Learning to Read Outside: The Vital Role of Feminist Literature in Creating Lively Futures Amidst Environmental Change

by

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Dedication

For my more-than-human kin who point toward vibrant pasts, bright futures,

and playful presents every day:

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Abstract

In this dissertation, I argue that literature is a site for environmental record-keeping, imagining paths of thriving amidst climate crisis, and valuing the more-than-human, and thus plays a vital and lively role in environmental education. I demonstrate that by centering feminist writers who challenge normative concepts of sustainability and prioritize multispecies care as a tool for survival, reading diverse environmental literatures can lead to transformational and just environmental futures. Taking a genre-oriented approach, I explore a broad range of texts to trace the ways that non-canonical feminist environmental writing contributes to environmental discourse across many genres. My first chapter, The Roots of a Clear-Cut: Tracing Feminist Orientation and Environmental Legibility in Twentieth Century Women's Life Writing, engages with Jody Aliesan's journalistic archive alongside poetry and prose life writing by Aliesan, Sharon Doubiago, and Jan Zita Grover. In chapter two, Spaceships, Butterflies, and Plastic Bags: Confronting Change in Contemporary North American Novels, I map a genre of "literatures of arrival" in novels by women writers, including Barbara Kingsolver, Ruth Ozeki, and Margaret Wappler, that explore environmental change outside of the popular conventions of dystopian and disaster-focused climate fiction. In chapter three, The Party Place: Imagining Survivable Futures through the Genre of Speculative Fiction, I extend my discussion to both popular culture texts and small press publications to trace the emergence of speculative fiction black, queer, and crip writers across film, music, fiction, and self-help for activists and organizers. My scholarly interlocuters include feminist materialists, such as Sara Ahmed and Donna Haraway, and

disability studies scholars who see environment and disability as intersecting experiences in and around bodies, such as Alison Kafer and Eli Clare. I also engage with the anti-racist work of community activists and arts-based practitioners including adrienne maree brown and Petra Kuppers. With the support of these feminist environmental methods, I approach my primary texts with a method of reading that identifies their pedagogical perspectives – how the writers learned about their environments through writing and what environmental lessons are conveyed to their readers. The final chapter of my dissertation, Tracks for Teaching: Forging an Experiential Feminist Pedagogy at the Brink of Pain and Change, is devoted to applying what I have learned from reading literature as a feminist-environmental archive to place-based and experiential pedagogical experiences in diverse learning spaces, including undergraduate classrooms. I engage with student voices and disability culture practices of place-based and experiential learning across writing and Women's Studies classes to ask, how might environmental education transform by centering care between teachers, students, and more-than-human beings?

Introduction: Vital Narratives for a Just and Lively Future

I have wished I could rest among the beautiful and common weeds I can name, both here and in other tracts of the globe. But there is no finite knowing, no such rest. Innocent birds, deserts, morning-glories, point to choices, leading away from the familiar. When I speak of an end to suffering I don't mean anesthesia. I mean knowing the world, and my place in it, not in order to stare with bitterness or detachment, but as a powerful and womanly series of choices: and here I write the words, in their fullness:

powerful; womanly.

Adrienne Rich, *Your Native Land, Your Life*

In *Emergent Strategy: Shaping Change, Changing Worlds*, adrienne maree brown asks a question that I extend to the context of reading environmental literature: "What is compelling about surviving climate change?" (58). The question is, itself, compelling and pedagogical. Why be invested in climate change futures and why read fiction about them while living through the ordeal? Thomas van Dooren and Deborah Bird Rose, fellow feminist environmental scholars who study multispecies writing practices, offer the perspective that "Storytelling is one of the great arts of witness, and in these difficult times telling lively stories is a deeply committed project, one of engaging with the multitudes of others in their noisy, fleshy living and dying"

(91). They argue that "Stories are opportunities to test and explore different modes of responsiveness, to 'learn to be affected' in new ways, to cultivate the intellectual, emotional, and critical capacities necessary to recognize our own implication in the world, the consequences of our actions, and possibilities for other kinds of futures" (90). Literature, therefore, is a site for experimentation, where readers can imagine ways through, ways out of, and ways of coping with endings that are caused by environmental crisis. That textual experimentation is the focus of this dissertation. The chapters ahead interrogate how Anglophone literature contributes to readers' ongoing environmental educations through experimenting with environmental imaginaries and multispecies interdependence. This dissertation will explore the role of 20th century to contemporary Anglophone environmental literature by feminist writers, centering women, disabled writers, and women of color in contributing to readers' and writers' environmental educations through genre-based textual analysis and autoethnographic writing informed by experiential education.

The need for new and evolving critical approaches within the environmental humanities is of ever-growing importance as the planet faces environmental change and the Western world confronts its responsibility for environmental crisis. Rather than arguing that the environmental crisis is a problem for science alone, scholars have repeatedly highlighted the environmental humanities' multidisciplinary approach as a useful perspective from which to tackle the environmental crisis (Heise "The Environmental Humanities"; Castree; Bergthaller et al.; Forêt et al.). The environmental humanities has proliferated a range of environmental approaches and issues beyond the fields of science, technology, engineering, and mathematics. For instance,

Wood and Peterson offer that "Artists can paint, sculpt, and create depictions of drought-parched grounds in Africa or vulnerable flood zones in Malaysia; and philosophers can lecture society on its moral culpability for emitting too much CO2" ("Eh"). Bergthaller et al. assert that the literary practice of close reading and other forms of "slow scholarship" within the humanities are necessary in the Anthropocene when "the opportunity for painstaking and riskier thinking is enlarged, even as the time in which such thinking might prove effective appears to be growing shorter" (266).[1] In the context of literary studies, environmental humanities scholars underscore the importance of engaging with textual analysis and interrogating cultural stories to "explain why [humans] care [about endangered nonhumans], not just as individuals but as communities or cultures" (Heise, *Imagining Extinction* 5). Ursula K. Heise explains that literary studies plays a role in the effort to reduce and repair harm to the planet through "[c]ultivating synthetic as well as analytic perspectives, distant as well as close reading, and constructive as well as critical thinking" ("The Environmental Humanities" 29).

I argue in this dissertation that literature is an environmental archive that supports readers through planetary crises and through learning to notice and connect with the more-than-human. Studying environmental change tends to be thought of as a meaningful yet emotionally taxing undertaking. The responsibility of serving as an effective environmental steward and the pressure of holding a deep knowledge of anthropogenic effects on the more-than-human world are

[1] The Anthropocene is the name proposed for the current geological epoch following the Holocene. After Paul J Crutzen and Eugene F Stoermer coined it in 2000, it has continuously accrued popularity and widespread usage, in addition to sparking critique and controversy. See Crutzen and Stoermer's article "The 'Anthropocene'" in the 2000 *IGBP Newsletter,* issue 41.

overwhelming to many people. I approach the environmental humanities with hopefulness. I often think that this is because my entry point is through literature. The closer that I get to the narratives of living through crisis and change, the more affirmed I feel that humankind has the creativity and strength to change the course of the future, even when that course is currently paved with disaster and loss. Questions that guide my path through literary environmental inquiry circle around the relationship between literature and materiality, including more-than-human matter, space, and environments. What is material about the stories that we, as humans, tell? Where do the edges of narrative and earthy materiality find traction with each other? When does reading and writing become a material pursuit? How can learning to read in materially connected ways help us find energy to repair damage and nurture ongoing life when we, as humans, are living parts of a sick planet? Why do I read environmental literature with the urgency of saving the world? And who will carry their reading of this dissertation into future world-changing?

While the umbrella of environmental literature is vast and multifaceted and libraries are stacked with books on climate change, wilderness adventures, and communing with endangered animals, in everyday lived experiences there tends to be a sense of disconnection, distance, and guilt pertaining to human relationships with the more-than-human, rather than connection and curiosity. The texts that I am working with dwell on the ways that the humans, environments, and more-than-human presences interact even when the protagonist is not actively searching for connection with the nonhuman. By recentering the nonhuman and being curious about more-than-human relationships, these texts infuse the presence of environmental and lively, wild

beings in everyday experiences, unlikely settings, and between crises. When the main sources of environmentally engaged narratives are found in literatures of crisis and wilderness adventures where human achievement is often the central focus, it can be challenging to find ways of connecting with the more-than-human in the immediate immediately present without falling back on anthropocentrism and decentering the more-than-human. It can also be difficult to cultivate imaginaries of thriving and sustainable futures out of climate crisis. When anthropocentrism takes hold of dominant environmental narratives, sexism, ableism, racism, and the manifold oppressions of Western culture also maintain their centrality.[2] Ecologist, writer, and indigenous scholar Robin Wall Kimmerer identifies a disconnect between college students' desire to take environmental studies and find solutions for environmental harm and their own inability to "even imagine what beneficial relations between their species and others might look like" (6). The issue of being unable to imagine multispecies thriving stems from two specific problems. The first is a problem with the kinds of narratives that circulate in environmental discourse – both on mainstream and specialist levels. The second is a problem with the availability of narratives that envision imaginaries and futures where organisms thrive across species lines. My textual engagements explore two routes for readers and writers to find ways through these problems. The two routes are to create new stories and to reread existing stories. I am suggesting that

[2] Rosi Braidotti explores the connections between anthropocentrism and patriarchy within the context of posthumanism, where she critiques Western, "Enlightenment-based" humanism as being built on the value of "abstract masculinity" in which "the dominant subject is implicitly assumed to be masculine, white, urbanized, speaking a standard language, [and] heterosexually inscribed" ("Four Theses" 21, 23). Braidotti contrasts the exceptional male human subject with the "posthuman feminist subject" who thrives on knowing difference and "is a complex assemblage of human and nonhuman, planetary and cosmic, given and manufactured" (29). Defamiliarization and "disidentification from anthropocentric values" is necessary to center feminist ways of being in and being with the more-than-human world (30).

feminist environmental humanities follow both of these threads in tandem in order to reinvigorate feminist literary studies with reading and writing practices that center more-than-human presences, lively contact between diverse bodies, and narratives that cultivate just future imaginaries.

Environmental humanities scholars are continually navigating the two problems that I identify. In regard to the first problem, describing her "impatience" with two of the dominant responses to environmental crisis, Donna Haraway challenges both the narrative of having "a comic faith in technofixes" that will solve current crises and "a position that the game is over [and] there's no sense trying to make anything better" (3). Haraway's well-known directive for humankind to "stay with the trouble" in order to work toward "earthly multispecies recuperation and resurgence" is grounded in moving away from such binaries of hope and despair that repeat across the dominant narratives of environmental discourse (8, 4). The second problem is of equal concern in environmental humanities discourse. Scholars have identified a need for crafting more stories that support just and transformational futures where humans and more-than-humans thrive together, as well as literary texts that do not avoid the realities of environmental crisis. In *The Great Derangement: Climate Change and the Unthinkable*, Amitav Ghosh famously accuses literary fiction of failing to take up the climate crisis in its narratives, asking "Are the currents of global warming too wild to be navigated in the accustomed barques of narration?" (7). Heise, who is interested in the question of "How, when, and why do we invest culturally, emotionally, and economically in the fate of threatened species?", also places responsibility in the hands of storytelling, whether those stories take place in literary fiction or other formats such as

biodiversity databases and speculative fiction (*Imagining Extinction* 4). She argues that the efforts of the likes of environmentalists and conservation scientists "gain sociocultural traction to the extent that they become part of the stories that human communities tell about themselves: stories about their origins, their development, their identity, and their future horizons" (*Imagining Extinction* 5). As she marks "biodiversity, endangered species, and extinction" as "cultural issues" rather than issues of a nonhuman origin, Heise points to cultural stories that uphold the value of and care for the more-than-human as vital to the ongoingness of a wild planet (*Imagining Extinction* 5).[3] Accessing narratives that recenter more-than-human care and relationships is, therefore, necessary for confronting environmental crisis and working toward real-world change.

Throughout this dissertation, I trace the echoes of a binary that is visible across environmental literature: utopia/dystopia. In genres such as science fiction, eco-fiction, and climate change fiction, many texts lean into the apocalyptic tropes of dystopian narratives or the world-saving potentials of utopian alternative futures. In selecting my primary texts, I have chosen to engage with works that evade the utopia/dystopia binary in favor of landing somewhere more ambiguous. The utopia/dystopia binary tends to lead toward narratives that

[3] Haraway similarly undergirds her argument with the understanding that "Natures, cultures, subjects, and objects do not preexist their intertwined worldings" and "Like all offspring of colonizing imperial histories, I – we – must relearn how to conjugate worlds with partial connections" (13). Likewise, Heise also identifies the two dominant environmentalism narratives "the stereotypical narrative of the decline of nature" and "progress boosterism", the latter of which "leaves no room for considering how the missteps and disasters of the past might be kept from repeating themselves" (*Imagining Extinction* 12). Both *Staying with the Trouble: Making Kin in the Chthulucene* and *Imagining Extinction: The Cultural Meanings of Endangered Species* were published in August 2016, so Haraway and Heise's overlaps may be considered indicative of trends in critical discourse and of mainstream cultural obstacles to living through and beyond environmental crisis.

suggest success in preventing environmental crisis and building an idyllic future or failure in protecting environmental futures.[4] In the spirit of "staying with the trouble", texts such as *A Tale for the Time Being* by Ruth Ozeki and *Ice Bar* by Petra Kuppers craft narratives of surviving through the precarious, dangerous, and violent environmental and social conditions. By moving away from the binary, these stories reflect the tensions of hope versus despair toward the future that critics such as Heise and Haraway observe. I am drawn to the texts' perilous ongoingness because of the possibilities that it offers for thinking about *how* to survive through change and crisis, not simply *if* one will survive.

To this end, the persistence of ongoingness despite the precarity of the future tends to center stories of survival that are community-oriented rather than focused on an individual's livelihood. The communities of survival in my texts include the local, activist-driven support networks of adrienne maree brown's *Emergent Strategy: Shaping Change, Changing Worlds* and Jody Aliesan's *True North/Nord Vrai*. They also include multispecies communities, as will be seen through brown's learning to cultivate sustainable futures with starfish and mycelium and Aliesan's orientation toward the struggling new growth saplings of clear-cut forests. These narratives of surviving in the very midst of environmental crisis and rapidly changing realities share a language of interdependence and multispecies flourishing across the numerous genres

[4] Drawing on the example of a well-known speculative fiction text, the two future worlds visited by the protagonist of Marge Piercy's *Woman on the Edge of Time* encapsulate the two directions where utopia and dystopia generally lead. In the utopian future, humans live in harmony with the earth and live without the worry of environmental crisis or harm. The dystopian alternative future represents the failure of humans to protect the planet, a hyper-urban time and space where destructive capitalism structures and environmental toxicity reign.

that I explore. In that language, I find lessons of how to keep going during difficult times, for the wellbeing of not just yourself but of every vitality with which you share space.

Even when such stories are being crafted around us, Western readers – including scholastic ones – struggle to center the more-than-human in our reading practices in order to distill the ways that writers of all kinds are actively engaging with their material environments across genres. Despite this readerly disconnection, the environmental engagement of feminist writers and writers with marginalized identities is actually a lively space for recording environmental change, cultivating caring relationships with the more-than-human, and imagining sustainable futures that push against the white, hetero-patriarchal narratives of living in the Anthropocene. Within and beyond such genres as life writing, eco-fiction, and speculative fiction (these being the three generic focuses of the chapters ahead), writers are cultivating narratives of mutual survival, thriving, and sustaining through exploring acts of noticing and caring for more-than-human vitalities. These texts find the wild in (sub)urban, green, wilderness, and unprotected environments, and they ask who is sustaining, threatening, inviting, turning away, witnessing, or ignoring those wilds and how. Scholars share familiar investments of curiosity and care as they are mapping the ways that the more-than-human world cultivates ways of being in the world that can shape the narratives of survival and sustainability that are noticed and drawn upon by humans. Anna Lowenhaupt Tsing reminds readers that "Making worlds is not limited to humans" (22). Noticing is a vital tool for Tsing which enables "living-space entanglements" (6) and "collaborative survival" (19) to rise to the surface of the narratives that humans cultivate for surviving and "[living] with precarity" (3). Noticing is linked to storytelling in Tsing's analysis,

as she suggests that "To listen to and tell a rush of stories is a *method*. And why not make the strong claim and call it a science, an addition to knowledge?" (37).

Haraway's *Staying with the Trouble*'s provides a case study of what it can look like to use stories as a method. In the book's introduction, Haraway briefly but memorably intervenes into the contentious subject of over-population: "in my experience, feminists, including science studies and anthropological feminists, have not been willing seriously to address the Great Acceleration of human numbers, fearing that to do so would be to slide once again into the muck of racism, classism, nationalism, modernism, and imperialism. But that fear is not good enough" (6). She pushes for engagement with the messy, frightening crisis to answer the question, "What is decolonial feminist reproductive freedom in a dangerously troubled multispecies world?" (6). Rather than directly debating the issue further over the course of the book, Haraway waits to return to it in her final chapter, "The Camille Stories: Children of Compost." The chapter is "a collective speculative fabulation" that emerged out of a collaborative speculative narrative workshop (8, 134). The stories of a future of multispecies, low-impact reproduction offers a way out of the limitations of the current discourse surrounding over-population. Haraway explains that "Camille taught me how to say, 'Make Kin Not Babies'" (137). "The Camille Stories" use the tools of literature to theorize and imagine beyond current eco-crises. Haraway and her collaborators move into creative scholarship modes to introduce new language and new paths toward environmental problem-solving in order to diverge from discursive limitations.

