12.

Climate Change and the Struggle for Genre

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The search for Anthropocene genres has been energetic, contentious, and popular. People outside of academia, people who might not be expected to care about genre, are looking hard for Anthropocene genres—for patterns of expectation and narrative form with which to combat this unsettling era of climate shift and social injury. Much that we know—and I will risk this "we" to indicate humans broadly—about life and its parameters falls apart in the shadow of global climate change. Habit, the subjective practice of reality, frays in this unique moment of global ecology, and such fraying indicates a potential shift in human understandings of the everyday. Ultimately in this chapter I turn to the novel as one genre of the everyday, but I begin with a humbler genre, the news. The news and the novel have been paired before, as generators of imagined community (namely, the nation). In most cases, nations can no longer be said to coalesce around either genre in an era of screen culture and self-selecting publics. For those whose reading is restricted to sources chosen to bolster an already decided vision of the real, the news will not "happen," as it does for those of us who still enjoy the surprise of turning a page, either on a screen or in print. To the extent that this chapter anticipates the possibility of surprise, it addresses those who still seek it—and the extension of intersubjectivity that surprise might entail—by reading what they have not curated so closely as to exclude any inconsistencies in ideology or worldview.

For sociable readers, who want to encounter and dwell with others, one look in the newspaper hints at a world unlivable by previous standards: "sunshine flooding" in southern Florida eighty days of the year, the Iranian city of Bandar Mahshahr reaching a heat index of 165 degrees Fahrenheit, the Great Barrier Reef nearly dead.[1] As a genre, the news has long been a dystopian account of the everyday, anecdotes of catastrophe digestible with coffee, a training ground for

forgetting all sorts of endings, including mortality. But climate change "news" fails to be "news" insofar as it implies an end to the everyday itself, since the everyday relies on human habit and its complement of forgetting. Extreme weather, including superstorms and severe drought, and all of these conditions that are taking hold *as conditions* rather than as events shift the ground of habit and call attention to the profoundly ecological, interdependent state of humanity. Climate change represents, among other things, an assault on the everyday. This means that it will register in those genres intended to query and explore what is understood as probable, cyclical, and even trivial experience.

The everyday implies getting by, living alongside the world, living through it. One of the reasons that the American protoenvironmentalist Henry David Thoreau hated "the news" was because it implied that "the world" is a disposable externality, a serial fiction with an iterative and forgettable plot. (Thoreau's extensive recording of seasonal variations in his journals registers the apparently small differences within cycles in such a manner as to show profound respect for those nonhuman agents—for example, berrying bushes—that are irreducible to human plotting.) As Stacy Alaimo and other new materialist thinkers remind us, the environment is not an externality. Toxic off-gassing from our carpets, intestinal bacteria, and climate all make clear that the world lives inside of us, and we it.[2] This realization, theorized as transcorporeality (bodies moving across, through, and inside one another) by Alaimo,[3] comes to the doorstep and to ordinary talk in climate change news. In a kind of anti-obituary in the weather section of the *New York Times*, victims of Hurricane Sandy are described as deindividualized bodies arrayed amid storm-fallen trees and flooded streets.[4] This is news without the therapeutic structuring of plot, the obituary denied the familiar arc of an individual life. It is an Anthropocene genre, the weather section obituary. In it, human lives disappear into a map of unprecedented storm damage that can be anticipated as symptomatic of a shifting ground condition, a new everyday.

Cli-Fi as Novelistic Mode

Faced with an everyday in which the habit of living alongside the world crumbles under pressure from material impingements—superstorms, flooding—we are at the edge of something, perhaps modernity, perhaps even "humanity" depending on how you define it. Since climate change began to show itself in the late twentieth century, varied genres have come into being to speak, self-consciously, of

human extinction, both real and philosophical. Climate fiction (cli-fi) is the most popular. It is the focus of this chapter, both because of its notoriety and because of its explicit project of redefining humanism and the humanities.

I will not attempt a typology of cli-fi. Fictions that have been called cli-fi are remarkably diverse, from psychological realism to science fiction to newer genres attempting to stand apart from cli-fi, such as solarpunk. Cli-fi ranges across media, including digital, television, film, short fiction, the novel, and memoir. That said, I recognize cli-fi across genres and media as a symptom of a social need, the need for new patterns of expectation, to paraphrase Lauren Berlant's capacious description of "genre."[5] This call for genre comes at a moment when life as many humans know it is changing at a pace and scale difficult to imagine. My discussion of climate change begins in the struggle for genre, by which I mean the struggle to find new patterns of expectation and new means of living with an unprecedented set of limiting conditions. More explicitly, in this chapter I address the ways in which cli-fi aspires to envision a climate change culture for readers who are in some cases losing their sense of what it means to be human, to generate culture, and to love.

This intimate and collective questioning of what it means to be human—reflecting the ontological insecurity that sociologist Kari Norgaard identifies in lived experiences of climate shift[6]—recommends response in what I describe as the "novelistic mode." In Alastair Fowler's classic account of literary forms, genres are structures that coalesce, rigidify, and open out to experimentation and dissolution, while "mode corresponds to a somewhat more permanent poetic attitude or stance, independent of particular contingent embodiments of it."[7] For Fowler, mode is what is left once a genre decays. Structural innovation ceases within a particular genre, the genre disperses into the fuzzier attitude of mode, and the mode in turn may generate newer genres. But cli-fi is a relatively new structural response to changing social and ecological conditions. If anything, it is just now coalescing. My insistence on it as a novelistic mode reflects my interest in mode as "a method, a way of getting something done," in the words of the science fiction scholar Veronica Hollinger, who sees sci-fi in particular as less a genre than a way of living in the world.[8] Cli-fi, I argue, marks another way of living in the world—a world remade profoundly by climate change. Hence, I practice a version of distant reading, surveying numerous works in this chapter not to create a graph or tree of cli-fi's dispersion and evolution, but rather to attempt to capture the social attitudes and desires, the atmospheric mode, of cli-fi.[9]

