flowers hidden inside" (81). This transition is jarring not only because it pulls the reader away from the cinematically narrated action of Pavlicek's aerial free-fall; It also dramatically shifts our attention toward how things interact. The clipped sentences describing exploding pallets and detonating "shit" are here replaced by a cluster of interconnected nonhuman actors: the pollen, wasp, fig, eggs, and flowers are all strung together in a single sentence, each playing a small role in laying the groundwork for what follows: "That fig was eaten by a bulbil. The bean passed through the bird's gut and dropped from the sky in a dollop of rich shit that landed in the crook of another tree, where sun and rain nursed the resulting seedling past the million ways of death. It grew; its roots slipped down and encased its host. Decades past. Centuries" (81). When the narrative rejoins Pavlicek, still falling through the air, it carries with it the history contained by these centuries, including the fig, the bulbil and its shit, the sun and rain, and the seedling's transformation into a banyan forest: "[Pavicek's] scream pierces the air, and his body tumbles into the branches of the banyan, that one-tree forest that has grown up over the course of three hundred years just in time to break his fall" (82). The sense of

urgency implied by the phrase “just in time” translates the three centuries of banyan growth into the clipped register of Pavicek’s free-fall, effectively conjoining these two disparate timescales.

Through all this scalar shifting, Powers carves out a unique conception of what exactly counts as “realism” in fictional representation. Neelay, the paraplegic game designer whose childhood devotion to computers and coding evolves into a multi-billion dollar game company, is driven by a pursuit of "more realism" (277) in each subsequent instalment of his game series. This drive meets its limits not so much in the seemingly endless processing power available to render the increasingly intricate virtual world, but rather in its ability to render the quotidian aspects of everyday life: As he reflects while on a phone call with his mother, "it doesn’t matter what she's saying. Pita is taking too many naps. Planning a trip back to Ahmedabad. Ladybug invasion of the garage-- very strong-smelling. Might be cutting hair very dramatically soon. He revels in whatever she wants to go on about. Life, in all the pitiful details that won't fit yet into any simulation" (278). Again, the implicit suggestion here is that the novel itself steps in to fill this void, rendering those same "pitiful details" that still elude even Neelay's most cutting-edge virtual simulacrum. Those "pitiful details" of the human quotidian sit on one side of a representational spectrum that has been a recurring thematic of how the changing global climate comes to be registered in realist fiction. On the other side of the spectrum sits the extreme environmental occurrences that Ghosh suggests are too outlandish to figure in "serious fiction.” But here again Powers’ novel suggests that outlandishness is itself a kind of relative descriptor: While examining the Brazilian rainforest for her seedbank project, Dr. Patricia Westerford and her team encounter a tree whose trunk is shaped to look like the Virgin Mary:

> Cameras come out of packs. Botanists and guides alike snap away. They argue over what the face means. They laugh at the stupefying odds against anything accidental growing

> exactly like this, like us, out of mindless wood. Patricia does the estimate in her head. The odds are nothing compared to the first two great rolls of the cosmic dice: the one that took inert matter over the crest of life, and the one that led from simple bacteria to compound cells a hundred times larger and more complex. Compared to those first two chasms, the gap between trees and people is nothing at all. And given the outlandish lottery capable of producing any tree, where's the miracle in a tree shaped like the Virgin? (394-95).

Here again we see the emergence of terrestrial realism, with a sense of predictability measured not against the narrow standard of the human, but rather on the much vaster scale of the planet. That is to say, *The Overstory* confronts readers with a mode of realist storytelling calibrated to a scale beyond the human, or what Wai Chee Dimock characterizes as "the realism of elemental forces, impartial in their power to nourish and their power to destroy" (144). Importantly, Powers remains conscious of the kind of orientational problem that this mode of realist storytelling might pose for both his human characters and readers: As copyright lawyer Ray Brinkman reflects, "[t]o be human is to confuse a satisfying story with a meaningful one, and to mistake life for something huge with two legs. No: life is mobilized on a vastly larger scale, and the world is failing precisely because no novel can make the contest for the world seem as compelling as the struggles between a few lost people" (383). Despite these limitations, Ray also comes to recognize the importance that fiction has come to play in his life after his stroke: "Ray needs fiction now as much as anyone. The heroes, villains, and walk-ons his wife gives him this morning are better than truth. *Though I am fake*, they say, *and nothing I do makes the least difference, still, I cross all distances to sit next to you in your mechanical bed, keep you company, and change your mind*" (383). Here again, the novel functions as a means of

negotiating vast scales of time and space to serve the twin functions of care and pedagogy: Like the trees around which the novel is structured, narrative itself offers comfort and insight in a mode that is distinctly nonhuman.