The scholarly discussions that I have unpacked so far point towards an articulation of how literature is not just a reaction to crisis or delayed processing of change, but an active site

for cultural interrogation of environmental ethics, for cultivating relationships with the more-than-human. Literature is an environmental archive as much as it is a human one. It is a space for imagining livable and thriving futures, for mourning more-than-human loss, and for recording our material realities in unexpected ways. It is space in which to experiment with vocabulary and where we can imagine ways through, ways out of, and ways of coping with endings that environmental crisis causes.

At the beginning of this introduction, I included a quotation from Adrienne Rich's book of poetic life writing, *Your Native Land, Your Life*. In this quotation, I continually find myself dwelling on the fullness of the gap that Rich places between "powerful" and "womanly". The gap is visual and audible. It is an intentional space left behind that signals a difficult to express knowledge and connection. The gap carries a transformational linguistic understanding of the relationship of care to the more-than-human. Rich's poem emphasizes a gap existing between expression and experience. A similar gap arises between Kimmerer's students, who are actively engaged in environmental science but aren't capable of envisioning themselves having a positive relationship with nature. In that case, the students are experiencing a gap between where their investment and energy is placed and their ability to envision a hopeful future. Another noteworthy gap arises in Ghosh's work when he argues that literary fiction writers are *avoiding* addressing climate change, which is a gap between what is needed and what actions writers are taking. Of course, literature has grown and moved forward since Ghosh's 2016 publication, but his argument is still important for understanding the journey and pacing of literary fiction in engaging with environmental change and crisis. I have chosen to focus my readings on a range of

genres and texts both inside and outside of literary fiction, and the balance is on the side of lesser-known texts and, particularly, texts that are addressing environmental change outside of the dominant climate change discourse. I center a number of texts that are not always or often categorized as environmental. I do so to demonstrate that if we turn to writers who are outside of the dominant narrative of climate crisis, we can see them interrogating and developing relationships with the more-than-human. These texts sketch maps for the futures that they imagine.

I find the lively site for this to be in books by feminist authors who are from marginalized identities and underrepresented communities. My readings demonstrate that engaging with their diverse representations of the more-than-human world teaches readers to notice more about their environments, to understand what a positive relationship with a threatened species might look like, and to imagine transformational futures. The texts that I engage with are exemplary of a plethora of literature that fills the gaps of caring multispecies relationships and environmental narratives that the aforementioned scholars and writers have identified. It is a space to turn to for innovative approaches to environmental crisis and to engage with environments differently. Even when I explore more mainstream texts, I unpack how their narratives go against the grain of the dominant discourse about environmental crisis. In chapter two, I show that women are carving out a literary space for themselves to talk about these issues and bring a perspective not readily available in the established discourse on the environmental crisis.

My first chapter interrogates the experience of reading a seemingly human-centric genre as environmental writing. Specifically, I ask the question, what happens when we read life

writing as environmental literature. I engage with late twentieth century life writing texts by women writers, including Jody Aliesan's *True North/Nord Vrai*, Sharon Doubiago's *Hard Country*, and Jan Zita Grover's *North Enough: AIDS and Other Clear-Cuts*. My readings of these texts focus on what, beyond human life, becomes recognizable and legible through the authors' autobiographical gazes. I turn to the writers' engagements with clear-cut landscapes, where the violence done to the land invites an articulation of what it means to sustain and care for livelihoods, both human and more-than-human. By pairing the feminist ecocritical innovations of theorists such as Stacey Alaimo and Eli Clare with Sara Ahmed's phenomenological theorization of orientation, I explore the way that feminist and environmentalist discourse critiques the construct of a "clear-cut" identity and bodymind-in-space. I consider where embodied experience ends and physical environment begins, and whether such a separation can – or should – be made when repairing and healing from shared environmental trauma. The chapter asks how narrating a life becomes a multispecies experience that bridges social and environmental justice through narrative, form, and language.

Taking notes from Anna Tsing's assertion that "To learn anything we must revitalize arts of noticing," I am invested in finding literatures that encourage and guide readers through the act of noticing (37). In chapter two, I dedicate my analysis to the epistemologies of sight in the context of noticing environmental change. I focus on contemporary environmental fiction by women writers in which unexpected migrations of the more-than-human arrive in each female protagonist's local environment. The texts under discussion include *Flight Behavior* by Barbara Kingsolver, *A Tale for the Time Being* by Ruth Ozeki, and *Neon Green* by Margaret Wappler. I

situate each of these novels within a genre that I call literatures of arrival. By exploring the conventions of the arrival genre, I consider how the authors utilize the trope of arrival to interrogate what it means to know one's environment beyond simply "seeing" change and to respond to signs of harm and crisis. Ultimately, I argue that, through exploring multispecies entanglement with migratory bodies, the authors cultivate a discursive space to respond to, imagine, and navigate new paths through environmental change without being contained within the dominant environmental discourse in the United States.

In chapter three, I dive into the world of speculative fiction to consider how disabled writers, writers of color, and queer writers utilize speculative fiction to cultivate just and sustainable imaginaries that lead to real-world building. Through genre-focused analysis, I explore the ways that speculative fiction has become a part of the language of coping with environmental change and crisis while also allowing for a discursive space for writers who are women of color, queer, and/or disabled. I work with the two primary texts, *Ice Bar* by Petra Kuppers and *Emergent Strategy: Shaping Change, Changing Worlds* by adrienne maree brown, which are both inspired by the legacy of Octavia Butler. These texts inspire their readers to become reader-writers by using speculative fiction tools for their own future-world-building as engaged members of their communities. My analysis also follows the growth and depth of the speculative fiction genre across diverse mediums of literature and pop culture texts to imagine transformative and just futures that do not fall into the binary of utopia/dystopia but instead broaden the scope of environmental fiction through inclusive representation and narratives of

surviving despite crisis. At the core of this chapter is my exploration of how narrative can lead to social change.

Chapter three emphasizes that the methods of imagining, reading, and being-with that I have outlined so far did not emerge out of nothing for each of the aforementioned scholars. Each author brings their particular focus into the intersecting spotlights of environmental studies and feminist theory (for Tsing, that focus is mushrooms), yet they stem from longstanding traditions among marginalized communities who utilize narrative and storytelling to imagine thriving futures in order to survive the present. This kind of future-world-building has a vibrant history, yet it is often relegated to the worlds of low-culture art, genre-fiction, or simply outside of the literary canons that can ensure the visibility and longevity of texts.[5] Ytasha L. Womack, whose work focuses on Afrofuturism, explains that fiction as a means of instigating change in the world, especially in the context of Black writing where science fiction and speculative fiction has long been a platform for imagining just and transformative futures (124). She points to such nineteenth century writers as W.E.B. Du Bois as contributors to the heritage of using writing to "re-create futures with black societies, and make poignant commentaries about the time" (120). However, writing in the speculative genre or even simply outside of the bounds of realism puts Black writing in a precarious position. Sami Schalk traces how realist representations have trapped Black women's writing and disability writing in order to garner critical attention, while Black women's speculative fiction is treated as non-serious writing (18-20). Black writers,

[5] Chapter three will discuss the relationships between power, publishing, and representation that play out in the context of genre-fiction.

however, are actively breaking down the distinctions between serious/non-serious or critical/uncritical writing, especially as speculative fiction gains popularity and participation. Walidah Imarisha's assertion that "All organizing is science fiction" in her introduction to *Octavia's Brood: Science Fiction Stories from Social Justice Movements*, co-edited with adrienne maree brown, underscores the fact that communities of organizers are refuting the harmful treatment of Black imagining and futurism as superficial (3). Imarisha explains that "For adrienne and myself, as two Black women, we think of our ancestors in chains dreaming about a day when their children's children's children would be free…We wish to continue the work of moving forward with their visionary legacy" (5). Their collection of short stories speaks to the need to cultivate new stories of transformational futures, while also honoring and drawing upon histories of future-world-building through imaginaries and storytelling. Honoring the past while narrating new futures provides a foundation for just futures that learns from previous harms and encourages radical new possibilities, instead of repeating negative historical patterns.

Another cornerstone of future-world-building through narrative exists within disability culture. Disability culture has both a lively and necessary commitment to drawing the more-than-human into the center of narratives about human bodies and domestic and urban spaces – entities which are not often thought of as "environmental." Disabled communities are at high risk for being impacted by climate and environmental crisis due to inequities such as access to evacuation measures during disaster, increased negative impact of environmental changes on health, and low prioritization of disabled lives during rescue efforts (Levy and Patz 312-3, Abbott and Porter 843-4). Disability scholar, Petra Kuppers, encourages readers to recognize and

use storytelling and narrative reclamation as a vital tool within disability culture and more broadly. Kuppers locates disability narratives within the future-world-building lineage of *Octavia's Brood*:

> Disability authors have begun to reclaim disability from the often stereotypical and one-dimensional uses in mainstream texts. Collections like *Accessing the Future: A Disability-Themed Anthology of Speculative Fiction* (Al-Ayad & Allan 2016) address these openings for thinking disability differently in genre literature. At the same time, activists of all kinds are embracing again the value of storytelling as a way of generating and sharing knowledges, as a form of analysis in its own right. *Octavia's Brood: Science Fiction Stories from Social Justice Movements* (2015) is an example of this kind of inquiry…Storytelling is an activist tool, a way of making change. Participatory artistic practices can allow us to feel things, to feel things differently, and to invent new appreciations for the diversity of humanity and beyond. The storytelling round table is prepared; your adapted and comfortable seat is waiting. No open fire in the space station, but everything else goes. ("ADAPT" 280)

In "Writing with Salamander", which discusses community writing practices in disability culture space, Kuppers emphasizes material and social overlaps as she explains, "disabled people and their allies reclaim and remediate our shared spaces in a field of interdependency. We live engaged with our world, whatever our world is, and we find an equilibrium with our sensoriums, pain thresholds, cognitive differences, and mobility challenges. We live with change" (117-8).

Scholars such as Mel Chen and Stacy Alaimo have brought specific attention to ways that environmental toxicity is both part of many disabled people's embodied experience and blamed for creating new disabled communities.[6] Chen asks readers to follow their experiment to "deemphasize the borders of the immune system and its concomitant attachments" (196-7). By framing toxicity through their lived experiences of a "toxic sensorium" that lessens the distance between self, objects, and affects, Chen highlights the proximity of disabled bodies to the more-than-human (196). Chen's memorable image of lying on their leather couch after "a day of navigating my own particular [toxic] hazards" offers a visual and tactile reference for the ways that a disabled body can collapse the boundaries between self/other and human/nonhuman through "ephemeral" and "lively" intimacies (202-3). They explain that "The couch and I are interabsorbent, interporous, and not only because the couch is made of mammalian skin" (203). In her exploration of Rhonda Zwillinger's photography of people with multiple chemical sensitivity (MCS), Alaimo finds often unrecognized points of contact between disability and environmental change. She asks readers to recognize the ways that "'*environmental* illness' extends the body outward" and asserts that "for people with environmental illness, places are never merely in the background" (*Bodily Natures* 115, 122). The subjects of Zwillinger's photos are the humans with MCS, their built surroundings, and their more-than-human environments. Both Chen and Zwillinger put the environmental aspects of their texts into the foreground as subjects – Zwillinger's rooms or outdoor landscapes where toxicity circulates and Chen's couch

[6] See "Deviant Agents: The Science, Culture, and Politics of Multiple Chemical Sensitivity", in Alaimo's *Bodily Natures: Science, Environment, and the Material Self* and "Following Mercurial Affect" in Chen's *Animacies: Biopolitics, Racial Mattering, and Queer Affect*.

becoming an extension of their own body. Because of disabled people's lived experiences of survival amidst risk and harm and their "bodily difference and awareness," David Abbott and Sue Porter, who are writing from the intersection of disability studies and policy studies, suggest that disabled people be treated as "interconnected experts" in the midst of climate change and disaster planning due to their lived experiences of survival amidst risk and harm and their "bodily difference and awareness" (850, 846).[7] In my textual engagements ahead, I locate and foreground disability experience which might occur centrally or peripherally. By centering those presences, I find a rich layering of insight and connection to the environments in the ways that narratives of disability see the interaction of human subjects and environmental surroundings. The environment is drawn from background to foreground and recognized as agential and active, which leads to intra-active narratives where human and more-than-human futures are accounted for in tandem.

Feminist Relationships to the More-than-Human

As a Women's Studies scholar, survival is often on my mind outside of the context of environmental sustainability. I read to learn about surviving trauma, surviving double binds, surviving inequity, surviving burnout, surviving violences. To learn how to support women around me in all of these things when I, myself, am strong and able. The journey of this dissertation, my understanding of the entanglements of human and more-than-human survival

[7] Interestingly, Abbott and Porter also utilize "stories" in their language and methods exploring the expertise of disabled experience. In focus groups, participants discuss "stories" of disabled vulnerability amidst disaster to imagine and propose policy changes (842).

has grown with every text. Sharon Doubiago's *Hard Country* articulates the ways that learning with the struggles of one's environments can lead to knowing and healing oneself. Doubiago connects her own struggle to survive beyond the violences of colonial heteropatriarchy with the survival of the material environments around her. She describes the pain afflicted on her by her lover in the language of forest clear-cuts where survival develops underground, below visible scars on the surface:

> The Redwood Empire is now, at best,
> second growth,
> and I am a giant snag
> left from your clearcut
> of the virgin forest
> my famous awesome beauty gone
> my enormous roots still snarled
> everywhere beneath the ground. (98)

By learning to recognize and care for the harm done to the earth, Doubiago can begin to believe in her own ongoingness after trauma, too. Reading feminist texts about multispecies survival, like *Hard Country*, has taught me the plethora of ways in which sustainability is a community process and structural inequity can always be found reflected in the roots of violent environmental and social histories. Understanding and treating sustainability as a community endeavor rather than an individual feat is key to realizing just environmental futures that are built upon collaborative support and multispecies thriving.

In addition to the impact of literary texts, feminist scholarship offers a strengthened and critical ability to discursively engage care in discussions of world-building and sustainability. Writing in the field of feminist science studies, Hilary Rose considers care within the framework of labor and suggests that integrating labors of care, body, and intellect could be a future direction for harmonious relationships between the human and more-than-human: "Transcendence of this division of labor set up among hand, brain, and heart makes possible a new scientific knowledge and technology that will enable humanity to live in harmony rather than in antagonism with nature, including human nature" (73-4). I understand care to be an action and a relationship. Without engaging with those actions and relationships, environmental researchers and practitioners will not be able to harness a reciprocal and reparative approach to the natural world. Alexis Pauline Gumbs' *Undrowned: Black Feminist Lessons from Marine Mammals* provides an exemplary exploration of the productive synergies between care and environmental studies. By intertwining her life and narrative with the lives and legacies of such creatures as the rare and elusive right whales and the hair-covered ringed seal, Gumbs practices (and models for her readers) a multispecies care that is built upon justice, repair, and attention to commonality between land and sea mammals – breathing in order to survive. Care as a relationship is encapsulated in her writing to the ringed seal, where she utters like a meditation, "Do not despair. I am with you. And I love your wise audacious boundaries. I love your visible evolution…I love your bristle and your backbone…Your work of art (96). As an action, Gumbs manifests care in a list of activities that offer practical steps for readers to live the ways of being in the world that are explored in *Undrowned*. One activity, "End Capitalism" – which is itself

framed as a relationship-centered project because "We can end capitalism one transformed relationship at a time" – instructs readers to "Choose an aspect of the economic system that entangles marine mammals mentioned in this book and change your relationship to it for a period of at least thirty days" (168). By maintaining a balance between careful relationships and action, feminist approaches to engaging with the more-than-human allow theory and praxis to meet in ways that create innovative and just methods and insights for future-world-building.