The novelistic mode offers a method for making social worlds by modeling individual consciousness in relationship with imaginary but possible worlds. Literary historians like Nancy Armstrong have lamented the privatization of human experience by the European novel, its tendency "to attach psychological motives to what had been the openly political behavior of contesting groups."[10] By contrast, cli-fi, like its older sibling sci-fi, indicts the privatization of human experience even as it participates in novelistic modes of action. That is, it makes the social through the vivid evocation of individuals in relationship with possible worlds. The need for cli-fi is profoundly social, although its realization rarely includes a vibrant evocation of collective, rather than individual, experience. Finally, the novelistic mode of cli-fi is not restricted to any subgenre within what Franco Moretti identifies as the diverse system of novelistic genres:[11] cli-fi can be seen as realism, sci-fi, and even memoir, a close relative of the Euro-American novel from its beginnings in epistolary form.

Setting: The Everyday Anthropocene

Cli-fi summons and chafes against a neoliberal feeling-state that I call the "everyday Anthropocene." The genealogy of the everyday Anthropocene as a background setting for cli-fi begins, for me, in the *Parable* novels of Octavia Butler. These novels have been widely regarded as speculative fiction and only recently associated with the term "cli-fi," which was coined around 2007, after Octavia Butler's death. Nonetheless, the *Parable* novels offer a social and historical dimension to cli-fi that I find indispensable to the larger project of making climate change publics savvy enough to imagine both thriving and surviving with global climate change.

Butler describes the realization of the everyday Anthropocene (without naming it such) in *Parable of the Talents* (1998), the second novel in her magisterial, unfinished trilogy that began with *Parable of the Sower* (1993). For Butler, the era of humanity's succumbing to the collateral damages of modernity is identified as the "Pox," an outbreak of socioecological disease. "The Pox was caused by accidentally coinciding climatic, economic, and sociological crises."[12] The "Pox" names a relatively short period of time, lasting roughly from 2015 to 2030, in which the world as it was known in the 1990s, when the two *Parable* novels were written, came undone. "Overall, the Pox has had the effect of an installment-plan World War III," writes the narrator of this section of the novel

(*Parable of the Talents*, 8). He is Bankole, an African American doctor who was born in 1970 and can testify to the fact that the Pox has a long history, beginning before 2015. "I have watched as convenience, profit, and inertia excused greater and more dangerous environmental degradation. I have watched poverty, hunger, and disease become inevitable for more and more people" (8). The cultural work of the *Parable* novels involves reconciling the crises of dystopian story structures with the habits of living on, which underwrite what I call the "everyday." As other readers have noted, Butler indicts neoliberal policies, such as privatization and deregulation, as causes of climate change and of the collective and intimate forms of social suffering that it entails, including widespread refugeeism.[13]

The primary protagonist of both *Parable* novels, Lauren Olamina, founds a religion called Earthseed, which emphasizes constant attention to the changes seemingly imposed on us by the material world. We might "shape" these changes if we refuse to forget our embeddedness in them. Olamina's mantra, "shape the change," implies attending vigilantly to the world that enters and impinges on us.[14] As Sylvia Mayer notes, *Parable of the Sower*, in particular, borrows from the prescriptions for collective liberation evident in the genre of the American slave narrative, where escape from bondage depends on both print literacy and environmental literacy ("Genre," 193). Such preparation might take the form of learning Indigenous uses of medicinal plants, communal gardening, and marksmanship. Habits of close attention are integral to Butler's notion of bringing about the interruption of the future, in Fredric Jameson's terms, by which Jameson means utopian thought that truly breaks from ("interrupts") current hegemonies.[15]

Drawing on long histories of colonialism, slavery, debt peonage, rape, and resource extraction, Butler's *Parable* novels "[criticize] the emerging neoliberal world" *and* allow for the possibility of meaningful resistance to it (Streeby, "Speculative Archives," 34). Shelley Streeby places the *Parable* novels in the category of "critical dystopia," where a background condition is deplored, but still the possibility of new sites of resistance can be imagined (34). Thus, Butler's broad setting is the everyday Anthropocene, by which I intend to evoke neoliberalism as both a feeling-state and its underlying socioecological conditions, characterized by enduring crises that never quite come to a head. The philosopher Teresa Brennan has coined the term "bioderegulation" to describe the effects of impossible but undramatic conditions of labor in the wealthier world within late capitalism, conditions that kill slowly by means of stress, sleep deprivation,

anhedonia.[16] The cultural critic Rob Nixon writes in a complementary fashion of "slow violence" as it affects the world's poor. This wearing, structural violence has been carried out, over time, against the poor and the places in which they live through the diverse practices of colonialism—from fossil fuel extraction to territorial occupation to, again, economic globalization.[17] Both bioderegulation and slow violence ask us to think through environmental degradation, war, and even extinction without the irresponsible and self-indulgent excitement attached to narratives of apocalypse.

The everyday Anthropocene offers a setting or space-time for bioderegulation and slow violence, and it names my correction to contemporary epochal discourse that capitalizes on the charisma of crisis. By "everyday Anthropocene" I imply the present tense, lived time of the Anthropocene, and I recommend paying attention to what it means to live, day by day, through climate shift and the economic and sociological injuries that underwrite it. Epochs are not attentive to the wearing away of bodies, their slow depletion. Epochs are time monuments, attaching us—by "us" here I mean those elite humans who identify ourselves with world authorship—to stone, to universal history. As such, the idea of epochs works to organize new modes of forgetting. The Anthropocene, conceived as a geologic epoch, is a coping strategy of sorts, externalizing not the world so much as time, such that we can forget the moment-by-moment loss of the world by naming its passing on a geologic scale authenticated (and externalized) by a golden spike. Whether the spike marks the radioactive traces of the atomic age present in rock strata or the sedimentary evidence of reforestation after the seventeenth-century genocide of Native peoples of the Americas, it is an indicator that our own time can be understood as displaced onto an elsewhere in which narrative significance resides. The elsewhere is the stratigraphic record, not history per se, and it is not exactly continuous with ourselves.