This conception of fiction can be contrasted with Ray's wife, Dorothy, who, while consulting a pamphlet on plants in an effort to identify a tree in their front yard, describes nature as its own kind of realist narrative: "She flips the pages. Way more oaks than good taste would recommend...She remembers now why she never had the patience for nature. No drama, no development, no colliding hopes and fears. Branching, tangled, messy plots. And she could never keep the characters straight" (419). While *The Overstory* itself could be characterized as both the "compelling struggles" of a few lost people compiled into "branching, tangled, messy plots," Powers remains cognizant of this tension between satisfying and meaningful storytelling. In a scene immediately following Dorothy's dismissal of nature's convoluted plot, the narrative perspective of the novel shifts to Dr. Patricia Westerford, now in her late 70s and finishing the manuscript of her second book, in which she is working to correct the exact problem that Dorothy identifies. As the narrator describes, "[Patricia] spins short biographies of her favorite characters: loner trees, cunning trees, sages and solid citizens, trees that turn impulsive or shy or generous-- as many ways of being as there are forest elevations and facings. *How fine it would be if we could learn who they are, when they're at their best*. She tries to turn the story on its head. *This is not our world with trees in it. It's a world of trees, where humans have just arrived*" (424). Here, Powers deploys the branching, arboreal structure of the text to create resonances between individual characters whose lives never directly intersect within the novel: in this way, the novel form itself functions as a kind of nonhuman participant in a mode of kinship that supersedes

conventional modes of human relationality, as Dorothy and Patricia enter a kind of dialogue visible only from outside the frame of the narrative itself.

Crucially, the analogy between trees and the novel form as two similarly nonhuman modes of kinship organization is not merely a superficial reinforcement of the novel's thematic focus on trees. As the above moments of extradiegetic relationality suggest, the utility of these nonhuman modes of relationality is that they can serve to forge connections precisely where the strictly human modes of community fail. As Marco Caracciolo points out, "*The Overstory* probes an uneasy analogy between human and nonhuman collectivities, drawing attention to the striking formal similarities in human and nonhuman networks and showing—pointedly—how human collectives fail to replicate the cohesiveness and efficacy of plant assemblages" ("Deus Ex" 62). The failure of human collectives to effect meaningful environmental change is a running theme throughout *The Overstory,* evidenced by Vietnam-vet-turned-radical-environmentalist Douglas Pavlick's manifesto, "What the Fuck Went Wrong with Mankind" (386), and dramatically reinforced by Dr. Patricia Westerford's final appearance in the novel, in which, during a public lecture, she posits suicide as "the single best thing a person can do for tomorrow's world" (464). As Caracciolo goes on to describe, "Powers holds a mirror up to the shortcomings that keep human collectives (the environmentalist movement, the scientific community, and of course various levels of government) from approaching this problem with the genuinely altruistic mindset that defines the social behavior of seemingly "passive" plants" ("Deus Ex" 62).

Dr. Westerford's final pessimistic message on the failure of humanity to adequately understand its relationship to the rest of the planet finds an interesting intratexual reverberation with Adam Apich, the psychology student turned radical activist turned psychology professor. During her final public lecture, she reflects to herself, "the problem begins with the word world.

It means two such opposite things. The real one we cannot see. The invented one we can't escape" (466). Later, in Dr. Apich's final appearance, as he approaches the prison in which he'll spend the rest of his life, he offers a similar reflection: "Of all the waiting terrors, the one he fears most is time. He does the math, calculates how many futures he'll have to live through, second by second, until his sentence ends...Futures where humanity goes to its mass grave swearing it's the only thing in creation that can talk. Vast, empty expanses with nothing to fill the hours but remembering how he and a handful of green-souled friends tried to save the world. But, of course, it's not the world that needs saving. Only the thing that people call by the same name" (495). Again, there is a resonance here that is only visible from outside the frame of the text itself, and builds a form of kinship between the novel's characters of which they could not be aware.

In this sense, Powers' novel could be said to operate through an orientation toward the same collectivized subject position as Ben Lerner's *10:04*. Like Lerner's novel, *The Overstory* builds toward a sense of collective terrestrial inhabitation that implicates the form of the novel itself: Where Lerner plays on the lose correspondence between the narrative perspective and authorial position inherent in the auto-fictional mode, Powers uses the arboreal structure of *The Overstory* to demonstrate the utility of an expansive, terrestrially scaled realist fiction to forge new modes of kinship relationality. Throughout the novel, characters with no direct diegetic contact are repeatedly put into conversation through the novel's structure, in this way generating a sense of community that is unique to fiction. These structural resonances are made most evident in the continuities of thought and theme across characters exemplified above, but it also emerges on the level of diction, as specific phrases and motifs recur throughout the text, creating what Shannon Lambert characterizes as "Mycorrhizal Multiplicities." As Lambert argues,

"Powers' most successful attempts to move beyond language and human thought into a world of multispecies entanglement come not from these glimmers of anthropomorphism, which serve only to re-establish the dominance of linguistic understandings of semiosis; instead, they come from the work he does formally to create 'living signs– ' messages patterned across the text which suggest modes of nonhuman collective communication" (11). As she goes on to catalogue, phrases like "There are no individuals in the forest, no separable events" or "Let me sing to you now, about how people turn into other things" (a line self-consciously borrowed from Ovid's Ovid's *Metamorphoses*) recur many times throughout the text, and serve to produce "affective 'refrains' which modify the humans with which they come into contact, creating interspecies communities that challenge – or deterritorialize – notions of human individualism and exclusivity" (15), and in so doing, produce a uniquely novelistic mode of kinship.