Feminist approaches to future-world-building that cultivate caring relationships between the human and the more-than-human are especially inflected by feminist new materialist discourse. Feminist new materialism provides language for understanding the dynamic activity and responsiveness between bodies and environments, between organisms of different species and forms of matter that interact with and affect each other. These interactions may be as noticeable as the extinction of a large mammal as a result of their habitat being destroyed for human industrialization, or they might be subtler and harder to trace, such as the impact of airborne toxins on a community over a number of decades. Nancy Tuana writes of a "viscous porosity of flesh" to describe the way that flesh acts as a permeable border. "The boundaries between our flesh and the flesh of the world we are of and in is porous" and the viscous membranes of flesh "serve as the mediators of interactions" between organisms (198, 199-200). Other new materialists have developed additional terms to explore the multiplicity of ways that matter is lively and active, such as Karen Barad's concept of intra-action and Stacy Alaimo's

term transcorporeality.[8] Each of these approaches contribute to changing the way in which the relationships between the human body, nature, and more-than-human beings are understood. At stake is how we humans, as individuals who are situated in our local environments, develop knowledge about our world. Alaimo explains that the production of knowledge is a feminist issue, and new materialism demonstrates that knowledge production is also an environmental issue ("Trans-Corporeal Feminisms" 251). Drawing on Haraway's claim that feminist knowledge production "*makes room* for surprises and ironies" with an awareness that "we are not in charge of the world" (Haraway 198), Alaimo argues that:

> Epistemological 'space' becomes ethical in environmental philosophy and feminist theory…epistemological space needs to be contiguous space – it is always as close as our own skin…Allowing a space-time for unexpected material intra-actions…is one way of understanding an ethics that embraces the wild, even as it is wary of wilderness paradigms that divide humans from nature and erase the presence of indigenous peoples. ("Trans-Corporeal Feminisms" 251-2)

Wild and wilderness emerge in the sites of both space and body. Alaimo posits that "some avenues of approach to 'the' body, or even one's own body, sometimes echo wilderness imaginings of nature as an external, foreign, unknown, and perhaps unknowable space" ("Trans-Corporeal Feminisms" 252).

[8] To read more about these terms, see Barad's *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (2007) and Alaimo's *Bodily Natures: Science, Environment, and the Material Self* (2010).

Feminist new materialism recognizes the immediacy of more-than-human matter and beings, of their omnipresence in all environments, and the transcorporeal intra-action between nonhuman and human bodies. I work to bring this into the language of environmentalism, to think about the fluidity of space and bodies together, in order to approach this dissertation with a feminist figuring of environmental justice. Katherine Behar explains that the intervention of object-oriented feminism – a field adjacent to feminist new materialism – "is to approach all objects from the inside-out position of being an object, too. Shifting focus from feminist subjects to feminist objects extends a classic tenet of feminism, the ethic of care, to promote sympathies and camaraderie with nonhuman neighbors" (8). Behar goes on to note that object-oriented feminism "makes way for continuity between all objects, whether human or nonhuman, organic or inorganic, animate or inanimate" (9). Exploring the material space of the body opens up a site of (un)knowable wilderness, and the body becomes a source of materiality that is knowable through embracing the mysterious agency of viscous porosity between self and environment. Space is permeable and invites the meeting of human and more-than-human, of the cultural and the material that make up an individual's daily experience. Understanding matter as animated and agential is at the heart of what new materialism has to offer for recognizing the expansiveness of life and the ways in which liveliness emerges in surprising sites, through surprising actions. In the readings to follow, I endeavor to approach each of my texts with the openness of feminist objectivity, leaving space for diverse liveliness to come to the foreground. When that liveliness invited to the foreground, readers can learn what more-than-human

presences might need and hope for in the shared, multispecies futures that lie before us during this time of environmental crisis.

The legacy of reading and writing in feminist history is vibrant and vital, from access to literacy to narrative representation to small press publishing that offers an alternative to hegemonic stories and exclusionary publishing practices.[9] In *Living a Feminist Life*, Sara Ahmed treats textual archives as a method of understanding the current world and also a tool for future-world-building. She even describes feminism itself as a fragile archive and books as an important component of a feminist survival toolkit (17, 240). Rich's words shape this project and my readings of every text. The gap between powerful and womanly and Rich's *infinite* knowing of the land is part of my feminist survival toolkit. I find the powerful and womanly in stories that go beyond the human to the less familiar world of the more-than-human. You could read this dissertation as a search for how the powerful and womanly makes itself known in the textual landscape of environmental literature. By tracing the powerful and womanly, I believe that the path toward building just environmental futures will begin to unfold with the clarity and openness needed to be hopeful amidst crisis and change.

Jennifer Mae Hamilton and Astrida Neimanis call for "feminist composting" to fertilize the field of environmental humanities both in terms of subject matter and citational practices, encouraging scholars to think deeply about the abundant opportunities that feminist scholarship affords to the environmental humanities (502). They explain that "We are…not insisting that

[9] In chapter three, I will return to the subject of small press publishing, especially presses that seek to represent marginalized voices in speculative fiction.

every environmental humanities scholar must necessarily become a feminist (although, why not?), but rather that a rigorous understanding of feminism's legacy within the field might subtly or radically change one's questions, or their commitments" (504). I embrace Hamilton and Neimanis' position that "Feminism is not a special interest or an add-on (as is sometimes the assumption when disciplines make room for things like "women's writing" or "feminist philosophy" in a second-generation mode)" but instead "certain feminisms are immanent and foundational to contemporary environmental humanities" (505-6). Ahmed describes feminism as "how we survive the consequences of what we come up against by offering new ways of understanding what we come up against" (22). She also claims that "Feminist theory is world making" and goes on to speculate that "To be a feminist can feel like being in a different world even when you are seated at the same table. If that is the case, then to be a feminist is to be in a different world" (14, 40). Taking each of these points together, feminism can be considered a tool for reparative world making from a place that centers difference. I cannot imagine a field, community, or a way of life better suited to guide humans through a planetary reckoning of crisis, care, and repair.

Reorientation and Accessing the Wild

In all of my textual engagements, I encourage readers to reach toward a reorientation of the concept of environment. This is not a redefinition or a reconceptualization, but a reorientation of how we, as humans – specifically recognizing my own situation as a human of the western world – understand our worldly positions in relation to "the environment." Reorientation,

specifically, is the most effective tool for my purpose. Redefinition predicates that the thing itself is not only misunderstood, but also mislabeled. The environment would no longer be the environment as we know it, but some newly evolved thing instead. Reconceptualization instead suggests that you will change what it is that you associate with the nature of the thing. Reorientation, on the other hand, asks for change on our part, to reassess your relationship, proximity, and interaction with that thing. Such a reorientation requires a recognition of the environment as expansive and diverse. It requires a recognition that one is never not immersed in the environment. The environment is indeed wild. It is green. It is out in nature. But it is also here, presently. It is in the coffee shop where I write this, in the space where you are reading this, in the urban, in the suburban; it does not disappear at the point where four walls and a door shut out weather and bugs. If anything, changes in the migration patterns of wildlife visibly demonstrate that nature does not stay where it seemingly belongs. The environment is always with you and always requires your attention, care, and preservation. This means that environmental threats, disasters, and toxins also follow you and cannot simply be shut out or ignored. Furthermore, imposing limits on what counts as experiencing the environment and engaging with nature can be both naïve and harmful. We are symbiotic, ecological beings living in a deeply diverse, vital, and codependent environment all the time. When lines are drawn in regard to who is or is not engaging with nature in a legitimate way, the relationship of individuals and communities to environment becomes a feminist concern of inclusion and exclusion. A disability culture framework teaches that the exclusion of certain bodyminds to certain spaces is in direct correlation with the societal value placed on able bodies.

"Reorient" articulates the work that the writers who I engage with do to invite diverse bodyminds into finding nonviolent survival in endangered spaces. Learning to survive in a way that moves with the needs of one's environment instead of against it requires active care and recognition of the multiplicity of diverse and interdependent life forms that are present and emergent. It is not an action that changes the environment but requires a change in how we relate to it. Thinking with orientation allows our attention to be drawn toward space, as an extension of that continuity with the more-than-human. Orientation allows us to think more consciously about proximity and habitation. Thinking directionally also pulls us toward the questions, where are we going and from where have we come? By looking at our tracks and our paths forward, we can learn from environmental pasts while imagining futures that offer care and support for existing livelihoods. I encourage readers to embrace spatial awareness on implicit and explicit levels, and I encourage contemplation of impacts, consequences, and changes in direction. This attitude is not always intuitive. In contradiction to the ever-changing motion of the natural world, humans tend to gravitate toward stability, familiarity, and reliable repetition. Climate change shows that such stasis is not reliable. Learning to adapt to changeability is necessary for future-world-building. The texts that I will discuss in my chapters have narratives that probe at humans' routine and repetitive behavior, at the stasis of things, to play with and confront the straight lines (to use Ahmed's language) of normative environmental practices.

As suggested by my earlier discussion of Chen, Alaimo, and Kuppers, disability studies provides language and room for thinking about the possibilities reorienting bodies in space and has shaped innumerable aspects of this dissertation, from method to content to writing. Here, I

will highlight two more key disability scholars who help me to see the possibilities of reorienting my relationship to the environmental to unearth unexpected access to the more-than-human. Many of my readings take place at the intersections of disability studies, environmental humanities, and feminist theory to find ways that texts offer new conceptions of and relationships to the environmental that address the ruptures between access to and safety within wilderness and wildness. I ask, how does literature act as a site for making sense of these ruptures? The work of Alison Kafer and Eli Clare led me to rethink what is wild and what it means to be with the wild. In *Feminist, Queer, Crip*, Kafer challenges the notion that the natural environment is distinct from the built environment, explaining that "the natural environment is also a built environment, one shaped by and experienced through…gender, sexuality, class, race, and nation" (129-30). She offers the lens of "cripped environmentalism" through which she challenges the paradigm that "able-bodiedness is necessary in order to bridge or transcend the essential separation between human and nature" (131, 135). Being-with is central to transcending that separation, as Kafer offers the hope that "Recognizing our interdependence makes room for a range of experiences of human and nonhuman nature, disrupting the ableist ideology that everyone interacts with nature in the same way" (144). The immediacy of environmental crisis is more keenly felt when one understands that nature and the more-than-human are ever-present and interdependent co-presences. My readings learn from disability studies as I push readers to recognize the closeness of all things environmental to their own lives, even in (sub)urban spaces. Rethinking the closeness nature and wildness can reduce the perpetuation of the ableist ideology

that Kafer mentions and open up space for engaging with the more-than-human in new ways that do not repeat historical harms to both the nonhuman and disabled communities.

Foregrounding intersectional identity in his relationship to nature, Eli Clare rejects the over-simplified relationship in which the disabled body is othered from wilderness. He writes that with "a body of white, rural, working-class values…[t]he mountain will never be home, and still I have to remember it grips me" (11-13). In his description of climbing a mountain as a disabled person in *Exile and Pride: Disability, Queerness, and Liberation*, Clare extends the critique of wilderness being constructed by human culture to be inaccessible by explaining his desire to make it up the mountain as a manifestation of the "supercrip" figure. The supercrip is a figure projected onto disabled people by able people that idealizes physical and social feats that disabled people achieve seemingly *in spite of* their disabilities – such as climbing a mountain despite having cerebral palsy. Supercrip narratives "focus on disabled people 'overcoming' our disabilities. They reinforce the superiority of the nondisabled body and mind. They turn individual disabled people, who are simply leading their lives, into symbols of inspiration" (Clare 2-3).[10] By wanting to find a way to access the mountain, Clare finds himself fitting the mold of the supercrip through "internalized supercripdom" and the perception that others have of the physical struggle he takes on to climb the mountain (3). Even though the mountain is a supercrip obstacle and wilderness is a construct built on being physically inaccessible, Clare's

[10] Clare asserts that "The dominant story about disability should be about ableism, not the inspirational supercrip crap, the believe-it-or-not disability story," drawing attention to the ways that stereotypes like supercrip keep attention on objectifying disability rather than on advocating for disability rights and access and pushing back against ableist narratives (3).

sense of home and wellbeing within his body is centered around nonhuman nature spaces. Finding a means to survive the abuse inflicted on his bodymind amidst growing up disabled, "I abandoned that body, decided to be a hermit, to be done with humans, to live among the trees, with the salmon, to ride the south wind bareback" (10). The contradiction of disability and wilderness that lies within Clare's narrative is a path for my own reading as I confront the material presence of the wild in disabled writers' immediate environments that draws them into lively co-presence with the more-than-human and deep understanding of the intra-action between bodies and spaces.

Kafer sees interdependence between vitalities and spaces as an issue of environmental and disability justice as well as an issue of the narratives that are circulated around nature what counts as a nature experience and who has access to nature. In response to narratives of disabled experience of wilderness, including ones from Clare and Kuppers, Kafer poses the following questions about changing the narratives of relationships with the more-than-human:

> How might this story of interdependence, of moving through nonhuman nature in relationship, expand the realm of ecofeminism? How might it bolster the claims of ecocritics who reject popular distinctions between humans and nature by presenting other humans as part of our encounters with nature? What happens to theory when it is no longer based primarily on tales of individuals' encounters with nature, but on experiences of interdependence and community? (144)

My fourth, and final, chapter shares these questions with Kafer. The chapter is an exploration into what it looks like for me, as a woman with chronic illness and chronic pain, to engage in

experiential environmental education in a time of climate crisis. Through autoethnographic first-person accounts, close-reading, and engaging with feminist disability studies and scholars working on trauma-informed pedagogy, I critique the space between critical distance and immersive experience. This discussion aims to make room for diverse bodyminds within the field of experiential environmental education, which so often perceives environment as a remote wilderness and experience as a limited range of physical feats. I follow the tracks of more-than-human presences that have overlapped with my own life and teaching and have shaped the ways that I understand environmental education to be always present and always accessible. These include the ancient and patient Greenland shark, boisterous Michigan bird residents, ruminant buffalo students, recently felled trees whose roots and legacies grant them immortality, and many more. As an extension of my autoethnographic approach, I engage with student voices from first-hand materials derived from classes that I have taught. Those materials are both written and lived, including students' in-class and in-field writing, as well as reflections on the embodied experience of teaching and learning with them. My goal in this chapter is to chart a path for cultivating caring pedagogical relationships amidst the obstacles of academic ableism, anthropocentrism, and climate change. I ask what opportunities for teaching, learning, and surviving beyond crisis can occur when experiential environmental education invites local and accessible experience and makes space for care between teachers, students, and more-than-human beings. I am driven by the question, why do we, as adult learners of reading and writing, stop learning to read outside?

This dissertation is all about learning – reading to learn, writing to learn, the ways that noticing and witnessing help you to learn, what it means to learn outside, and more. As readers, I hope that you will think about how you might be learning about the more-than-human world through reading this text and the texts with which it engages. I think of learning as a process of epistemological play. Learning from and about the nonhuman moves between the instinctive and the deliberate – boundaries which impact the livelihood of the nonhumans that are being witnessed. My readings and my reflections on teaching ask, how can you open yourself up to learning from the nonhuman? I argue that a vital step in that journey is to read. Read widely and read deeply to find the many lively presences that lie in the pages of books by feminist writers who recognize that the stories of their environments are also the stories of their communities and their own livelihoods. Beyond the traditional canons of environmental writing, literature is a thriving space of recording environmental histories, imagining transformational environmental futures, and learning to build connection with and care for the more-than-human.

Methods and Approaches to Genre

I believe that writing is part of the process of healing harmful relationships with the environment and finding a space where you can honor connections with the more-than-human that are not often honored in everyday human life. If writing is healing, then teaching those literatures is a pedagogical exercise that can help students act with care and think about environmental justice and just futures in new ways. The range of methods that I use to approach literary analysis and environmental criticism in the chapters ahead include archival work, textual

analysis, genre analysis, and autoethnographic writing. The first three chapters are organized by genre: life writing, contemporary environmental fiction, and speculative fiction. While filled with textual analysis in the forms of both close reading and surface reading, I take a genre-oriented approach to my readings in each of these chapters.[11] Genre is intrinsic to how storytellers construct stories. It is how readers and writers find points of familiarity and connection and how writers construct recognizable narrative structures that can then be subverted. For this reason, I have taken care to consider genre at every stage when exploring how my texts contribute to environmental discourse. The kinds of readings that I undertake involve a pedagogical approach to reading genre on the pages of my texts. This involves looking at connections between novels where materially pedagogical moments, where readers learn something about environments, come to the forefront and indicate a pattern across a genre. I ask how several different texts within a genre are contributing to environmental discourse through narrative pattern, like chapter three's moments of arrival or chapter four's reader-writer engagements. This method of reading sees value in working across several texts at once.

In the course of my readings, I consider the effects of genre as a categorizing device. Categorization overlaps with several of the factors of how texts are accessed by readers that I have discussed so far, including the gendering of texts, how books are circulated and picked up by publishing houses, and whether a text is marketed as being "environmental". The latter factor, in particular, plays a role in whether readers interact with a text from a position of seeking out

[11] I am referring to Stephen Best and Sharon Marcus's definitions of surface reading, including "Surface as the location of patterns that exist within and across texts" (11).

environmental discourse or whether they encounter its environmental themes. An example of this can be followed in my own discovery of Margaret Wappler's *Neon Green*. I stumbled upon the novel in an independent bookstore where it was showcased among a variety of works by Michigan authors. The bookstore did not emphasize the environmental themes of the book, instead focusing on its local origins and small press publication context, as well as comedic genre components. For many like me, *Neon Green*'s environmental narrative would likely be a surprising and edifying aspect of a book that was otherwise treated as a comedic Michigan text about a family visited by a spaceship in the 1990s. I do not consider the "hidden" nature of the novel's environmental themes to be a problem or a shortcoming, necessarily. By not limiting a text to being marketed as an environmental book, the text has a better chance of arriving in the hands of readers who do not tend to read widely around environmental discourse. This unexpected arrival is an opportunity for learning. Genre can also influence readers' engagement with environmental themes by making environmental content accessible and exciting when that content is introduced into a narrative through genre tropes that do not mirror canonical environmental literature patterns. Writers can lead readers to engage with environmental discourse through drawing on genre tropes, such as Ruth Ozeki's play with mystery narrative conventions to incite interest in the arrival of a plastic bag on a beach. I ask in the readings ahead how environmental discourse is created, structured, and intervened into by other writers.