In contrast, the everyday Anthropocene offers a more granular and personal account of near catastrophic change that believes not in new worlds or even new humanisms so much as "in this one-shot life and the body." These words come from the African American writer Ta-Nehisi Coates, and they name what I see as the focus of the novel in the era of climate change.[18] The project of the Anthropocene novel, I argue, is at best a project of paying close attention to what it means to live through climate shift, moment by moment, in individual, fragile bodies. It is at best a project of reinventing the everyday as a means of paying attention and preparing, collectively, a project of staying

home and, in a sense distant from settler-colonialist mentalities, *making* home of a broken world.

The philosopher of science and longtime SF (both sci-fi and speculative feminist) practitioner Donna Haraway makes a similar point when she writes of "staying with the trouble" as an antidote to the "abstract futurism" that can be imagined in response to the epochal shift of the Anthropocene. "Staying with the trouble requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings" (*Staying*, 1). Haraway recognizes Butler's *Parable* novels as complementary to her "own explorations for reseeding our home world," for making refuges for those threatened by displacement and extinction (119). I too see the *Parable* novels as a working model for stories to live by—rather than stories to die by—in a time of climate shift and potential social collapse. This project of the novel within the lived time of the everyday Anthropocene has been more explicitly identified by writers of color and by feminist writers and philosophers than by the elites who have not yet experienced what Coates calls "the plunder of our bodies" (*Between*, 37).

Referring to people who imagine themselves to be white Americans ("Dreamers"), Coates writes in his memoir, *Between the World and Me* (2015), in relation to global climate change: "the Dreamers will have to learn to struggle themselves, to understand that the field for their Dream, the stage where they have painted themselves white, is the deathbed of us all. The Dream is the same habit that endangers the planet, the same habit that sees our bodies stowed away in prisons and ghettoes" (152). Coates did not write a cli-fi novel or even recommend the writing of such novels. However, his book recognizes the climate change era as an extension of a protracted struggle, born of many centuries of colonialist history. His intimate relationship to that struggle and the dialectic between individual and social experiences (with each making over the other, through time) in the memoir places it in the novelistic mode, to a degree. *Between the World and Me* shares some of the assumptions about how the Anthropocene arises not as a geologic epoch so much as lived experience, a culmination of historical tendencies, which we see in Butler's "installment-plan World War III." Similarly, the African American poet Jerry Ward Jr. describes "climate change" as "World War III," which is both a "race war" and a war of survival fought by the human race, in his memoir about life in New Orleans after Hurricane Katrina, *The Katrina Papers* (2008).[19]

These African American versions of the Anthropocene note that the Anthropocene cannot be conceived apart from colonialist practice, including racism, the first act of enslavement (predating African American history, of course), the first rape, the first territorial theft. The authors acknowledge that nature, at least in the form of the human body, has never been an externality. And they imply that what we—meaning all humans—face is not necessarily an end, but profound change, struggle, war, and perhaps a reapportionment of socioeconomic burdens and powers. I make note of the everyday Anthropocene in the context of what might be called an anticolonialist or even Black Anthropocene as a means of giving depth to a central preoccupation of all cli-fi, which is the loss of humanity, as authors variously define it, and often also the loss of "civilization"—with, at times, an explicit call for new humanisms and new cultural forms. Not all cli-fi is as attentive to the possible upending of relations of power as are these black and postcolonial Anthropocene visions, however.

Learning to Die as Novelistic Practice

Roy Scranton's memoir, *Learning to Die in the Anthropocene* (2015), makes a call for new genres and new forms of "civilization" consonant with the goals of many practitioners and defenders of cli-fi. Like Coates, Scranton writes about his individual experience as a way to converse with and perhaps shift the political field, and he makes his central theme confronting the threat to the self that lurks implicit in climate change. So, I place him as a practitioner of the novelistic mode of climate change representation. Drawing from his experiences as a soldier in Iraq, as an environmentalist, and as a graduate student in the humanities at Princeton, Scranton writes: "In order for us to adapt to this strange new world, we're going to need more than scientific reports and military policy. We're going to need new ideas. We're going to need new myths and new stories, and a new conceptual understanding of reality, and a new relationship to the deep polyglot traditions of human culture. . . . We need a new vision of who 'we' are. We need a new humanism—a newly philosophical humanism, undergirded by new attention to the humanities."[20] Here Scranton's call to philosophy and the arts is expansive enough to embrace the work of Octavia Butler and Donna Haraway, if we allow that his "new humanism" might be conceived as posthumanism or multispeciesism. Scranton invites broad participation. Potentially,

his call could be seen to embrace even Indigenous writers and thinkers like Thomas King, whose cli-fi novel *The Back of the Turtle* (2014) introduces the possibility of a multispecies (post)humanism based in First Nations cosmology but accessible to settler allies.[21]

Where Scranton departs from what we might see as a transcultural, coalitional project of remaking humanism in the era of climate change is signaled by the apocalyptic gesture of his book's title, "learning to die," and his subtitle, "reflections on the end of a civilization." Scranton explains, referring explicitly to the Western philosophical tradition of liberal humanism: "If, as Montaigne asserted, 'To philosophize is to learn how to die,' then we have entered humanity's most philosophical age, for this is precisely the problem of the Anthropocene. The rub now is that we have to learn to die not as individuals, but as a civilization" (*Learning*, 21). Of course, *who* is learning to die as a civilization is a relevant question. The Citizen Potawatomi philosopher Kyle Whyte makes clear that "our ancestors"—meaning not only Potawatomi people but all Native North Americans—have already endured and lived beyond the end of their world; they are working now on shoring up and conserving what is left.[22] King in *The Back of the Turtle* makes a similar argument, if more fancifully, by staging the return of a prodigal Native son, Gabriel Quinn, to the home river in British Columbia that he inadvertently ruined through the release of a lethal pesticide, which, now banned, moves surreptitiously across the oceans on a barge. The barge itself eventually floats back to the home territory carrying its toxic load. Finally, it is pushed and "sung" away from the home shore by Quinn and a community of survivors.