Also like Lerner, Powers' novel anticipates a coming collectivized mode of planetary consciousness. Just as Lerner's novel deploys a shifting, Whitmanesque collective "you," Powers' work is deeply invested in its relation to the transformative function of pronouns. In an interview with *Emergence Magazine*, Powers was asked whether, after spending so much time thinking about the timescale of trees, he might have felt "dwarfed by this new sense of time that you were connected to," to which he responded, "[it] depends on what you mean by 'you.' In the sense that we're most familiar with it now—that kind of private individual—sure, humility and fear and insignificance were all feelings that I felt as I made this journey, but that's not a genuine or legitimate perception of being. It's a cultural illusion, and if you allow kinship, then the question of you becomes more permeable." This increasingly permeable sense of a "you" that extends beyond the narrow timescale of the individuated human in reflected in the novel by

Nicholas Hoel, who observes late in the novel that "[p]eople have no idea what time is. They think it's a line, spinning out from three seconds behind them, then vanishing just as fast into the three seconds of fog just ahead. They can't see that time is one spreading ring wrapped around another, outward and outward until the thinnest skin of *Now* depends for its being on the enormous mass of everything that has already died" (358). Just as Nicholas comes to recognize a kind of collectivized kinship to the deep past, later in the novel, paraplegic programmer and game designer Neelay Mehta experiences a similar moment of recognition of his collectivized kinship to the future: "Neelay looks up from his code-filled screen. Grief washes over him, a grief youthful and full of expectation. He has felt grief before-- that awful mix of hopes crushed and rising-- but always for kin, colleagues, friends. It makes no sense, this grief for a place he won't live long enough to see" (487). Here, Neelay struggles to articulate a kind of terrestrial kinship with the deep history of the planet, just barely registering a sense of loss that is too broad and generalized to be located in relation to any individual relation. This vague and half-articulated sense of loss experienced by both Nicholas and Neelay remains a pervasive presence throughout the narrative. As Jeff Adams argues, much of *The Overstory* "gestures toward the immediacy of the present and a distant time when a human artifact will be overtaken by the environment: life systems tinier and vaster than human comprehension that also require the human medium of words for their expression" (805). That is to say, the tension between these two temporalities is never full resolved, but rather serves as a generative dialectic through which the narrative is propelled forward, and the novel itself becomes the medium through which that vague sensibility seeks to articulate itself.

This tension is where terrestrial realism emerges: *The Overstory*, like many of the texts examined over the course of this project, delicately balances its novelistic focus on the narrow

experience of the individual against this anticipatory, not-quite-articulable cognizance of the planetarily-scaled subject position forced upon us by the changing global climate. As Dipesh Chakrabarty describes,

> [the] climate crisis may indicate yet another development in our history: that as a geophysical force, we now wield a different kind of agency as well-- one that takes us beyond the subject/object dichotomy, beyond questions of justice and human experience. To incorporate this agency into our telling of the human story we will need to develop multiple-track narratives so that the story of the ontologically-endowed, justice driven human can be told alongside the other agency that we also are— a species that has now acquired the potency of a geophysical force" ("Climate Makes History"15)

For Chakrabarty, the scalar challenges posed by the Anthropocene can be productively addressed through narratives that resist the totalizing logic of a singular perspective, and instead operate on multiple scales simultaneously. In many respects, *The Overstory* can be seen to exemplify this kind of "multiple-track narrative." Not only does its narrative framework drastically shift in focus from the temporal scale of centuries to the narrow quotidian minutia of individual human experience, but those individual experiences themselves are vastly distributed across the lives of the novels nine central protagonists: While obviously not an exhaustive account of the human species as a whole, the scope of Powers' novel does effectively dramatize the vastly different ways in which the Anthropocene is experienced, through identity demarcations that cut along dynamics of race, class, and ability, with no one identity position taking precedent over the others.

This multi-track narrative again offers a means through which the novel can extend itself beyond the narrow enclosure of the individual and confront the terrestrial scale. As Latour

argues, "[it] makes no sense to force the beings animating the struggling territories that constitute the Terrestrial back inside national, regional, ethnic, or identitary boundaries; nor does it make sense to try to withdraw from these territorial struggles so as to 'move to the global level' and grasp the Earth 'as a whole.' The subversion of scales and of temporal and spatial frontiers defines the Terrestrial" (*Down* 93). Terrestrial realism, with its careful balance of individuated lived experience counterposed against a set of planetary power structures that are never wholly cognizable on the scale of the individual, provides a literary mode through which these new frontiers can be mapped.

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