My commitment to genre overlaps with my focus on reorientation. In addition to reorienting our understandings of environment, I am asking readers to reorient their relationship to literature, to recognize the importance of its role in each of our environmental educations, to

recognize how the environmental extends beyond the generic limits of nature writing in order to demonstrate the expansiveness of that which is environmental. The ubiquity of environmental record-keeping, consciousness raising, and sustainability practices found across literary genres is indicative of the environmental pervading all aspects of human experience and endeavors. Literature provides a set of tools to encourage and hone unusual sensing and to carry over our attention to the nonhuman into the discursive and uniquely human space of sustainability, conservation, and problem-solving. The texts that I will be working with explore the communities in their narratives in terms of intersections, alongside-of's, margins, and other non-straightforward and non-hierarchical positionalities. My relationships to environmental justice, environmentalism, and the environments that I inhabit are shaped by my identity and embodied experiences. They are more than political. I cannot be *un*human when I write this. All of my own readings are therefore governed by my human way of being in the world.

I approach the conversation of the role that stories play in environmental discourse with a particular curiosity toward feminist narratives. What might readers find if they look for feminist environmental literature on the shelf? What paths and nodes are formed at the intersection of feminist literature and environmental literature? My chapters follow the revelation of this search that sometimes canons and well-known genre categories for environmental literature are not always a home for feminist writing, especially when the texts are by and about people of color, disabled people, and queer people. These writers and representations find homes in adjacent places – like life writing – or they inhabit and subvert familiar genres – like contemporary women's environmental fiction. Feminist literature, as a site rife with unexpected narratives of

living through and beyond trouble, has pushed me to think critically and openly about what multispecies care looks like in both realist and fantastical contexts and to be critical about what it means to know our environments and how to sustain them. It asks, who is being invited and who is being supported? And in what ways and at what costs are we surviving?

The final chapter diverges from focus on literary genres and dives into what it means to be a scholar, writer, and teacher in the face of environment change and crisis. In my experience, environmental scholarship is always better explored in collaboration rather than isolation. For me, that collaboration tends to take place in the context of teaching, where I learn to communicate urgency, fears, hopes, and strategies with my students and they teach me to look to material environments for insight in new ways. Kind of like a workshop, the classroom space – whatever form it might take – is where I find the threads of reading, writing, and being-with the more-than-human world intertwine. I like to think of chapter four as a labyrinth of my tracks through those threads that allow others to trace the connections for themselves.

A Note on Terms

Writing about critical approaches to environmental studies tends to involve a great deal of tiptoeing and backtracking around the language of environments. While much of the commonly used language on this subject is fairly straightforward and points to recognizable, material entities (wilderness, outdoors, green spaces; animals, insects, weather), the boundaries around these words start to fall apart under scrutiny. Alaimo warns feminists to be cautious of the word nature which "has long been enlisted to support racism, sexism, colonialism,

homophobia, and essentialisms, [and] remains a rather volatile term" (*Exposed* 11). Within the context of Women's Studies, I prefer to push against the essentialist conflation of woman and earth that has developed around the feminist, feminine, and womanly discussions of nature. I continuously reach toward nuanced understandings of how women experience and relate to the more-than-human world. Likewise, Barad's critique of acts that are "against nature" underscores the tensions within the categories of human, animal, nature, and natural ("Nature's Queer Performativity" 150). Kafer also marks the disability-centered exclusion that occurs linguistically and materially through certain environmental language, explaining that "Given the often exclusionary dimensions of "nature" and "wilderness," it is important to explore how those considered out of place find ways of engaging and interacting with nature" (129). I choose my language because my word choice has the political potential to include or exclude certain people or entities from environmental futures. At points in the chapters ahead, I may refer to nature, wilderness, green spaces, or "the environment" if that is the language used within the text under discussion. However, in my own voice, I will move away from these terms in favor of more expansive terms, such as *environments*, *wild*, and *wildness*. I hope that these terms will allow for readers to envision matter and/in space without a highly predetermined conception or image of what or who is included within the more-than-human world.

Throughout this dissertation, I have and will continue to experiment with the language of the zoetic. Animal, vegetable, mineral. Biped, invertebrate, fungus. The varying degrees of cognizance, movement, and defensiveness between these bodies do not reduce the inter-reliance and intra-action amongst their porous integuments and the skin, walls, and air of human beings.

My intention is to loosen the linguistic boundaries that try to put clean edges around the natural, the wild, and the animal. In the spirit of transcorporeality, viscosity, and being-with, I invoke language that signals the permeability of bodies, space, and matter to invite an understanding of all kinds of matter and vitalities as lively participants that are surviving among us in our diverse environments. Chen and Jane Bennet have both encouraged critical engagement with the idea of what is alive, animate, and agential.[12] Some words that I have found to make room for that openness include: *vitalities*, *livelihood*, and *liveliness*. My readings are looking for and signaling the presence of all kinds of vital things – things that are full of vitality and things that are vitally necessary for survival. Above all else, I have shaped the language herein to be inclusive of everything that inhabits this planet, whether existing loudly or quietly, whether common or uncommon, whether surviving or thriving.

A lot has changed since I began writing this dissertation. Universities in this country have gone from closing their physical doors to conferring virtually and back again. I used to leave my house without thinking about viral contagion on every surface and in every social interaction, and now I do not. After forty-seven years, the United Kingdom left the European Union. The United States White House website denied the reality of climate for four of the years that I have been writing. Humans did not yet have names for the Cirrhilabrus wakanda fish or the Tapanuli orangutan and now they do. Many of the books discussed in the chapters ahead were first-time reads during these experiences. Some I revisited for the second or third

[12] See Chen's *Animacies: Biopolitics, Racial Mattering, and Queer Affect* and Jane Bennet's *Vibrant Matter: A Political Ecology of Things*.

time along the way. There are also others that did not make it into this project but are deeply entwined in my experience of the last four years. All are with me now at the end of the process and will be with me as our collective future unfolds infinite changes ahead.

Chapter 1

The Roots of a Clear-Cut: Tracing Feminist Orientation and Environmental Legibility in Twentieth Century Women's Life Writing

Feminism can begin with a body,
a body in touch with a world,
a body that is not at ease in a world

Sara Ahmed, *Living a Feminist Life*

The scope of "life" in life writing is expansive, much more so than I expected to encounter when I approached this genre. Life in these texts extends beyond the human and beyond the individual to encompass the many livelihoods that influence the writer's life and that are affected by her life. My primary texts are Jody Aliesan's *True North: Nord Vrai* (2007), Sharon Doubiago's *Hard Country* (1982), and Jan Zita Grover's *North Enough* (1997). All of these texts are life narratives that were written in the late twentieth century.[13] The expansive representation and redefinition of life develops out of each of the texts' focus on space. Space is a central theme present in all of the texts, a binding factor in women writing about their lives. These writers think spatially in order to recognize and engage with the environments on which their lives depend. I argue that by turning to space to tell their life stories, the writers address

[13] While published in 2007, Jody Aliesan's *True North* is made up of writing from several decades of her life, the majority of which are from the 1980s and 1990s.

what the narrative of one life has to do with survival of *life* in the collective sense. When we read life writing as environmental writing the texts illuminate not only how space shapes the human lives in these texts, but also how space and the nonhuman reflect and depend on these women's livelihoods.

My readings attend to what becomes legible in the story of a human life under women's autobiographical gazes, and what is at stake in women taking up space in their writing. My research is indebted to Sidonie Smith and Julia Watson's prolific contributions to the field of life writing criticism. In one of her essays, Watson points out the surprising dearth of dialogue between life writing discourse and discussion of space and place (ch. 8). Life writing tends to be discussed in terms of temporality, identity, and authenticity, issues that matter deeply to women's authorship. What has not made it to center of these discussions are the authors' engagement with the environments in which they are immersed. Even Eveline Kilian and Hope Wolf's edited collection, *Life Writing and Space*, which significantly furthers the literature surrounding this intersection, does not delve deeply into an ecological and material perspective that engages with space as a non-linguistic and multispecies site. Watson does devote one of her essays to the topic of space in life writing. In this piece, she proposes spatiality as a reading practice that will illuminate "the networks of social relations negotiated across differences of location and position" (Smith and Watson). Watson considers space in terms of "place" – geographical and culturally marked locations of experiences to which life writers bear witness. Her focus on how humans locate themselves in space precludes discussion of space as non-discursive, though, as space is discussed in terms of culture rather than the material and the

nonhuman. My readings will demonstrate that women's life narratives do the work of making non-discursive space legible through their writing. They draw the material, nonhuman background into the foreground of their experience. I argue that doing the work of writing one's witnessing of nonhuman life is an act of feminist sustainability. Bearing witness to the spatial, the environmental, and the material makes legible the experiences of both human and more-than-human life that are illegible in narratives that are dominated by oppressive, patriarchal epistemologies.

Space is taken up to define different aspects of environment across the texts. In Aliesan's text, space is where the body is located, its living environment – a habitat, if you will. Aliesan makes little distinction between built and natural environments and instead focuses on space being a part of the body. In Doubiago's poem, space is addressed through the language of landmarks and ecology. It requires looking outside of the self. Grover's approach to environment is grounded in breaking apart the binary of city and country, which is a process necessary to reconcile her experience of the prevalence of AIDS in urban settings and the idea of wilderness as a site of retreat and solace even within the built environment of the city. In each of the texts, the women are drawn to sites of logging – specifically sites of clear-cuts. They write about forests that have long, deep histories, histories that are longer than the traumas that the trees endured at the hands of human industry. These forests are teeming with life, with layers and layers of multispecies survival that offer lessons into what it means to stay grounded and persistent when rooted in an ever-changing planet. The authors approach these spaces in differing ways, from openness of listening to predetermined opinions about what will be found

there. But each writer finds themselves encountering something in those spaces of wooded history that communicates a liveliness that is illegible outside of that subject's interaction with the space.

Clear-cutting acts on several different levels in each of the texts. The clear-cut moves between a material experience of the forest, an analogy to women's oppression, a diverse metaphor, and a source of language for witnessing change, redirection, and subversion – and also, simply, of trauma. I am not tracing a trope of clear-cuts across the texts, as my goal is not to identify a narrative pattern. Instead, I am pausing to linger on moments of trees, forests, and the violence of logging in which the writers are able to express something otherwise illegible. While these moments in each text are unique in how they unfold, they always resonate with each other because of the significance of turning to the more-than-human to write about survival, longevity, and vitality.

Methodologically, "clear-cut" will serve as a theoretical tool in this chapter. A clear-cut is a material act, a site of violence and economy. Anna Tsing describes the logging history in Oregon as "This is a story we know. It is the story of pioneers, progress, and the transformation of 'empty' spaces into industrial resource fields" (18). The story that "we need to know" recognizes that the history embedded in the land is a result of anthropocentric power even when "Industrial transformation turned out to be a bubble of promise followed by lost livelihoods and damaged landscapes" (18). Tsing identifies that the "story" of landscape is a cycle of "promise and ruin" (18). In North America, clear-cuts carry this narrative of valuing lively wilderness as empty spaces that can be used for resource extraction and left to waste until enough time has

passed that resources have acclimated again for further extraction. The balance of emptiness and promise, fullness of history and barrenness of violence are what pulls Aliesan, Doubiago, and Grover to intertwining their narratives with those of clear-cut forests. The life writing texts draw out the phenomenological resonances of what it means to view a lively space as empty and available for resource extraction. These resonances move outward from the immediate impact of the material act to drawing from marginalized lives to fuel the desires of those in power. The phenomenology of the clear-cut – the post-extraction space – embodies a particular coexistence of presence and absence. Let us think of this as a phenomenology of ongoingness. The clear-cut bears life and death, fullness and emptiness, barrenness and fruitfulness. It fits itself easily into binary thinking, but it encourages seeing outside of a perspective that is "clear-cut", beyond the black and white to the grey.

The deep histories of spaces like the clear-cutting sites offer a great wealth of meaning for life narratives. Clear-cuts have an established history in feminist, disability, and queer studies discourse as a learning ground for activism. Eli Clare writes about the clear-cut as a challenge to relearn ecology in the wake of an education that supports the commodification of wilderness: "I knew big, old trees exists…But I didn't know about thousands of acres of big old trees. Nor did I know about animals, like the northern spotted owl, that lived in old growth forests. No one told us, and the logging industry had quite a stake in the silence" (23). Clare grapples with "the chasm between my homesickness for a place thousands of miles away in the middle of logging country and my urban-created politics that have me raging at environment destruction" (20). That loneliness "reaches deep under my skin, infuses my muscles and tendons" (19).

Intertwining the narratives of diverse more-than-human life is an act of survival, and sharing them as written text is activism. The readings to follow demonstrate the ways in which the women writers recorded their lives in a manner that pushed against the normative structures of thought in their cultural contexts and that found ways of giving voice to diverse forms of life and survival in their narratives. While writing in very different forms, they share this manner of unearthing the unseen and unheard, of preserving through text, and of challenging hegemonic cultural narratives with their own. It is theorization of survival, of how to cultivate feminist ongoingness – which is all shared across the texts. An archive of thinking through and recording survival and legibility. I consider this to be an important archive for thinking about the relationship between literature and environmental care. It holds the theoretical work of drawing on an act of environmental violence – the clear-cut – to understand the affective and phenomenological residue of this act, of drawing on an act of violence to understand the world in its wake. Clear-cuts exist in the texts as literal, material logging events. They also have a presence as metaphor, illustrating the relationships between environmental violence and gender-based violence. Then, there is the expansive and intriguing formation of clear-cut as an epistemological structure. Clear-cut, as a structure of knowing, is vital for articulating the ways in which the women writers know their own life experiences and know the livelihoods around them, when those lives and experiences are refuted and reframed by masculine voices. The life writing texts of this paper theorize their own critical materialism by asking, what is vital? And what, beyond the individual, is part of one's individual life? For women it is *vitally* important to recognize the environment as lively and storied.

I am turning to Sara Ahmed's *Queer Phenomenology* and her theorization of orientation to demonstrate that bearing witness to space makes legible the threats to survival of both human and nonhuman beings in that environment. It is a feminist act to be attentive to the impact of power structures on all beings. I am using Ahmed's orientation to address how bodies relate to and rely on each other in space, which is at the core of why space and writing about one's life are so intricately tied. These relationships make legible how the human and nonhuman are mutually implicated in oppression and survival. If feminist new materialism teaches us that bodies and space are permeable and codependent, then orientation teaches that the survival of marginalized bodies is dependent on their legibility to others. A reading that engages with materialism and orientation expands what, and how, we see when reading life writing. Ahmed's framework of orientation offers a language for thinking about the seemingly illegible presences that shape the lives that we turn into narratives. Ahmed conceptualizes life in terms of lines and directions and turns: where we go, how we go, and why we go – and what happens when we go off course? Orientation is as much spatial as it is embodied. A discourse of survival arises out of the relationship between space and orientation. Ahmed explains that "some spaces extend certain bodies and simply do not leave room for others" (11). Considering "home" as a space in which a queer individual seeks, expects, or hopes for familiarity and ease, she understands the consequences of feeling "out of place" in terms of a disorientation that shifts that individual into a marginal position: "If orientation is about making the strange familiar through the extension of bodies into space, then disorientation occurs when that extension fails" (11). Orientation is social and material. Ahmed writes that "[o]rientations…are about the intimacy of bodies and their

dwelling places" (8). Bodies have perspectives, responses, and histories all shaped by and with their dwellings. The body knows as much about its dwelling as the dwelling knows of itself. Overlooking certain vitalities and sensations, certain spaces and "heres" (in the sense of being "here") are all part of Ahmed's claim that phenomenology is a matter of centers, margins, and backgrounds. The life narratives of women writers, with their attention to space, make margins legible by making them part of the narrative and bringing them into focus. The background, the alongside-of, the life stirring at the edges of a clear-cut, is active.