Both King and Whyte argue, essentially, for collectivism and conservationism as means of living with climate change. They imagine coming together in local communities, often watershed-based, to save what can be saved. Octavia Butler's *Parable* novels strike an uncomfortable balance between this kind of local commitment or "taking care of unexpected country," in Haraway's phrase,[23] and a more typically American and transcendentalist imaginary that includes the possibility of space travel and the settlement of new planets.[24] In contrast, much of the cli-fi of Europe, white America, Britain, and Scandinavia echoes Scranton's central theme: living through climate change means, first, "learning to die" or, in another of Scranton's phrases, "letting go."

I mentioned Ta-Nehisi Coates earlier in part because to me it is remarkable that his memoir on race in America ends with a discussion of climate change, but also because in those pages are, I think, some keys to why the theme of

learning to die is so prominent in Euro-American (and, arguably, European) climate fiction. Coates's book begins with a discussion of embodiment—black embodiment, America's obsession with black embodiment, and the necessity of accepting the body as life—all of this in order to live as one chooses in a black body. "In accepting both the chaos of history and the fact of my total end, I was freed to truly consider how I wished to live—specifically, how do I live free in this black body? It is a profound question because America understands itself as God's handiwork, but the black body is the clearest evidence that America is the work of men" (*Between*, 12). Putting aside what is by no means a marginal point about the historical creation of black bodies in the United States, I focus on the more implicit idea here that not having a body—not thinking of one's body as oneself—is a privilege denied to people understood to be black, as well as to some other kinds of people.

The privilege of not thinking of oneself as embodied, as matter overwritten and writing history, is a privilege lost to all humans, including those imagined to be white, in the era of climate change. Climate change presents a radical challenge to ways of living once seen as unencumbered by material constraint—for example, living as white, living as hypermobile in a culture of speed, living as a top consumer in an age of credit. Learning to die, as a theme of cli-fi, is always in part the problem of coming back to oneself and one's defining conditions as problems of recalcitrant matter. "Letting go" is losing any trappings of social transcendence—whether these are understood as whiteness, wealth, heteronormativity, or national belonging. When learning to die enters novelistic practice, it assumes particularity—for example, Scranton's experiences in war—that invites readers' empathy, theory of mind, and, to some extent, identification. The theme of learning to die as played out in novelistic practice also tends to mask the contention built into the proposition that there is a "we," a broad if not universal social category, who must learn to die. I argue that a historical argument would be different: there are people in this world who already have learned to die, and there are people who, faced with anthropogenic climate change, are only just now learning to die.

For cli-fi writers in the Euro-American tradition, learning to die implies letting go of some cherished tenet of humanism. Sometimes this letting go proves productive of new aspirations for humanity and human sociality. In other instances, learning to die means recognizing oneself as a biological entity, challenging traditional humanist ideas of the sovereign self. In the English novelist J. G. Ballard's *The Drowned World* (1962), often cited as one of the earliest

examples of cli-fi, entering into climate collapse and embracing a new Europe of flood and tropical heat means, for the protagonist Bodkin, "abandoning the conventional estimates of time in relation to his own physical needs and entering the world of total, neuronic time, where the massive intervals of the geological time-scale calibrated his existence."[25] For Ballard, climate change invites a kind of white flight from social and historical responsibilities into a trippy, "neuronic" existence in line with countercultural fantasies of the 1960s. What I sardonically call "white flight" here marks my response to *The Drowned World*, a novel at ease with a tired discourse of racial primitivism. It may be that the effort of imagining a species mind, so to speak, tends to preclude more nuanced understandings of social history and power. The historian Dipesh Chakrabarty in his influential critique of Anthropocene thought worries about whether social injustices can be addressed when one thinks of oneself as a member of a species rather than a historically specific community. To paraphrase Chakrabarty, once we begin to think of ourselves as a species exercising its brute force on the planet, then it becomes quite difficult to think in more nuanced terms about histories of uneven (human) power, including colonialism and the like.[26] Yet Chakrabarty also argues that the thought experiment of feeling oneself, phenomenologically, as part of a species may be necessary to understanding and addressing global climate change.

To know oneself as embodied in a deep, evolutionary sense may bring about both a profound remembering of ecological enmeshment and an invitation to forget one's specific history or relationship to power. Kim Stanley Robinson's monumental Science in the Capital trilogy (2004–7) offers a nuanced recognition of the responsibilities attendant on biological self-realization in the character Frank, a primary narrator whose fascination with sociobiology leads him to reflect on his social motives from the perspective of species tendencies. This profound self-consciousness, which is also a consciousness of the self as species, does not lead to consistently altruistic or just behavior. Yet Robinson's inclusion of a sociobiological plot in a realist series of novels about the marginalization of science in U.S. politics makes an interesting statement about how understanding climate change calls for a surrender, essentially, of the sovereign self to biological notions of being. Bringing science into the U.S. capital, into policy making at the federal level, might require a philosophical sea change in which we begin to recognize ourselves as primates with specific endowments and limitations.

A more literal take on what it means to die into a recognition of oneself as nonsovereign and embodied is found in Cormac McCarthy's *The Road* (2006),[27]

a novel that I see as a latecomer to the postnuclear annihilation subgenre of speculative fiction but that has been embraced by environmentalists, including the well-known author George Monbiot, as cli-fi.[28] In *The Road*, the nameless protagonist recounts his descent into embodiment through near starvation and a wearing sickness. For McCarthy, loss of the sovereign self when that self is, as in the case of his protagonist in *The Road*, a father, also implies the potential loss of patriarchal order, morality, and the capacity for love—at least until a new father/god figure can be found. The profound fear of social failure at the core of U.S. masculinity is on display in McCarthy's work, provoked in this novel by a devastating and sudden climatic change, perhaps caused by nuclear detonation, which has rendered the world sterile. Unfortunately, to my mind, McCarthy resolves the crisis of American masculinity and all of the systems that this crisis generated historically (the nuclear family, a Protestantism centered on an all-powerful father, weapons of mass destruction) by simply offering another, healthier father figure—walking out of the dust like a miracle—at the novel's end. Thus, *The Road* ultimately refuses Scranton's invitation, the invitation arguably posed to white America and wealthy America by climate change, to learn to die.

Scranton's prescription for learning to die in the Anthropocene may begin with learning to die as an individual—something he understands intimately through his service in war. But the larger implications of the prescription involve learning to lose one's "civilization," by which Scranton seems to mean both the best that has been thought and said, and the zombie-like habits of consumerism, social media addiction, and political spectatorship. "Learning to die as an individual means letting go of our predispositions and fear," Scranton writes. "Learning to die as a civilization means letting go of this particular way of life and its ideas of identity, freedom, success, and progress" (*Learning*, 24). Given my initial approach to the topic of learning to die in climate fiction, it may not be necessary to ask, again, *whose* civilization must be let go? Nonetheless, I reiterate the question so as not to let it creep too far to the margins of this argument, because cli-fi and discussions of it too often assume an all-inclusive "we." For now, "we" is the European American subject, comfortable enough in wealth, contemplating not only the loss of self-sovereignty but also the end of a kind of culture that has exceeded its ecological carrying capacity.

Two of the most stylistically impressive cli-fi novels to date, the Canadian author Emily St. John Mandel's *Station Eleven* (2014) and the British author Marcel Theroux's *Far North* (2009), enumerate cultural losses in the process

of imagining deeply detailed and (by virtue of their imaginative richness) to some extent compensatory futures. Mandel's "incomplete list of things disappeared after the end of the world" includes "cities," "films," "screens shining in half-light," and with the loss of the cultures of print, celluloid, and screen, "no more reading and commenting on the lives of others, and in so doing, feeling slightly less alone in the room. No more avatars."[29] Blazoned with the phrase "Because survival is insufficient," the horse-drawn buses carrying Mandel's protagonists crisscross the Great Lakes region, a relatively safe territory. The protagonists are musicians and actors known collectively as the Traveling Symphony. They perform concerts and Shakespeare plays for those who are left in the former United States of America, the survivors of the Georgia flu. They are, in essence, "staying with the trouble" by practicing those elements of their former civilization that they find still useful—and the useful things include literature and art. The Georgia flu was a pandemic apparently accompanying climate change, and it wiped out most of the human population, ending the modern world. Mandel invests the material artifacts of informational and narrative culture (screens with their eerie light, paper books colored with bright inks) with sensuous power and resonance—in the sense of social memory. The loss of these things does not serve as a scolding referendum on modern consumerism. As Mandel's Museum of Civilization suggests toward the novel's end, the objects that made up the cultures of the wealthier world—the world that accelerated global climate change—hold the keys to redemption as well as the symptoms of shortsightedness and civilizational collapse. Mandel's subtle conceptual response to near extinction inheres in her insistence on not simply letting go of the culture that brought about the "end." The protagonists in *Station Eleven* act as bricoleurs, repurposing what they recognize as still usable from the old culture.

For Mandel, as for Marcel Theroux in *Far North*, the airplane more than any other Anthropocene object signifies the gorgeousness, globalism (affirmative *and* imperialist), and profound arrogance of modernity. "The end of air travel" (*Station Eleven*, 35) is the name Mandel gives to the transitional phase between civilizational collapse and her straggling "afterward." Theroux's protagonist, a woman named Makepeace who passes as a man through most of *Far North*, sets out on the journey that sparks the novel's plot in search of a downed airplane. Another airplane—and the desire to travel on it—brings her to the novel's climactic conflict. Reflecting on her decision to leave her relatively safe compound in search of the downed plane, Makepeace confides: "Seeing that plane the first

time in the lake, I'd never known hope like it. . . . The plane was a sail, luffing and snapping to a new course as it came to find me. I would walk on its warm deck with my pretty feet. There was silk and cloves in its hold, coconuts, oranges. Well, I guess it brought on the hooey in me."[30]

For both Mandel and Theroux, airplanes offer a false promise of human connection and even closeness to "the world," when the world is abstractly conceived in terms of mappable distance and totemic commodities, like oranges. More authentic connections in their post-apocalyptic story worlds are violent, raw, and simply awkward, like the knife fights remembered on the bodies of Mandel's protagonists, or the forgettable sex between Theroux's Makepeace and a fellow wanderer, which produces an unexpected child. Perhaps the point is that we "moderns" have never transcended the profound frictions of social encounter, have never been cosmopolitan or particularly socially intelligent—even in the age of airplanes. Certainly, Ian McEwan's realist cli-fi novel *Solar* (2010) serves as an indictment of human intelligence as it is conceived by wealthy moderns. McEwan offers up the worldly man of science as a philandering, cowardly glutton, a figure who performs the profound vulnerability of the rationality attributed to science.