Ahmed writes that "space is sensational" (*Queer Phenomenology* 14). This phrase is mirrored in her later book, *Living a Feminist Life*, when she writes, "Feminism is sensational" (21). She explains that "[a] sensation is often felt by the skin…If a sensation is how a body is in contact with a world, then something becomes sensational when contact becomes even more intense" (*Living a Feminist Life* 22). This parallel dynamic of knowing one's environment through the sensations of space and the sensations of feminism underscores the importance of orientation to reading women's life writing. I am concerned with space as not just the site of objects and the field on which lines are drawn, but as a sensational multi-dimensional assemblage of lives and livelihoods that can also be pushed off-line and disoriented, like humans can. Clear-cuts offer a versatile case study for this. When faced with a forest, do you see[14] a commodity, a shelter, a wilderness, or something else? What you see therein is indicative of your

[14] The notion of seeing is not one that I treat as stable or singular, but as expansive. "Seeing" can be performed differently according to individual bodyminds and sense perceptions, especially when seeing is used to mean recognizing or being aware as opposed to simply looking at. I will be exploring this in detail in my chapter on novels of environmental crisis, which focuses on modes of witnessing change.

orientation to the object of the environment. From that orientation comes narrative. Stories arise out of individual orientation relationships to objects. These stories offer a source of language to make legible the nonhuman, the diverse liveliness of an environment. In the case of clear-cuts, what happens to the life and to the story of a forest that has been logged requires a reorientation. How humans reorient themselves around that changed forest impacts the ongoing narrative and cultural value of green spaces. Aliesan's text will exemplify this when the forest that she writes about becomes "a managed forest". Indeed, all of the texts in this chapter address the question of what do you see when you encounter a clear-cut? An individual's orientation provides the answer.

My engagement with life writing texts involves looking back and returning to former feminist moments, to former women's lives. Looking back is a necessity of sustainability, one that needs to balance looking forward. Each of the texts that I work with in this chapter delves into the authors' experiences during the 1970s-80s. Some writing is written retrospectively, and some is taken from publications and journals written during those decades. From the perspective of feminist environmental humanities, it is increasingly valuable to look back to feminist history to make sense of the relationship between gender and environment. The language of these texts invokes a different relationship to gender and sexuality than is used in current feminist discourse. The portrayal of gender is often essentialist and binary; there are men and there are women, and they are oriented along separate but parallel lines. Deviating from these lines is a divergence from the norm and so is being vocal about the effects of these lines. The language of sexuality is direct and visceral. The women's voices locate sex and gender in no uncertain terms – mapping

the way in which the world takes form around these axes. The body and the self are worldly and relational; they are deeply material. The emergence of ecofeminist discourse in the United States during this period played a major role in the articulation of the relationship between the treatment of women's bodies and the environment (Sturgeon 23).[15] Doubiago's poetry exemplifies the clarity of the shared language of women and environment, as exemplified by *Hard Country's* passage: "*Flood me, deflower me, pollute me, blind me. / Make me as my city, the 200,000 dead. / You are a man. You know nothing. Therefore you can do / anything"* (53).[16] These lines articulate how Doubiago sees women and environment reflecting each other, and gestures toward an embodied knowledge that is at odds with the knowledge of men. Locating embodied knowledge as part of one's identity is the seed of women's counter-epistemology that I will be exploring in each of the three texts. I find myself drawn to these moments of visibility and anger, of action and resilience, and to a time when women demonstrated the need to search deeper within their own bodies and further away from culture to understand themselves and their oppression. The persistent survival in these texts teaches – even decades later – how to locate life and livelihood where there appears to be a dearth of it.

The essentialism also extends to the authors' ecological approaches which emerge out of the height of twentieth century western environmentalism. These texts refuse to refute the existence of wilderness. They hold on to such nostalgic perceptions as nature possessing a

[15] See Noel Sturgeon's *Ecofeminist Natures* chapter one for a thorough genealogy.
[16] While not explored deeply in this paper, the environmental toxicity and pollution are engaged with frequently in *Hard Country*. They are a site for articulating slow violence that affects the human and nonhuman livelihoods in Doubiago's family history.

unique kind of beauty or holiness. As you will see in the readings below, concepts are of course not unproblematic, and the authors do not leave them uncomplicated. But they remind us that sustainability can start with something as straightforward as saving the trees. There is clear tension between my primary literary texts and my secondary theoretical texts, which embrace queer and deconstructive readings. However, this tension in regard to where they stand on essentializing the body and identity is a threshold for recognizing marginal forms of life and rethinking survival and sustainability. The dynamic encourages us to look back to what we leave behind. The archive of my first author, Jody Aliesan, will take us down the path of returning as a form of reorienting and recognizing.

True North

Aliesan's *True North* was brought alive to me through the archive that I visited at the University of Washington which gave me access to Aliesan's personal journals from much of her adult life. This work is a point of contact for me, a point of kinship. It is the beginning of a path through feminist history grounded in space and place. Reaching back is a practice of feminist sustainability – reaching back, repetition, and recursive practices. Aliesan demonstrates this in her recursive reflection: she asks how self-examination through detailed record keeping can teach something about helping the feminist collective to survive. Jody Aliesan was a feminist, a poet, and an environmental activist, conducting her work within the Seattle area. Among the causes that she worked for were women's rights, establishing sustainable farmland, and building socially conscious communities. The name Aliesan is a self-reinvention, as she refashioned it to

express her identity on her own terms. Her blog provides the translation from Old English: "álíesan: to loosen, set free, deliver, liberate, redeem, release, ransom, absolve" (*As We Were Saying*). Her 2012 obituary from *The Seattle Times* describes, "Jody lived a life dedicated to 'telling the truth, and speaking for those who cannot speak for themselves. My community, my culture, is our common humanity. I aspire to speak for that'" ("Jody Aliesan").

Reaching back initiates reaching forward. By visiting the archive, I was put in contact with Aliesan's living legacy. Through my encounter with Aliesan's archive, it became apparent how much of an influential force in the Seattle community that she was. I say through my "encounter" rather than through my research because Aliesan came alive outside of the boxes and the digital biographical material that I found. One of the special collections librarians who I conversed with at the desk told me, "I knew Jody." At this opportunity we shared how and what we knew of Jody – my impressions of her and the librarian's memories. She confirmed and corrected what I had gleaned from the boxes. This was a moment of community that Aliesan had given to me. Two women on their work shifts with intimate knowledge of another woman who did not outlast us in life but remained in legacy, me having read her journals, tracked her health, touched her hair, and the librarian having lived with her, touched her, been bestowed the role of caretaker for several of her published works that were not included in the archive.

True North is a short memoir in what might be called experimental form. It is non-linear, fragmented, and collage-like, made up of journal entries, conference papers, poetry, notes, and more to tell the story of some of Aliesan's life. I know it was not the majority of her life because through her archive, I was privy to detailed logs of seemingly everything that Aliesan

experienced. Perhaps the most exciting material was the vast series of handwritten papers consisting of a timeline of Aliesan's entire life, from her work, her publications, her places of residence, her major life events, down to the minutiae of her health. The timeline starts at the time of her birth, seemingly retrospectively written to outline her childhood and becomes increasingly detailed as she ages. One folded piece of paper that I came across contained the words "my first gray hair – plucked April 20, 1976" and a nearly invisible single strand of just that, taped to the page (Jody Aliesan Papers). I was intrigued by imagining the figure of a woman who was so self-reflective and self-aware enough to see the significance each of her professional, personal, and embodied experiences as milestones that, if laid out graphically next to each other, provide a kind of three-dimensional map of who she was. Beyond the timeline were several notebooks from different points in her life, in which she journaled her reflections – political and social – on her daily work and activism. From her personal timeline to reports on her astrological profile and her DNA makeup, to the preservation of her own physical artifacts, she sought meaning for a 'self' meant not only for her own benefit, but she seemed to be searching for what makes up who she is and what that means for the spaces in which she co-acts – her communities, her environments, her homes. This is what drew me to *True North* – coming from a writer who documented her life in such copious detail, what made the cut for a published life narrative?

Approaching Aliesan's texts for the purposes of writing and critique poses the challenge of how to read the many modes of her writing in relation to each other. Aliesan's timeline demonstrates the method that I intuitively took – that reading chronologically or in terms of publication status is not productive; her writing demands to be read across and beside itself. The

timeline represents her life in terms of coinciding and parallel entities. Relationships, health, publications, etc. are on the same level. Modeling this as a reading practice for the archive of her papers as well as her published books draws out the counter epistemology of how she conceives of the relationship between self and space, gender and environment. Aliesan sees the world in terms of pieces making up a whole, systems that stem from other systems, life as assemblage in which understanding each piece is necessary to comprehending the whole. Therefore, the challenge of working with her archive is to determine how the pieces fit together for her whole story. My attempt to write about *True North* as an independent text was quickly derailed by the imprints of her journal entries that existed between the text of *True North* and myself as the reader.

Aliesan's opening to *True North* is a short poem entitled "You are Standing in a Dark Room". This poem embedded in spatiality and uses second person to embed the reader there, too. The title sets up the subject's existence as defined by space; "you *are*" (my emphasis) establishes the state of the subject as defined by where they exist and how ("standing") they exist there. The *there* of the poem is a meeting point of subjectivity, body, and environment:

looking out bright windows
the room is your skull
the brightness your eyesockets

you are safely hidden
curtains and treeboughs protect you

from anyone looking in

By revealing that "the room is your skull" and its "bright windows" come from "the brightness of your eyesockets", space is used as a solidification of the narrator. You are positioned in space and the space is in you; you exist. This poem underscores that the out is in and the in is also out. You exist in, and of, space – and interaction happens in, and out, there. The second person voice pulls the reader – and the potential of other life – into that bodymind space as well. There is an openness. The presence of other people and objects in the space of this bodymind shapes the subjectivity of "you". The subject knows life, knows what exists under the cover of things in and around them. Through this poem, Aliesan demonstrates the perspective that I want to highlight in women's life writing – that not only is the authorial voice recognized as being embodied but it is also always located. Space is within the self. The body's environment is foregrounded. It is put into focus as an active, animated, and symbiotic element of the author's life.

Aliesan's journals are filled with records of her lifelong commitment to community activism. One of her approaches to environmental activism was experimenting cooperative housing. As an environmental activist, she did not take a back-to-nature approach, but rather enacted change through promoting urban modes of living that brought local and ethically sourced food to the Seattle area and that supported local farmers. I would like to dwell on her experience of cooperative living which illustrates Aliesan's recognition of even a communal house as an environment on which her wellbeing and survival depended. In her journals she refers to the co-op in which she lives as "a closed ecological system" (Jody Aliesan Papers). Many of her moments of community restructuring are moments of self-care and restoration in

reaction to being faced with the pervasive presence of the patriarchal dynamics at work in her community. A short breakaway line in one day's entry observes, "Will be glad to leave the philosophical shallowness, arrogant ignorance of element in this house." (Jody Aliesan Papers). Describing the conversation taking place during a dinner with several friends and friends-of-friends, she writes:

> Over-intellectualized psychoanalytic sexism. Dave spent three extra years of time and tuition learning that males are "expansive", females "intensive", Eriksonian sugarcoating to the usual active-passive pill. Jennifer and I left them to their nonsense and danced in the dark, simply, sensually. (Jody Aliesan Papers)

Her retreat with Jennifer to dance in the dark is an act of searching and exploring, of rejecting and restructuring. Leaving the circle of men at the dinner, she and Jennifer reorients the space through nonverbal communication that resists and counters the truths put forward in their dinner conversation. By sharing in a performance of female intimacy that is visually obscured to voyeurs' eyes by the darkness, Aliesan works to heal herself from the toll of regurgitated epistemological oppression that threatens her vision for growth and progress in her community. Aliesan shows us that through reorienting a space the subject brings it to life and makes it vital while enacting her survival. Dancing in the dark restructures the house through movement between bodies. Reorienting is a kind of activism.

The idea of reorienting as a kind of activism is repeated in a central section of *True North,* entitled "This is a Managed Forest". The title refers to a site of deforestation and reforestation that Aliesan visits several times throughout her life. She knows the forest's wild

and undisturbed past, then revisits it on a bus journey accompanied with several men when the forest has been clear-cut, and finally returns with her partner – a woman – to see the replanted managed forest that now occupies site. The treads of her memory draw out an environmental history that the development and industry make irrelevant. Her writing and rewriting from different orientations act as a kind of subversive choreography for reclaiming and revitalizing both the memory and the futurity of the ecological space.

The section opens with a passage from E. C. Krupp explaining the structure of speeches given at "Mescalero [Apache] community gatherings", which emphasizes what the speaker does not know about a subject and that "his words have expressed how the situation looks to him" (90). Aliesan's account of the managed forest models this structure and is narrated with such concessions of knowledge in mind, of what she does not know or understand and how things look to her. From her position, the forest carries a story, a web of impressions, lifelines, and cuts. I am struck by the present tense of the section's title. The site *is* a forest, the verb drawing out its ongoingness. Even when clear-cut to the point that it can be seen by the passing eye as a site for future development, this is a forest, and continues to be. She writes that "the plantings are not part of a natural succession" and "[w]e will not get back what we lost", but she still recognizes that there is "a small misshapen hemlock", "the first sign" of the persistence of the forest and "all the other life underfoot and beside and above" (91). The text as a whole portrays Aliesan's orientation to spaces as taking up a perspective that sees life left behind in the wake of destruction and harm.

The figure of Aliesan, herself, is part of the life positioned "beside" the forest. She writes, "It looks to me like everything is getting steadily worse, and there is no hope. I can live without hope" (91). She and the managed forest share certain imprints, such as those of being unseen in their truth. The men do not see the forest as anything other than a controllable commodity. They also cannot pin down Aliesan's queer presence on the bus, in that space. One man on the bus asks, "You an environmentalist?" (90). Aliesan writes in response:

> I said I wasn't calling myself anything, but I hoped there would be someplace left where the trees weren't all the same kind and the same age and planted in rows. He didn't speak for a while and then we talked quietly, the way people do when they don't know for certain and aren't trying to prove anything. (90)

Aliesan characterizes the masculine social presence as follows: "Fears ambiguity, incompleteness, the unknown. Prefers what is black-and-white, thorough, clear-cut", or in Ahmed's words, that which follows a straight line (*Queer Phenomenology* 93). Through drawing this distinct analogy between the clear-cut forest and masculine dominance, she makes that shared experience of violence legible.

Offering another interaction between herself and the forest, at which point two queer bodies are aligned with it in ways that the men on the bus could not be, Aliesan describes her return to the site: "This spring my sweetheart and I drove to the same place on the same road…But when we rounded the bend into familiar country, I couldn't help the tears" (90). The inclusion of this memory draws out the question, how do you recognize the profoundly different space? It brings to mind Maggie Nelson's use of the question of the Argo ship: is something

which has been altered to the point of containing none of its old parts still that same thing? The Argo is "willing to designate molten or shifting parts, a means of asserting while also giving the slip" (Nelson). Other than location, something maintains Aliesan's sense of kinship toward the forest which has gone through a clear-cut and burning, "vast gray killing grounds…everything dead" to uniform planting of new trees (91). Shared history, being able to see and recognize the life that persists "under foot and beside and above" the "uprooted" and "burned" space (91). Shared experience brings recognition, mutual imprints and cuts, similar movement for the sake of persisting. *True North* is a project of recognizing – and making legible – her consistent self amidst traumas, growth, and changes – like Nelson's portrayal of the self as Argo. Montage is not a crisis; it is careful and precise articulation of something that resists homogeny and containment.

Aliesan is definitely what Ahmed would call a feminist killjoy, unafraid to linger and even immerse herself in the painful and the disappointing when it comes to her activism. Aliesan undertakes an epistemological exploration of environmental harm. Her attention to what exists at the edges and in the background of a space in which the goals of capitalism and patriarchy are in the foreground does not provide a solution to environmental justice or sustainability. But she draws into focus the insidious background about why we, as humans, act in harmful ways and which actions even defy their own internal logic. She writes, "What is it about us that wants to manage?...Maybe the manager inside us...fears whatever it can't control. Fears what is wild…Thinks of abundance as threatening, goes into a killing frenzy to assert superiority" (93). She shows that by her own not understanding, the dominant capitalist epistemology is not itself

"clear-cut" and does not exist in an empirical state of "rightness". From her situated perspective, from her queer intersections, the world does not make sense through the supply and demand equation. She explains that "it looks to me like the deforestation of the Pacific Northwest is more than a matter of supply and demand and a free-market economy. Something more than the forests is being managed" (94). She makes repetitions of "I don't understand" – "I don't understand…how someone can cut down a forest because it is in the budget…because a lot of money is being paid for big trees…I don't understand cutting down a forest to prevent it being set aside as a wilderness…I don't understand killing trees just because they are in the way" (94). Her repetitions call for thinking differently to reach new answers about living with the land and with the nonhuman. She closes the section with "Maybe it's time for the trees to manage us. By their absence they will" (95).

My questions around what made the cut of her published memoir when she kept such prolific written records and reflections of her life are also made less important by these imprints – impressions that exist across Aliesan's writing of herself. Imprints matter as much to Aliesan's disruption of the distinctions between space and body, and space and environment. Like the clear-cut forest, there are roots, scattered seeds, even ruins that remain and exist at the base of that which is rebuilt. Aliesan's dancing in the dark is a choreography that is repeated across her work because it represents an improvisational form of feminist world-making in which bodies can reorient space – even queer bodies that exist in the margins and the dark corners of that space.