Nathaniel Rich's cli-fi novel *Odds Against Tomorrow* (2013), which became a sensation in part because of Rich's apparent prediction of Hurricane Sandy through a powerfully imagined New York City flood, investigates the degree to which speculation, in the form of risk assessment scenarios for insurance purposes, is a largely irrelevant form of intelligence too. While Rich's explicit target is the actuarial logic of modern risk society, his send-up of a risk analyst who invents fabulous scenes of infrastructural collapse to some extent indicts the project of the cli-fi novel itself. In *Odds Against Tomorrow*, the combination of imagination and archival analysis that leads to actuarial prediction (and to speculative fiction) cannot compete with geological force: both kinds of speculation come off seeming, at last, impotent. Rich's protagonist, Mitchell Zukor, reverts to a primal version of himself (once again, learning to die into species being), bulking out and bearding up as he develops basic survival skills, like foraging.

The masculinist Paleo romance that too often serves as the last act of climate fiction is reminiscent both of the survivalist environmental populism of the nuclear age—of which James Dickey's *Deliverance* (1970) offers a respectful critique—and of the popular American Western, where wild (white) men such as John Wayne's Ethan Edwards in *The Searchers* (1956) "tame the wilderness" to make it safe for settlers, which in the Western typically means the nuclear family.

Even a novel as interested in feminism as Theroux's *Far North* offers consistent homage to Western-type scenes, as in the protagonist's concluding advice to her daughter: "When you're ready to light out of here, take the Winchester and the fastest pair of horses and go" (314). Women, at best a silent backdrop to the masculine exertion of the Western, often appear as a site of extreme vulnerability and even as luxury in cli-fi. The female protagonists in Butler's *Parable* series and in *Far North* must pass as men, *The Road* depicts women as slaves and as silent or dead partners, the Finnish author Antti Tuomainen's *The Healer* (2010) is dramatized around the loss of a woman and the near impossibility of heterosexual love in the time of climate collapse, and Edan Lepucki's *California* (2014) explores how the female capacity for pregnancy threatens a climate change survivalist community led by men schooled in Western humanism at an all-male liberal arts college. Even the savvy female survivor of Paolo Bacigalupi's multilayered cli-fi novel *The Windup Girl* (2009) is, after all, a "new person," meaning a kind of cyborg with female-shaped secondary sex characteristics designed for others' pleasure.

The woman problem in cli-fi moves across an ideological spectrum from the popular Western's assumption that new and unsettled environments (in this case, post-Holocene climates) are inhospitable to "vulnerable" female bodies to a more complex concern with population control that is played out through the suppression and even reembodiment of female characters. Haraway's imperative to "make kin not babies!" neatly glosses the ways in which new kinds of affiliation or kin making might assist population control, an issue at the core of her nuanced call to stay with the trouble we humans have brought into being (*Staying*, 101). The highly politicized questions of overpopulation and how to curb it without reprising a colonialist practice perhaps call for a drafting stage through speculative fictions. Margaret Atwood's MaddAddam trilogy (2003–13), speculative fiction with collateral interests in climate change, portrays a sustainable, genetically engineered society in which the cultural significance of gender and sex has dissolved. After a massive die-off of *Homo sapiens sapiens*, Atwood's new humanlike creatures mate as most primates do: infrequently, in the season of estrus, and without anxiety, romance, or art.

Coda: The Social Work of Cli-Fi, Beginning in Love

All of this leads to the primary questions haunting cli-fi and other Anthropocene genres invested in imagining the future as we live through the shifting present:

Will there be love in the era of climate collapse? If so, what will it look like? I argue that such questions of intimate attachment, appropriate to the project of the novel since its inception in the eighteenth century, are the ones most likely to drive the quest for a "new humanism," which Scranton and others have endorsed, because love demands, first, a theory of attachment (a fundamental psychological model); second, a practice of caring (a fundamental social practice); and, third, a fundamentally political categorization of worthy objects, of persons—human and nonhuman—deserving of empathy and care. Cli-fi authors have displayed diverse, tentative approaches to the question of love and how it might be answered within nascent climate regimes.

Barbara Kingsolver's *Flight Behavior* (2012), one of the most socially progressive and even hopeful cli-fi novels to come out of the United States, imagines an almost spiritual love (agape) reignited by wonder at other life forms, such as the monarch butterflies who are central actors in her plot. Kingsolver's interest in biophilia as a human expression of attachment that is born of both science and faith suggests the biologist E. O. Wilson's simultaneously empiricist and faith-based arguments for the wonder of biodiversity as an impetus to planetary-scale conservation. In a manner more ironic and polemical than Kingsolver, Jonathan Franzen also suggests in his climate-change-themed essays "My Bird Problem" (2005) and "Carbon Capture" (2015) that love, in the era of climate change, inheres in attachment to other life—but necessarily small attachments to limited life forms and places, attachments that can be enacted through local conservation or appreciation (e.g., birdwatching).[31] The writer Jeff VanderMeer's Southern Reach trilogy (2014), which VanderMeer explicitly asks not be identified with cli-fi but rather with the more capacious category of Anthropocene fiction,[32] offers a posthuman vision of the proliferation of life forms in the wake of human extinction and post-Holocene human evolution. The fertility of the world VanderMeer imagines into being on the U.S. Gulf Coast is both gorgeous and profoundly destabilizing to human bodies. Reading VanderMeer requires working through ecological terror to a non-human-centered and perhaps impossible love for a world that is no longer suited to human thriving.

In a different vein, Dale Jamieson and Bonnie Nadzam's *Love in the Anthropocene* (2015) renders "love" as, among other things, an enactment of memories of the kinds of relationship that the Holocene's climate afforded, such as family trout fishing in mountain rivers. Scranton, too, calls for memory as, if not a mode of love per se, then the most fundamental means of cultural survival, by way of cultivating intergenerational community and knowledge during

climate shift. Scranton writes: "If being human is to mean anything at all in the Anthropocene, if we are going to refuse to let ourselves sink into the futility of life without memory, then we must not lose our few thousand years of hard-won knowledge, accumulated at great cost and against great odds" (*Learning*, 109). For Scranton, the humanities are fundamentally a project of shoring up cultural memory and rendering it usable for what cannot be predicted but, in some shape, may have happened before. This practice of respecting the stories, beliefs, technologies, and acts of ancestors resonates with Native Americans' protection of traditional ecological knowledges (TEKs), which have become especially important in the climate change era when traditional food sources and animal migrations are shifting in response to accelerated seasons. As Kyle Whyte reminds us, these TEKs make possible future planning and governmental action for Indigenous peoples.[33]

Embracing some version of indigeneity—living long in a place—has been an appropriative gesture of settler colonialists. Perhaps a better way forward, at a moment when it seems to me that we all must consider carefully what it means to live long in a place, would be to rethink the meaning of "settlement," to move beyond colonialist imagining toward a practice of caring about where it is that we are now. Caring for country, conservationism, loving local and small (as opposed to the view from the airplane) cannot be individualistic practices, and in fact they imply a more ecological and embedded politics. The depiction of these kinds of settled practice, these revised habits, competes in cli-fi with charismatic end-times. Learning to die is a practice of living, after all. And, I reiterate, the novelistic mode always has offered opportunities for trying out and testing material and social relations. The feeling-states that language can evoke through mimicked perception are externalized and simplified in visual narrative.

A gorgeous homage to what I call "deep homing" appears in Richard McGuire's graphic novel *Here* (2014), which recounts the longue durée of a single room from eons prior to its construction (50,000 B.C.E.) to distant futures after what appears to be a climate-induced flood and then curation of the watery waste in a posthuman museum. Perhaps love, in the time of climate change, demands memory *and* speculation, by which I mean attachment to multiple generations, distant futures as well as distant pasts, all times worthy of curation and song. What could be more difficult than loving across time, across futures and pasts not known? Not attempting to do so might be easier, but lonely—especially in the years of early climate shift, our diminished present.

Notes

1. It is not possible to list every instance of such news, but one example that includes a discussion of the phenomenon of sunshine flooding is Justin Gillis, "Global Warming's Mark: Coastal Inundation," *New York Times*, September 4, 2016, 1.

2. These ideas are developed in many of Stacy Alaimo's articles and books, but for the most succinct version, see Alaimo, "Sustainable This, Sustainable That: New Materialisms, Posthumanism, and Unknown Futures," *PMLA* 127 (May 2012): 558–64.

3. "Transcorporeality" is the key word elaborated throughout Alaimo, *Bodily Natures: Science, Environment, and the Material Self* (Bloomington: Indiana University Press, 2010).

4. I include a long reading of the *New York Times* weather section of November 18, 2012, in my chapter "Humanities after the Anthropocene," in *The Routledge Companion to Environmental Humanities*, ed. Ursula K. Heise, Jon Christensen, and Michelle Niemann (New York: Routledge, 2017), 473–81.

5. Lauren Berlant, *Cruel Optimism* (Durham: Duke University Press, 2011), 6.

6. Kari Norgaard, Living in Denial: Climate Change, Emotions, and Everyday Life (Cambridge: MIT Press, 2011).

7. Alastair Fowler, "The Life and Death of Literary Forms," *New Literary History* 2 (Winter 1971): 199–216, 214.

8. Veronica Hollinger, "Genre vs. Mode," in *The Oxford Handbook of Science Fiction*, ed. Rob Latham (New York: Oxford University Press, 2014), 140.

9. For a more explicit typology see Adam Trexler, *Anthropocene Fictions: The Novel in a Time of Climate Change* (Charlottesville: U. Virginia, 2015).

10. Nancy Armstrong, *Desire and Domestic Fiction: A Political History of the Novel* (New York: Oxford University Press, 1987), 5.

11. Franco Moretti, *Graphs, Maps, Trees: Abstract Models for Literary History* (London: Verso, 2005).

12. Octavia E. Butler, *Parable of the Talents* (New York: Grand Central Publishing, 1998), 8 (hereafter cited parenthetically in text).

13. See Shelley Streeby, "Speculative Archives: Histories of the Future of Education," *Pacific Coast Philology* 49.1 (2014): 25–40; Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 119–20; Sylvia Mayer, "Genre and Environmentalism: Octavia Butler's *Parable of the Sower*, Speculative Fiction, and African American Slave Narrative," in *Restoring the Connection to the Natural World: Essays on the African American Environmental Imagination*, ed. Sylvia Mayer (New York: Transaction, 2003). Hereafter, all of these sources are cited parenthetically in the text.

14. Olamina elaborates what it means to "shape God" in the first novel: Octavia E. Butler, *Parable of the Sower* (New York: Grand Central, 1993), 24–25.

15. Jameson writes: "The Utopian form itself is the answer to the universal ideological conviction that no alternative is possible, that there is no alternative to the system. But it asserts this by forcing us to think the break itself, and not by offering a more traditional picture of what things would be like after the break." *Archaeologies of the Future* (London: Verso, 2005), 232.

16. Teresa Brennan, *Globalization and Its Terrors: Daily Life in the West* (New York: Routledge, 2003), 19. As the title of Brennan's book indicates, she focuses primarily on the wearing effects of economic globalization in the wealthier regions of the world.

17. Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011).

18. Ta-Nehisi Coates, *Between the World and Me* (New York: Spiegel and Grau, 2015), 79 (hereafter cited parenthetically in text).

19. Jerry W. Ward Jr., *The Katrina Papers: A Journal of Trauma and Recovery* (New Orleans: University of New Orleans Press, 2008), 183.

20. Roy Scranton, *Learning to Die in the Anthropocene: Reflections on the End of a*

Civilization (San Francisco: City Lights, 2015), 19 (hereafter cited parenthetically in text).