Hard Country

Recognizing the imprints left by other livelihoods in one's environment is central to Doubiago's life narrative, which asks the question of what alternative histories are legible within land. Doubiago approaches life writing by taking up the genre of epic poetry. Her intervention into the masculine epistemology upon which the epic genre is constructed also asks: how do you write an epic poem when you do not have the foundation of empirical knowledge of your narrative? What does such an epic poetic voice sound like? What if you do not have a reliable set of memories on which to base your writing? And in what voice should you provide witness in order to reach an audience? Doubiago understands that the material world holds the presences of women's history. The histories of women in her family have been forced into impermanence by being rejected by patriarchal cultural discourse. Turning to the land is an opportunity to witness from a temporal distance. The mission of *Hard Country* is recovering imprints when traditional history records fail to represent the lives of the past. Her life narrative is an act of both searching and record-keeping.

The register of poetic voice is bound up in the very question of witnessing. Doubiago alludes to her chosen literary predecessors early on in her verses, invoking the Whitmanesque repetition of "who" in her first segment. The who is not just establishing the subjects of the poem through declaratives, but it is also used as an interrogative. "Who" asks "Who were the men and women / who prepared the ground / by making love on it", "Who were the women / who then worked the corn / in the fields / owned only by women", "Who were the men / owned by the mothers" (10). These inquiries pose the underlying question, what is it that gets left out during

the process of bearing witness? Doubiago turns to the environment to trace the fragments – and even whole identities – that are missing from the story of her life that she has inherited.

Doubiago grapples with the tension of using the voice of the poet and the voice of the woman to narrate a world that has been predominately narrated by men. She addresses her concerns about the intertextual writing process of poetry by stating that "I'm not sure how one keeps the life-sustaining images of other poets from one's work" (81). "Life-sustaining images" underscores the intricate relationship between authorship, language, and vitality that is made particularly complicated for a woman writer who is inheriting masculine poetic tradition. Navigating that inherited poetic language is both life-sustaining and oppressive. She is situated between the heritage of masculine voices dictating what language is: "I…know myself as Williams' pure product of America going crazy, what I cannot express, the slaughters, and the great broken tongue of the people" (81). She quotes Martin Luther King and her friend, Philip, who say that "a riot is a language of the people" and "language has been used to repress Americans", and then inserts her own experience stating, "I've always felt like Billy Budd, my life at stake on the words that won't come, mute before the obvious" (81). Articulating the obvious of her world in the nebulous language of poetry becomes a problem of grappling with the illegible experience of women. This experience exists in the land, and in the oppression of "silent, sullen men" (82). She settles on a poetic address that often utilizes "you", referring to an ambiguous woman subject, which may be herself, her reader, or a relative. She tells the second person subject about their identity, asserting such traits as "You are a woman / a violation / to your country" (54). Her second person address instructs women to "Leave. Do not believe. Run

west. Run against the war. Hold your life by journeys" (54). These directions encourage movement against the grain, cutting across norms, and orienting oneself with the land.

Throughout *Hard Country*, Doubiago works to recover and reconcile her family's history that has favored its male lineages and kept limited records on the women of the family. As a project of recovering and honoring lost histories, the poem is a story of women surviving with the earth at the hands of men's violence. Writing that story is crucial to Doubiago's family survival as she is at odds with the erasure of women's history in the previous generations of her family. In the end notes of the text, she explains her connection to her indigenous heritage as being a matter of oral and memory-based preservation of an illegible truth that evades normative, empirical record-keeping:

> When I wrote *Hard Country* I didn't know the specifics of my own Indian heritage. My mother had just pounded it in from the beginning, *We are Cherokee, Choctaw Seminole, maybe Shoshone*. What I think now is that the grandparents drilled this into her and her siblings – *You must never forget!* – before putting them in the local Virginia orphanage, an institution whose main admittance rule was *all white*. (272)

She traces the erasure of her women ancestors through the record of the word "squaw" used in place of names and tribal affiliations: "It is *my* mother in whom the squaws live / *Squaw*, the only name on the marriage certificates / *Squaw*; Cherokee, *Squaw:* Seminole, *Squaw:* Choctaw" (16). The movement between the recorded "*squaw*" to the tribal names Cherokee, Seminole, and Squaw makes legible and rewrites what is erased in official, dominant forms of record keeping and keeps her mother's memory alive in the text of the poem. Squaw marks a lineage that has

been dishonored and belittled but is still a visible and ongoing presence in her genealogy, balancing between presence and absence. Also in the endnotes is the statement that "by U.S. Government record (those soldiers sent out to count us), I am of the Eastern Boundary Qualla Cherokee" (272). Doubiago chooses for this fact to not be present in the body of her poem.

There are a number of dead women in Doubiago's life that direct the meanders of the poem, including her mother, the mother of Ramon (her lover), Doubiago's grandmother, and Doubiago's grandmother's daughter for whom part one of the poem is dedicated. The narrative has the mission of centering such questions as "Who were the women / Who told their stories / to each other across the hills" and "Who is it that I look just like" (11, 15). The answers have been lost due to "the family disease, amnesia" (14). Doubiago writes back to her Grandmother, telling her that "You were a map, Grandma / to a place I couldn't find / born in a land without roots / to a family with amnesia" (14). She imagines how her grandmother interacted with space, making up memories of her movement: "Sometimes, Grandma, you walked to the Georgia border. / I make it up. You must have walked / to North Carolina looking for a tree. / How else did you bear / That poisoned corner of Tennessee?" (17). Her grandmother must have sought refuge in the land, as she, herself, has.

Land is the compass by which Doubiago searches for a new way of knowing the world. She grounds the human in site and landmark, in natural phenomena and geographical signifiers. Places and stories are inseparable. There are no disembodied presences in the poem; everyone is located in space and in geography. Land and environment are the compasses by which Doubiago makes sense of the human. Finding material landmarks in the self grounds her identity, providing

reason and steadiness. Place and witnessing are inseparable as the site grounds and validates the account of the experience. Somewhere between the tension of women's tenuously legible subjectivity and their material motherhood and genealogical persistence, and the tension of the material, ancient environment that is also fragile and vulnerable, there lies a space for women to pass down their witnessed accounts and to trust the voices of those experiences. Both women and environment are made vulnerable by men, harmed by men, and made illegible by men. But by intertwining stories and landscape, women in Doubiago's family create a space in which their vulnerable truth cannot be erased or silenced.

The scaffolding of the poem is made up of gaps of knowing and extinctions of being, but every section of the text is in some way bound up in locating survival in the wake of lost lives. Doubiago even describes herself as "born a dead infant" (11). However, her portrayal how she has grown and changed over the course of her life does not suggest that associating her birth with death is a condemnation of her life. Instead, the way that she writes about her identity recognizes the presence of death in all living things, and the remaining life that is present amidst death:

> And when I rose
> the mountain I had been
> heaved and collapsed
> into an ancient crater
>
> and I knew I would forever now be
> the gap to be filled (11)

She finds permanence in gaps, clear-cuts, and fissures that reconcile the disappearance of landmarks and that can be recognized as flourishing. Like the managed forest, the crater of a collapsed mountain, is still a site of life. The gap also holds space for trauma, which is emphasized by its strong connotations of sex and gender roles. The gap is itself embedded in the passage's line break, leaving space in which the particular story of why the mountain has collapsed is not told. The temporal gestures in the language of her embodied knowledge are hopeful, though. The crater that Doubiago becomes is ancient, transforming her into a form that has a long history. Subsequently, she knows that she "would forever now be / the gap". The crater is a source of limitless ongoingness.

The process of Doubiago's writing recreates an alternative knowledge of life (her own, her family's, the earth's) through untangling "the knotted male perspective / I will always be leaving" and recognizing traces of the life unseen (96). Recognizing livelihood and wholeness amidst damage is at odds with her family's male legacy. Her father is a figure of the normalization of violence and industrialization, and the erasure of lively women in her family. The syntax of how she describes her father's view of earth indicates the power of his patriarchal orientation:

> Daddy
> who thought the whole earth
> without trees, without flowers, without grass
> the way it's supposed to be, he thought, death-cracked (18)

The motif of gaps arises in the “death-cracked” earth that her father conceives to be the state of the world, drawing a parallel between his perception of the earth and the women of the family’s own embodied experience as reproductive figures which is undergirded by violence. “The way it’s supposed to be” emphasizes the rigidity of Doubiago’s father’s portrayal of the earth, thought the repetition of “he thought” draws attention to the situatedness of his understanding of space. This passage offers a map of the normative lines of a hegemonic masculine epistemology that shapes what it means to understand and relate to the earth, which women like Doubiago must struggle to push against.

A trip through the landscape of the Redwoods becomes a site for Doubiago to make meaning out of ruin. The presence of trees draws out a resonance of legibility. Visiting the site of a clear cut opens up a clear narrative “to the simple unfolding / of the story” (96), “to the stories that call through dark manure / and red carnivorous soils" (94). This is an opportunity to move further away from “knotted male perspective” (96). She takes a train with her lover through trees that have not yet been logged to the point of a clear cut. Being present amidst “the circle of new shoots / from the burnt heart of redwood” allows her to loosen “the knotted male perspective” (94, 96). Her own voice is bracketed by the voice of a male guide[17] who tells her “This track laid...to get the trees” (96). The following italicized passage moves from the Whitmanesque “who” to repetitions of “why” to unlock an articulation of experience that Doubiago sees reflected between herself and the wounded trees:

[17] It is unclear if this figure is an official guide or simply a random man who is offering unsolicited information about the forest.

Why

when you found me bathing in the pool

did you look at me and see

the world and your land, sacred

genital to holy mouth, why

your need to haul my body

into property, your land

into pornography, why

your fantasy to love things

to death? (96)

Where Aliesan saw capitalist exploitation in the male treatment of bodies – both human and nonhuman, Doubiago also recognizes colonization. Ramon's fantasy love for her is a conscious desire to turn her body into property and pornography. Through pairing property and pornography, she equates colonization with male hedonism, underscoring how each disenfranchises women and profits on their bodies. The action of hauling her body to turn it into property mirrors the trees being taken away on the train. The form of the bridge disintegrates into incomplete sentences as Doubiago pieces together her knowledge of her body being broken apart into serviceable entities for her lover. Like a clear-cut, the breakdown leaves more behind that "clear" suggests. Being amidst the logged forest with Ramon, she is able to recognize his orientation to her body. Her orientation to the forest and gaze on the trees and train tracks can detect and empathize with the forest's own exploitation.

The “why” the questions of the previous stanza evade her. She longs to “suck us back" – she and her lover, Ramon – to “before America was born / before the land was cleared / before our lives were broken // to wilderness / where marriage is possible" (94). The revelation of deforestation offers an intersection of exploitation of environment, violence toward women, and the mutually destructive silence and story-building of men:

> The Redwood Empire is now, at best,
> second growth,
> and I am a giant snag
> left from your clearcut
> of the virgin forest
> my famous awesome beauty gone
> my enormous roots still snarled
> everywhere beneath the ground. (98)

Calling the Redwoods an empire signals that they are never simply a forest; they are always implicated in colonialism. “Second growth” indicates the generates of the empire. An empire is a composite that grows beyond its original form to encompass diverse and manifold parts. By balancing the image of the Redwoods with a description of herself, Doubiago articulates a form of survival that speaks to Nelson’s Argo. Her lover’s clear-cutting of her is a destruction of that which is profitable and has market value, like virginity. After that hauling of her body, of what he deems to be his property, her “enormous roots” survive beneath the ground, allowing her to persist. She sees herself changed to a snag instead of a forest, like her movement from mountain

to crater, but those deeply entrenched roots answer the question of Argo by insisting that she is still herself: a forest remains through its roots.

North Enough

Jan Zita Grover's memoir, *North Enough*, takes up the conversation of what lives on in second growth and other sites of destruction. Grover writes about her experiences caring for HIV positive men in San Francisco. She then turns to her migration to rural Minnesota with the intent of recovering from the burnout that she suffers after being so close to death for so long. She describes her motivation for moving as, "Reckless and burned out, I wanted nothing more than to find a place where I might be at peace" (3). The book moves between the two major settings of San Francisco and Minnesota, which structure the tone and focus of each chapter. The goal of the text is clearly expressed as Grover wanting "to record what I saw and experienced. I want to bear witness" (7). The narrative bears witness to her own life experience, that of her friends who died of AIDS, and the nonhuman world that she observes around her. Its patient passages that articulate the behavior of the land, as well as the land's history, are necessary steps toward explaining the ways in which a dominant epistemology has shaped how forest life is valued and stewarded.

The binary of city and country is inscribed into the narrative simply through the process of moving from an urban area to a rural one in order to find peace and escape the harsh realities of modern existence. However, while Grover recognizes the binary, she does not reinforce it as being based on reality. The boundaries of city and country are broken down through her narrative

of recognizing life and beauty existing in damaged places. There is a reciprocity between the seemingly disparate settings that Grover describes: “In learning to know and love the north woods not as they are fancied but as they are, I discovered the lessons that AIDS had taught me and became grateful for them” (6). She explains that “I travel with my dead” (12). What this means for her experience in bearing grief both in the city and in the woods, is learning that nature follows you into the city and the human follows you into the wilderness.

The narrative of Grover’s experiences in both settings hinges around the dying process of her friend Perry who has AIDS. She meets Perry in Minnesota despite her intent of escaping from the impact of HIV by leaving San Francisco. Perry often reminded Grover that “Nothing lasts forever”, a fact that he “inhabited…his body rotted, sloughed its beauty, liquesced. He sunk deeper and deeper in his bed as if growing roots, extruding layers like a clam” (13). Death “most visibly entered” Perry through his lesion covered leg which becomes a focal point for Grover while she comes to terms with his death (24). As she changes his bandages, she thinks, “How much of the world could I find in something that was dying?” and “Could I learn to see his leg as a creation as well as destruction?” (23). Perry’s decaying body is a set of questions around what happens at the limits of living. As she debrides his wounds with hydrogen peroxide, “The bubbles winked back at me, catch-lit; they might have been stars wheeling in an unfamiliar galaxy” (24). A transformation takes place in the galaxy of his leg that spreads throughout his whole body and being, as “None of him was unaffected by what then macerated his flesh”, (24). Grover associates the changes with Perry becoming “something else, rich and strange – a dead organism, human peat. Dear bog” (24). The unfamiliarity of the transformation is hopeful,

moving from the human to the more-than-human instead of simply being an extinction. Later, the language that she uses to describe the Minnesota landscape echoes the descriptions of Perry's leg, locating so much of the change from his dying process in the environment around her that the unfamiliar traits become familiar and recurrent. Six months after his death, she moves to yet another unfamiliar place to reside in a cabin in the woods, where she grapples with creating a reparative representation in her imagination: "I cannot imagine it green and refulgent, shoots and crosiers and leaves scrambling over the scars. I try to see it through his eyes, but I cannot" (12-3). She draws on Perry's perspective, explaining that she "cannot think of anyone else who can help me imagine this place whole, who has willed damage into wholeness as thoroughly as he did" (13). This thinking-back and thinking-with Perry offers her a limited perspective of the landscape, which sees mostly damage, but with the inherent potential to expand and change with the help of different orientation (13).

When writing about her life in Minnesota, Grover situates herself as a migratory non-native being, a "nonreproducing individual (like a single ant, caribou, or merganser)…all of us – the insect, rodent, bird, and I – are less than whole, mere pieces of a larger entity that is waiting somewhere in the wings to complete us: the colony, the herd, the flock, the family" (94). For Grover, the predicament of Argo emerges through the idea of multispecies assemblage; the question is not whether something that has been taken apart and put back together piece-by-piece is still the original thing, but rather whether the individual pieces are whole until they are all brought together. Connecting to kin in the forest of Minnesota is a matter of understanding her right to finding a home in a place where she was not born:

> I do not believe that being native to a place gives any creature unqualified claims or advantages over those of a non-native; to believe so is to deny the importance of adaptation, of history…Witness the brook trout and the caribou: logging warmed the trout's waters and destroyed the caribou's ancient forest browse. Newer arrivals were arguably better suited to survive under these conditions than the creatures who had adapted to these particular niches over thousands of years. (93)

Grover demonstrates here that an answer is always in the land. She tells the reader to "witness" the resilient changes within the environment that once hosted trout and caribou (93). Her imperative statements, which are littered throughout the Minnesota portion of the narrative, encourage shifts in orientation that make legible marginal truths about the space. "Witness", reader, the history of trout and caribou from Grover's perspective. Doing so troubles the idea of the native animal and the supportive habitat by offering observation-based truths of the land. She goes on to explain that "there is always someone with a more primary claim than the current claimant. On what grounds, then, has a native the right to continued occupation? How – and how long – must someone inhabit a place to plausibly claim it as native ground, as a place she has a right to?" (93). The use of the pronoun "she" highlights the instability of a non-masculine individual's right to place. The matter of being native is undoubtedly political and ethical for Grover. She asserts that "These are not idle questions to me, a writer who has chosen in middle age to move alone to a new place, expecting to remain here for the rest of my life. What claims have I on this place?" (93). To make space for migratory beings and to sustain lives that are under threat is a matter of legibility that requires the definition of life to be expanded.

Grover's questions of place and native rights frequently pull the narrative back to her experiences with HIV care. She locates a circuit through the cycle of liveliness, survival, and decay that occurs in communities of every species that she witnesses. Through the process of witnessing that circuit, she finds beauty in the bodies of her sick friends, and she finds a similar kind of beauty in precarious sites of wilderness. The trauma of witnessing her friends' deaths is intricately tied to recognizing beauty in the ways that life appears in different spaces. Reflecting at the site of the Blackhoof River which is "a melancholy and pleasure-making place, for everywhere human influence of the direst sort is distressingly evident", she comments that "a powerful beauty remains" (98). The discordance between the sadness and beauty of nature that bears no illusion of being untouched and is visibly under threat strikes a familiar chord for Grover:

> Like a recent cutover, the river stirs up a thick stew of conflicting feelings in me – horror, sadness, wonder, gratitude – that reconcile themselves into what I call, for lack of a more precise word, *savor*: a state deeply familiar and grace-charged, a complex reaction to careless human use and the land's slow, mute resiliency. It is like looking at a festering lesion and noting the beauty of its smooth margins or marveling that cells still divide and defend the crumbling body they also destroy. Their life is too short to change their ways: this is their only place, the only way they know. (98)

Witnessing and legibility are at play in this passage. Grover's complex affective response to the river that results in savoring is made possible by her orientation to threatened bodies that are on the cusp of change because of only knowing one way to live. In savor, the gap between salvaging

and seeing is closed. It is an engagement with seeing and with recognizing. To savor what remains of changing beauty is to honor it, to value it. Her savoring is also an acceptance that there are many ways of being alive. Grover asserts that "It is in the name of a radiant diversity that I claim room and right for us, and this does not always shake out in favor of the preferences of the purist or the displaced" (94). Valuing beauty and valuing marginal forms of life require orienting to the world in a way that goes against the grain.

The sections of the narrative devoted to Minnesota are built around sites of wildlife and wilderness, though not places that would likely be recognized as worth savoring. She chooses "to find the poorest, most obscure spots…from which to ask my questions alone", calling these places "to think with" (94, 95). Her descriptions convey the beauty that she recognizes within them: beauty that is hidden, ignored, or unconventional, but always tied to diverse life forms. Her chapter "Still Life with Landfill" draws attention to the erased liveliness of nature sites that are too closely associated with the refuse of humans. She explains that "Sewage ponds are widely known among birdwatchers…as extraordinarily rich sites for birding, but they are seldom mentioned by anyone else – say guides and town boosters" and "the fact that one of the most dependable sites for viewing wild creatures is at civic troughs flies in the face of our fantasies about untouched natures" (102). The proximity of wildlife and decay in sites like the landfill and sewage pond strips them of the beauty and value endowed in nature. Grover provides the example of the treatment of birds with low conservation value. By stating that "Wisconsin and Minnesota hunting regulations permit crows, jays, and starlings to be shot anytime; their lives do not count", she highlights the high-stakes hierarchy of vitality at play (103). These cultural

norms of valuing some lives in the wild more than other feeds into what humans save in the name of sustainability and conversation.

Grover follows her discussion of the biodiversity of the landfill with another imperative that instructs readers to turn our attention to marginal sites at which life persists in spite of oppression: "Look to your borders, birders: there are birds who can live along edges and birds who cannot" (103). Observation is crucial for thinking with the more-than-human and working toward a radical diversity. Researchers of forest typology, Grover tells us, have found that "There is no privileged forest form…The only surety is that one change entrains another" (109). The dominant cultural orientation toward nature spaces as possessing some valuable wildlife forms and some worthless beings is not reflected in the knowledge that can be found in the environment itself. This is "chaos theory [coming] to the north woods" (110).

Grover's discussion of recognizing unvalued life brings orientation to the foreground when she writes about trawling "the backwoods for clear-cuts" (103). Clear-cuts are thinking spots where "certainly there was plenty…to interest one" (111). In each of the three life writing texts, encounters with woods tend to happen by car through the access point of the logging road. The logging road is a main thoroughfare for forests. The women move through the forests on the same route by which trees were felled and exported. Driving, moving, and pausing to observe all elicit different views of the forest's livelihood that also favor particular species and organisms. In *North Enough*, the logging road returns as a point of entry and a point of contrast but Grover states that the competitive and energetic liveliness found amidst the remaining organisms of a clear-cut "[occurs] much too slowly for visitors driving through the woods to observe" (109).

She gravitates toward areas of the forest that are not visible from tourist roads, but she emphasizes that only a limited view of the "visible violence of clear-cuts" is accessible from the vantage point of the logging road (109). By changing one's spatial relationship to the forest through diverging from the dominant perspective of the road, the forest's own radical diversity comes into view. Orientation, movement, and recognition are inextricably linked. There is no condemnation of the logging road. It is not relegated to the status of industrial imposition but is accepted as a scar in the history of the landscape and an entry point into knowing the forest.

There are many angles of perspective that Grover flags for the reader as she describes the forest space. The logging road itself offers a different view of clear-cut sites than the "paved country road[s]" that are buffered by "idiot strips" for "urban tourists' tender sensibilities" (103).[18] She draws attention to the "busyness" that exists underneath the "barrenness" of the clear-cut "that becomes visible only when you give yourself over to a scale of time slower than that of fax and voice mail" (104). The following passage employs a hegemonic lens to depict what a clear-cut looks like to the modern western individual who is embedded in a temporality dictated by technology. The perspective of this normative body is conditioned to reject the destruction that is left in the wake of profitable violence:

> The look of a clear-cut, especially one this fresh, is superficially distressing: the only things upright are dead snags riven by the vertical grooves bored by pileated woodpeckers; shrubs that escaped the loaders' and skidders' traders; an occasional trash

[18] "Idiot strips" refers to the buffer of trees left at high-visibility edges of a clear-cut to give the illusion of uninhibited tree growth and to hide the view of the clear-cut wreckage from sight.

> tree too small or lowly even for pulping. There was plenty on the ground, though: logged trees are limbed and bucked before being hauled, so between the running red sores of tractor treads lay piles of sweet-smelling slash. (104)

Grover's "trash tree" pulls the clear-cut forest to the "lowly" level of landfill, emphasizing the proximity of landfills to actual nature sites and also the destructive treatment of wilderness by humans.[19] A clear-cut, here, turns a forest to trash. The hierarchy of forest visibility looms large in this passage. The normative human perspective of the forest is oriented in such a way to favor that which is vertical, tall, and upward reaching. The foremost distressing quality of the clear-cut is that its height is gone, and the remaining upright snags are visibly dead. The woodpeckers, representatives of remaining animal life, are themselves a lofty species that draws the eye upward. However, "There is plenty going on the ground" and Grover wants to pull readers' perspectives to that angle, which requires leaving the vantage point of the logging road to go deeper. Instead of foregrounding grief, she favors a focus on scrappy activity in the wake of a clear-cut. To only see death is "superficial" (104). The closing alliterative line "running red sores of tractor treads lay piles of sweet-smelling slash" calls forth images of the sick body, like descriptions of Perry's leg as a complex site of liveliness in places where death is occurring. The "sweet" scent of the left behind tree branches draws the reader toward the ground.

Grover uses a foundation of scientific empiricism as a starting point for documenting her environment, which she then diverges from to unlock a language and logics that aligns with her

[19] There is also a tongue-in-cheek tone in the way that the trash tree reveals the thin line between a forest that has been impacted by human industry and the hated landfills that are rejected by most as sites of nature.

own understanding of what it means to live and to survive. The woods offer a site where dominant definitions of life, of what is worth saving, do not reflect the reality that she sees in the forest in regard to what has value and where life is thriving. Additionally, Grover sees a similar problem to what Aliesan argues in the case of the managed forest – that life is teeming in sites that visually reflect death. As she works out the problems of valuing life and defining death, she establishes the titular relationship between clear-cuts and AIDS. The description of the trees in this section is filled with the language of endurance, competition, and physical achievement. Grover writes that "It is a dramatic story – competition, violence, death, victory – this perpetual jostling for position among species and individuals in the forest…This quiet, seemingly static, possibly timeless forest is in fact the site of silent, almost invisibly fought wars" (105). The occurrence of a tree falling in Grover's forest is a transitional moment of death and change that subsequently impacts life across the forest floor: "Each time a tree falls, whether struck by lightning, insects, fire, age, or windfall…the contestation begins" (105). The way that these passages bring the forest to life is through animating it with images of rugged, visceral competition. The masculine and even colonial connotations of this language is jarring in comparison to the rest of Grover's narrative style of slow observation that tends to subtle forms of life and issues of care. By recognizing the forest as a competitive site, "those stately stands acquire an entirely different look: we see a Darwinian world of victors who have held their ground against members of their own and other species – against the beaver, deer, porcupine, fungi, insects, and viruses that would destroy them while perpetuating their own kind" (108). Grover's language makes visible the depth of often ignored life and "unexpected richness" of

felled forests that she argues is left out of most narratives of logging (104). She wants to make clear that the forest at any state – sick, clear-cut, thriving, or protected – is active, not passive. However, this section also performs a crucial task for reflecting back onto the San Francisco HIV/AIDS community.

The parallel between Grover's portrayal of the wild spaces of Minnesota and her experiences with sick bodies in California is already well-established by this point in the text. In this section, the stakes in instilling the parallel forest with images of wars being fought and survival being an active process are particularly political. Moving away from her previous narrative voice that describes the more-than-human world through the language of "radiant diversity", the descriptions of the forest take on a more normative and distanced voice of natural selection, battling organisms, and physical achievement. The shift ensures that the latter reflects back onto the disabled body of the AIDS survivor, just as progressive and flourishing traits of the radiant forest do (94). The "viruses that would destroy them while perpetuating their own kind" that wrap up the earlier sampling of forest species may be indicative of both HIV and the viral manifestations of homophobia and stigma that greatly increased the risk toward sick individuals gaining the resources that they needed in order to survive (108). The images of organisms and cells fighting for survival and making great achievements while "their lives [are] all but suspended in the cold" echo the activity of both the sick body and the community of those living with AIDS and their care workers (107). The echo is particularly strong when Grover follows her description of natural competition with the statement that "Mature forests are communities of

survivors" (107). By viewing the AIDS community through the lens of the clear-cut forest, it acquires its own "entirely different look" (108).

Grover writes in her introduction, "The north woods did not provide me with a geographic cure…they offered me an unanticipated challenge, a spiritual discipline: to appreciate them, I needed to learn how to see their scars, defacement, and artificiality and then beyond those to their strengths – their historicity" (6). Environmental observation – or consciousness, it might be called – is, for Grover, a process of desire, care, and faith. By going to the north woods, she is looking for "a place I can explore slowly, slowly, like a lover's body, like a body I will tend" (13). Her exploration of "the clear-cut north of the Gunflint Trail" leaves her "[needing] to believe, as a simple act of faith, that this nearly treeless, shorn opening nonetheless swarmed with a universe of creatures all busily remaking it" (122). The triangulation of desire, care, and faith that Grover inherits from caring for sick friends and learning about her environment offers an invitation to action for those with the power to take it. She tells readers that "Our forests and river bottoms offer this infinitude, but only if we do not reject the possibilities that lie in Styrofoam and clear-cuts" (123). Grover identifies her faith as distinctly American, and distinctly colonial. She traces her own orientation to imagining hopeful futures to something older than her work in San Francisco. It is also inherited, this time from "the tragic and ecstatic history of northern European immigrants' quest for a new world, a new land" that she bears (123). Coming from that position of privilege endows her with power to act against the devaluing of threatened wild sites, to pull others down the divergent paths that invite the slow tending of wilderness.

Conclusion

By turning to clear-cuts to tell the stories of their lives, Aliesan, Doubiago, and Grover are taking a stance on vitality. They are recognizing life where it has otherwise been denied or devalued. When Aliesan questions the logic of cutting down trees to make a profit, she forces the question of which lives on the planet are socially legitimate. The very inclusion in a life narrative of sites in which death and growth occur simultaneously centers the livelihood of those sites. Instead of whether this is a legitimate life, the feminist question becomes the puzzle of Argo: what is different about this life? The diffuseness of life and agency that we see in both the life writing texts and in feminist new materialist discourse demonstrates that survival is a matter that is both individual and cooperative. If life is diffuse across intra-active assemblages of multispecies community, then taking care of each other is vital.

The women's life writing texts that I have explored in this chapter demonstrate how gender and space overlap and how thinking with gender draws out covert livelihoods of a space. Thinking with space articulates our affective experiences as embodied subjects. Those bodies that are, as Ahmed describes, "off line", or diverging from normative lifelines, inhabit spaces differently and draw out otherwise unseen narratives from their environments. Orientation is not often a conscious relationship. It is a subtle and constant process of turning, pushing, pulling between and toward the objects and pathways that make up for the map of our experience. But some actions, some movements, alter orientation in such a way that a cut is created, like throwing out a lifeline (Ahmed, *Queer Phenomenology* 96). Ahmed writes that "subjects *reproduce the lines that they follow*" but "[a] lifeline thrown to us is what gives us the capacity to

get out of an impossible or unlivable life" (17-8). In *Living a Feminist Life*, she describes intersectional feminism as a lifeline, highlighting that feminism can serve as a vital tool for survival and sustainability. The cut of a lifeline makes room for lives staked on unfolding stories that do not silence – lives that, as Doubiago writes, "pull white men from the prohibitive world / deeper into my wilderness" (83).

Writing one's life for an audience is an act of sustaining. Life writing in which one records stories of her own doing and turning is a way of taking care of the collective through drawing on the experience of the individual. Orientation is a matter of action, of doing and turning again and again, towards and away from one's affective attachments. The affective stance is non-linguistic, occurring in a no-man's land that balances between cerebral, emotional, and embodied feeling. Writing is conscious, deliberate, and material, a creation of linguistic record. Why undertake the labor of translating the non-linguistic into writing? Translating affective experience for others is a recurrent effort of feminist praxis: orienting and reorienting, affecting the orientation of others; actions performed repeatedly. By recording the narratives of their movement and orientation, each of the writers tell individual histories of their environments that would otherwise go unseen and undocumented. They make legible lines that would otherwise remain unseen by aligning the orientation of the space with their own narratives. This does not mean changing the direction of the space but drawing attention to how human life and space reflect and influence each other and move together. Space cannot be known fully without also knowing the bodies that are a part of its history. For each these writers, space is a source of clarity for understanding the questions, mysteries, and gaps in knowing their lives. Turning to

one's environment, to one's connection with the more-than-human world – whether that is located inside, alongside, or outside of the body – offers opportunities for recognition, shifts in perspective, and new ways of articulating experience. Unrecognized liveliness is made legible.

Chapter 2

Spaceships, Butterflies, and Plastic Bags: Confronting Change in Contemporary North American Novels

This was better than Christmas. She couldn't wait to give him his present: sight.

"What is it?" he asked.

"That's the King Billies too. I know it looks weird, how they're all hanging down. But the whole thing is butterflies."

Barbara Kingsolver, *Flight Behavior*

In Barbara Kingsolver's novel, *Flight Behavior*, protagonist Dellarobia Turnbow takes her son, Preston, to see a swarm of monarch butterflies in the middle of a rainstorm. The mother of two seizes a rare moment away from her duties as a wife and mother to show the butterflies to her eldest child, driving an ATV through the storm to the butterflies' migration site on her husband's family's forested property. With nothing but "a crumpled tissue" to clean both of their glasses, they approach the butterflies' temporary landing site with "raindrops stippling" their lenses and Dellarobia's raincoat hood "shutting out the upper half of her field of vision" (91-3). Because of Preston's blurred vision, the insects clinging to the tree trunks are unrecognizable as butterflies. They are an "it" before they can be understood as "they". Dellarobia "only knew what they really were because her eyes had learned the secret" (94). She gives Preston what she considers "his present": access to knowing the butterflies as she does (94).

This scene stands out in the novel because of its nuanced play with obstructed vision and what it means to know what you see. This knowledge emerges out of an encounter with an unexpected migration. Here, Kingsolver uses the instability of sight as an opportunity for informal learning in a lively domestic setting – a pedagogical process which is the focus of this chapter. I argue that authors Barbara Kingsolver, Ruth Ozeki, and Margaret Wappler recognize sight as a site of power, epistemological conflict, and politics of environmental change through witnessing unexpected migrations in their local environments. To ground this argument, I identify a genre that I call *literatures of arrival*. I locate this "arrival genre" in women's writing and stories about arrivals within/to the domestic sphere. The writers do not explore the arrivals from a national or global scale; instead, the migratory bodies arrive physically close to home and are interrogated from domestic positions with a concern for how they will impact families and immediate communities. The narratives of arrival urge readers to recognize that multispecies and multi-mattered entanglements through the process of witnessing, sensing, and engaging with more-than-human migrants.

These novels narrate processes of witnessing, demonstrating that epistemology is intrinsically linked to literatures of arrival. Epistemology, here, signifies the diverse ways that one acquires knowledge about their environments and determines what is fact and what that fact offers for their understanding of the world. In the pages ahead, I explore narrative moments when "seeing" the arrivals is undertaken not only with the eyes but with a range of senses. Through expanding their means of witnessing, the characters are able to learn deeply with the more-than-human migrants in their environments. By unpacking the limitations of visual sight,

my argument is also invested in North American discourses of environmental change. The dominant conversations about recognizing human-induced environmental change are reliant on sight-based evidence. Methods of seeing are intricately connected to which methods of knowing lead to widely accepted fact, how information gets disseminated, and whether lively arrivals are perceived as threats or as valued life forms. Therefore, the risks of not accounting for diverse ways of knowing and responding to environmental change include not acknowledging harm in real-time and not utilizing strategies of sustainability and care that originate from non-dominant voices.