21. Thomas King, *The Back of the Turtle* (Toronto: HarperCollins, 2014).

22. Kyle Whyte, "Our Ancestors' Dystopia Now: Indigenous Conservation and the Anthropocene," in *The Routledge Companion to Environmental Humanities*, ed. Ursula K. Heise, Jon Christensen, and Michelle Niemann (New York: Routledge, 2017), 206–15.

23. Donna Haraway, "Speculative Fabulations for Technoculture's Generations: Taking Care of Unexpected Country," *Australian Humanities Review* 50 (2011), http://www.australianhumanitiesreview.org/archive/Issue-May-2011/haraway.html.

24. The ambivalent anticolonialist interplanetary settlement fantasy of the *Parable* novels does not quite reconcile with my notion of the everyday Anthropocene. It is more usefully considered within the cultural moment of Afrofuturism in the 1990s. Alondra Nelson, a primary generator of Afrofuturist thought, notes that "future vision is a necessary complement to realism, for the reality of oppression without utopianism will surely lead to nihilism." Nelson, "AfroFuturism: Past-Future Visions," *Colorlines* 3 (Spring 2000): 34.

25. J. G. Ballard, *The Drowned World* (1962; repr., New York: Liveright, 2012), 62.

26. Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35.2 (2009): 197–222; Chakrabarty, "Brute Force," *Eurozine*, October 7, 2010, http://www.eurozine.com/brute-force.

27. Cormac McCarthy, *The Road* (New York: Vintage, 2006).

28. George Monbiot, "The Road Well Traveled," *Guardian*, October 30, 2010, http://www.monbiot.com/2007/10/30/the-road-well-travelled.

29. Emily St. John Mandel, *Station Eleven* (New York: Vintage, 2014), 32 (hereafter cited parenthetically in text).

30. Marcel Theroux, *Far North* (New York: Picador, 2009), 261 (hereafter cited parenthetically in text).

31. Jonathan Franzen, "My Bird Problem," *New Yorker*, August 8, 2005; Franzen, "Carbon Capture," *New Yorker*, April 6, 2015.

32. Jeff VanderMeer's thoughtful reflections on the genre terminology appear in his blog of March 16, 2016: "Global Warming Narratives: The Dangers of Pushing for Early Labeling," http://www.jeffvandermeer.com/2016/03/16/global-warming-narratives-the-dangers-of-early-labeling.

33. Kyle Powys Whyte, "What Do Indigenous Knowledges Do for Indigenous Peoples?" in *Keepers of the Green World: Traditional Ecological Knowledge and Sustainability*, ed. Melissa K. Nelson and Dan Shilling (forthcoming), manuscript p. 14.

13.

Ungiving Time

Reading Lyric by the Light of the Anthropocene

Anne-Lise François

Sweat turned into a cloud that fell as snow to finally become ice
—Camille Seaman, www.vanishing-ice.org

In Northamptonshire and East Anglia "to thaw" is *to ungive*. The beauty of this variant surely has to do with the paradox of thaw figured as restraint or retention, and the wintry notion that cold, frost and snow might themselves be a form of gift—an addition to the landscape that will in time be subtracted by warmth.
—Robert Macfarlane, *Landmarks*

In her paper "Feral Biologies," Anna Tsing claims that "the inflection point between the Holocene and the Anthropocene might be the wiping out of most of the refugia from which diverse species assemblages (with or without people) can be reconstituted after major events (like desertification, or clear cutting, or, or, . . .)." For Tsing, "the Holocene was the long period when refugia, places of refuge, still existed, even abounded, to sustain reworlding in rich cultural and biological diversity."[1] In other words, what permanent climate instability threatens is the existence of margins as an alternative way of accomplishing x.

The margin can be understood both temporally and spatially as the capacity to alternate, as when temporary riverbeds shift between dry and wet land or fields alternate between lying fallow and being cultivated. Tsing may also be understood as designating the Anthropocene as a time of intensified marginality, if we remember that in ecology, the margin or boundary zone carries a related but different sense of the limit of a given plant species' viability—the edge where it is still possible, but only just, for certain varieties, but not all, to

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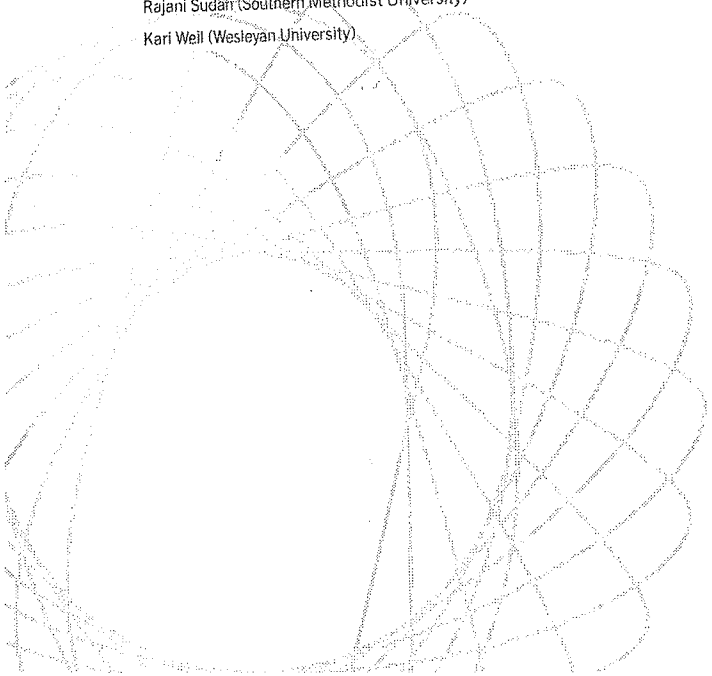

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