In this chapter, I focus on Kingsolver's *Flight Behavior* (2012), Ruth Ozeki's *A Tale for the Time Being* (2013), and Margaret Wappler's *Neon Green* (2016). The novels exemplify how literature can interject its voice in the nationwide conversations of committing to sustainability. Through exploring women protagonists' divergent approaches to witnessing change, the narratives ask what it means to "see" change in one's environment. Current environmental science can only explain so much about these arrivals. The characters in these novels illuminate alternative knowledge about what is being sustained and by whom through challenging epistemologies that rely on environmental fact. The arrivals require embodied experience and informal exploration alongside institutional science in order to understand them. The texts, thus, interrogate how individuals recognize, accept, and react to environmental change and unexpected presences. They ask how communities should care for and thrive with environments whose material truths are refuted and unseen by those in positions of political and policy-making power. As I describe in this chapter, women writers populate the arrival genre and create a site for their

own discourse of environmental change. The three authors here occupy a generic space in which women writers explore how change affects their families and communities and how witnessing in new and different ways creates space for learning from situated intersectional experience. Because I am codifying a genre, my readings take the form of genre analysis. Rather than traditional close readings of the breadth of each novel, I conduct genre-focused readings that consider the interplay between narrative and cultural discourse of environmental change.

In each of the novels, dominant scientific methods of knowing the world come into friction with other forms of knowing, including citizen science, embodied knowledge, and unnamed forms of learning that are incited by encounters with unfamiliar nonhuman entities. *Flight Behavior's* slow and challenging introduction of science to an non-traditionally educated community in rural Tennessee is my first example.[20] Kingsolver delicately balances a case for turning to science in the face of tangible evidence of climate change with a narrative that conveys the proximity of learning opportunities and the accessibility of learning from one's local environment through witnessing life and death. Ozeki's *Time Being* pairs scientific, material investigation with a crip-infused epistemology of how to know temporality and futurity in the midst of a sick sea and a potentially sick mind when the protagonist finds a plastic bag full of objects washed up on her local beach. In *Neon Green*, the relationship between knowledge, power, and hegemony are critiqued through protagonist Ernest's Thoreauvian relationship to nature and his own experience of embodied witnessing that he values over his wife, Cynthia's,

[20] With limited resources for their public school system, curriculum is outdated and teachers are undertrained. Dellarobia explains that when she was in high school, "Our science teacher was the basketball coach" who "hated biology" (222).

experience of witnessing the spaceship that lands in their backyard. Wappler puts a spotlight on the role of power in how environmental facts are received, validated, and utilized.

Each of the texts features encounters with migratory arrivals of the nonhuman; these arrivals are signals of change and the unknown as well as the health and sustainability of local and foreign land. My readings attend to the literary accumulation of migratory nonhuman bodies in the narratives: Kingsolver's swarm of butterflies, Ozeki's plastic bag, and Wappler's spaceship. The migration of nonhuman bodies centers otherness and diverse livelihoods in sustainability discourse through drawing species hierarchies, multi-species care, and endangerment to the foreground. The three kinds of bodies in the novels resonate with each other through their unexpected migrations that go off course and linger in new spaces. These bodies remain in spaces that are not local to them; they land and then inhabit, requiring cooperation from beings who are native to those spaces in order for their survival. They draw paths that break ecological norms so that migration becomes a warning sign and a cry for support.

Like Kingsolver's interrogation of sight as knowledge, each of the three novels plays with sight, sensing, and knowing, getting at the heart of witnessing these migrants and knowing what the stories behind their migrations mean both for the local and for the global. In *Vibrant Matter: A Political Ecology of Things*, Jane Bennett articulates the magnetism of unlively bodies through her analysis of a gutter assemblage that includes a glove, a rat, pollen, a bottle cap, and a stick: "the materiality of the glove, the rat, the pollen, the bottle cap, and the stick started to shimmer and spark" (5). The shimmers and sparks emerge from the "active, earthy, not-quite-human capaciousness" that Bennett calls vibrant matter (3). Her language for engaging with the

contents of the gutter is that "[i]n this assemblage, *objects* appeared as *things*" with "things" being defined as "vivid entities not entirely reducible to the contexts in which (human) subjects set them, never entirely exhausted by their semiotics" (5). In the following readings, I refer to nonhuman bodies as bodies rather than things even though the bag and spaceship are not necessarily alive like the butterflies, because I want to keep pulling attention back to the ways in which nonhuman, or more-than-human, entities of different levels of consciousness move through the world with material impacts and engagement with other more or less lively bodies. They are not stagnant or impermeable. They contribute to transcorporeal processes and impact the livelihoods around them.[21] The active roles that these bodies play in the literary narratives are indicative of the close relationships that they have to instigating change, impacting lives, and possessing animacy. Therefore, the material assemblage and the literary accumulation of these bodies are interactive and mutually important. "Bodies" makes room for the similarities and the kinship of an accumulation that is inclusive of the liveliness of butterflies, the unlively bag, and the ambiguous organicism of the spaceship.

Literatures of Arrival

Because I am focusing on the ways that the migratory bodies shape the narratives ahead, considering the texts within this framework provides insights that are not central to the frameworks of eco-fiction or contemporary literature in general. I bring together several different

[21] Transcorporeal draws on Stacy Alaimo's language of transcorporeality and the interplay between open and vulnerable bodies in shared environments, as discussed in the introduction of this dissertation.

strands of literary analysis to articulate the motif of arrival. Among them, I include the tropes of folklore, travel literature, and later iterations of genre fiction such as horror and fantasy. What joins them together is the focus on narratives that include the presence of a change or disruption to a setting by something or someone that that is not native to that setting. As can be observed by the disparate generic categories in which the motif is located, the commonality of arrival is in its plot arc rather than its affect. Farah Mendlesohn offers a detailed and expansive commentary on the arrival plot structure in her book *Rhetorics of Fantasy*, in which she identifies and breaks down four major categories of fantasy: portal-quest, immersive, intrusion, and liminal. Intrusion is equivalent to what I am calling the arrival genre.

Mendlesohn outlines the intrusion plot structure as follows: "The trajectory of the intrusion fantasy is straightforward: the world is ruptured by the intrusion, which disrupts normality and has to be negotiated with or defeated, sent back whence it came, or controlled" (115). She turns to well-known examples of the intrusion fantasy as she outlines, "They never seem to be natives to the Land: one of the early models for the form, the White Queen of *The Lion, the Witch and the Wardrobe*, is descended from an intruder from another world; while in J. K. Rowling's *Harry Potter* sequence, both the evil intrusion and the disruptive humor are located with half-breeds (Lord Voldemort and Hagrid respectively)" (114). Mendlesohn emphasizes the role of temporality in the intrusion narrative, explaining that "As the closest descendant from the ghost story or fairy tale told around the fire, the intrusion fantasy depends for its effect on the tempo of the tale, the constant seesawing between latency and escalation" (181). Temporality plays a central role in the intrusion narrative structure because the plot tends to conclude "with a

finality, a feeling that a sequel of any kind could be only escalation or anticlimax" (121). The finality of these narratives derives from the roles of chaos and normality: "The intrusion fantasy is not necessarily unpleasant, but it has as its base the assumption that normality is organized, and that when the fantastic retreats the world, while not necessarily unchanged, returns to predictability— at least until the next element of the fantastic intrudes" (Mendlesohn xxi). Chaos is the driver of plot and action, as Mendlesohn explains, "In intrusion fantasy the fantastic is the bringer of chaos. It is the beast in the bottom of the garden, or the elf seeking assistance." (xxi). Mendlesohn's point that intrusion need not be unpleasant but can simply be an upheaval to the usual guides me to my application of the arrival trope to non-fantasy fictions. As we see in Kingsolver, Ozeki, and Wappler's texts, the stories are entirely governed by the presences of the butterflies, plastic bag, and spaceship, and their ensuing disruptions to the protagonists' normality govern the plot.

Mendlesohn emphasizes that setting is important to the structure of intrusion because "It takes us out of safety without taking us from our place" (xxi). Scholar Lynn Mastellotto examines an alternative site for the manifestation of the arrival trope that is grounded in place. Mastellotto examines the genre that she calls "relocation narratives," a crossover between life writing and travel writing where the narrative's focus is on the experience of migration or "dwelling-in-displacement" (291-2). Mastellotto defines a relocation narrative as "the literature of arrival, an integral part of a mobility cycle that contains both the flux of travel and the fixity of settlement" (292). In my three texts, the narratives do not offer extensive insight into the experiences of migration or displacement from the perspective of the migratory bodies, because

they are more-than-human subjects, focusing instead on the human re/inter-actions with those bodies. Despite the difference in focus on arrival, both Mendlesohn and Mastellotto's frameworks still make room for more-than-human readings of arrival.

Mendlesohn's framing of the intrusion fantasy grounds the trope in sense, knowledge, and awareness of space – all of which are thematic cornerstones to the intersections of the novels in this chapter. She asserts that "As a rhetoric, the form appears to depend both on the naïveté of the protagonist and her awareness of the permeability of the world— a distrust of what is known in favor of what is sensed. This lack of trust sets up an interesting dynamic around the issue of what is known" (115). Mastellotto also sees the literature of arrival as a site for altering the relationship between self and place, arguing that within those narratives "An act of physical displacement/dislocation simultaneously 'places' or 'locates' the self in a new horizon of experience, one which displaces conventional self/other paradigms narrowly defined by nationality, giving rise to complex identifications and identities" (292). Mastellotto draws on Bruce Robbins' work on transnationalism to map the process of self-transformation that occurs within migratory subjects:

> "Robbins signals how transnationalism is, in fact, a "density of overlapping allegiances" (1999, 250) since migrants cultivate multiple identifications between their home and host countries, affinities that are not simply resolved over time but rather accrue in complexity and give rise to hybrid identities, identities fundamentally defined by difference. This focus on identity reformation draws on a vast philosophical literature, which recognises

> that the process of identity-making involves continual self-transformation, a process in which alterity plays a pivotal role." (302)

Perhaps for more-than-human migrants, instead of allegiance or identification, these bodies accrue material influences that continually shape and alter them, like the barnacles attached to the bag, the risks to the butterflies' ability to safely reproduce, and the spaceship's ability to continue to migrate. Their own bodily borders are permeable and affective; they shape the spaces they inhabit, and those spaces change them. By framing this process of movement and accruement as arrival rather than intrusion or migration, I aim to reposition the narrative trope from the perspective of the migratory bodies; they are arriving.

One of the most ubiquitous and useful critical touchstones within environmental humanities is Rob Nixon's concept of "slow violence" from his book *Slow Violence and the Environmentalism of the Poor*. The writers in this chapter use the arrival trope – one which is a direct, tangible, immediate threat – as a means of drawing attention to slow violence that is happening *around* those arrivals. Slow violence offers an alternative to "immediate…explosive, and spectacular" violence to conceptualize environmental harm (2). Marked by "long dyings", "incremental and accretive" pejoration, and "calamitous repercussions playing out across a range of temporal scales," slow violence constructs a vocabulary for too often unspoken harm humans, more-than-human vitalities, and environments from climate change, environmental toxicity, and other aspects of environmental crisis that are not easy to recognize in the immediate moment

(2).[22] Nixon engages with Rachel Carson's *Silent Spring* as a prime example of unpacking slow environmental violence and catastrophe. He references Carson's own description of the slow violence of toxicity which is "death by indirection" (Carson qtd. in Nixon 9). *Slow Violence* includes a call to action for the first steps to combatting the harm being done by these intangible processes:

> To confront slow violence requires, then, that we plot and give figurative shape to formless threats whose fatal repercussions are dispersed across space and time. The representational challenges are acute, requiring creative ways of drawing public attention to catastrophic acts that are low in instant spectacle but high in long-term effects. To intervene representationally entails devising iconic symbols that embody amorphous calamities as well as narrative forms that infuse those symbols with dramatic urgency. (10)

In the three novels, the authors twist generic conventions of arrival as a clean plot of intrusion, confrontation, and resolution to take on the kinds of representational challenges described by Nixon. Nixon's critique emphasizes that slow violence is inflected by intersecting identities, with communities of people with marginalized identities being at the highest risk. In his chapter on Wangarĩ Muta Maathai, who cofounded the Greenbelt Movement in Kenya, he connects Maathai and Carson as "extra-institutional" environmental scientist leaders in

[22] Nixon refers to other examples of slow violence including "the thawing cryosphere, toxic drift, biomagnification, deforestation, the radioactive aftermaths of wars, acidifying oceans" (2).

"[shifting] the patterns of what is commonly perceived as violence" (145, 144).[23] Also in common between the two is the barrage of sexism that they each received from men in their fields, directed at their being unmarried women from nonnormative backgrounds in science. Nixon writes that "The vehement attacks on Maathai and Carson are a measure both of institutionalized misogyny and of how much is at stake (politically, economically, and professionally) in keeping the insidious dynamics and repercussions of slow violence concealed from view" (148). In the texts ahead, the proximity of environmental harm to the feminine and the domestic puts the impact of what can be learned from the arrivals of the migratory bodies in close reach to the protagonists' local communities. Additionally, by giving textual space to the women's experiential knowledge of those harms, the narratives actually make slow violence visible and understandable to their readers.

Between Discourses and Genres

Kingsolver, Ozeki, and Wappler's narratives draw much needed awareness to ways that environmental crisis manifests in the everyday of North American life. In these narratives, the characters embed record-keeping and tracking data of local environmental phenomena. Their learning experiences grapple with the discourses of denial and acceptance of change, and how to pin down change through the experience of first-hand embodied witnessing. Texts that bring the environmental into domestic fiction offer new insights into the everyday, the domestic, and/or

[23] The Greenbelt Movement is an anti-deforestation endeavor that centers women's involvement in community tree planting and environmental and economic restoration.

the urban that the canon of contemporary climate fiction or eco-fiction might not be able to reach. While back-to-wilderness texts and climate crisis novels hold important roles in the super-genre of environmental fiction, the space held by women writing about change and crisis encroaching on the everyday is the specific conversation that intrigues me. I found that conversation taking place in diverse corners across the North American literary marketplace, from Ozeki's mainstream Penguin publication to Wappler's independent publishing stream of Unnamed Press. Through following the maze of women's voices in environmental fiction, I, as a reader, have arrived at thinking about them together. Grouping these texts together is not entirely organic or intuitive to the marketing of the texts. *Flight Behavior* is the text most strongly marketed as an environmental book, gaining national attention as being a literary player in climate change conversation. On the shelf, *Time Being* is framed as a bestseller with a transnational focus, yet its environmental investments stand out to me as vitally important to telling its international narrative. *Neon Green* resides in the fringe, being from an author local to my current region of the Midwest and part of the reach of women writers who engage with environmental themes in non-wilderness settings. Given my interests in understanding environment in more cohesive ways, it has been an organic process to bring together texts where women encounter strange bodies in domestic domains and try to navigate conflicting knowledge systems to make sense of them.

As climate change awareness and debates gained a larger and larger stage during the years that these books were published (2012-2016), the understanding of the future of the planet as an unstable impending crisis became a *predictable* crisis as climate change science provided

less disputable evidence every year and the public platform for discussing environmental crisis was at a peak. In response to the 2013 report from the Intergovernmental Panel on Climate Change, George Monbiot describes the results as indicating "climate breakdown" in "conservative" terms that do not convey the extent to which "[t]his is a catastrophe we are capable of foreseeing but incapable of imagining. It's a catastrophe we are singularly ill-equipped to prevent" ("Climate Change?"). An article by Zachary Karabell in *The Atlantic* from the same year, however, argues that "[w]hile climate change could spell death and harm to low-lying areas around the world as the seas rise", the tone of early twenty-first century climate change reporting has "scared people into passivity and closed fruitful avenues to policies focused on mitigating the effects rather than halting the trend" ("Climate Change Doesn't"). Karabell contends that a creative and innovative approach to problem-solving is necessary for survival. Both of these perspectives describe a discourse of environmental crisis that demonstrates an awareness of the lively and impactful nonhuman bodies on which the future of the human species and Earth as we know it relies. These contradictory standpoints speak to the poles of mainstream, news-based discussion of environmental change at the times leading up to the novels' publications, which provides a framework for understanding Kingsolver, Ozeki, and Wappler's representations of evidence and knowledge.

Literature can carry over and extend the debates of current news discourse by playing with genre. The restrictive bounds of national engagement with environmental crisis limits both the ability of individuals to process the presence of change and the speed at which communities find solutions to reduce environmental impacts. In literature, these authors find an alternative

public space that allows them to reconcile change and precarious times, while also imagining alternative futures. Ozeki utilizes the tropes of familiar genre conventions to advance the ways in which environmental change is being understood – to show how it can be approached from multiple standpoints, not just as a clear-cut set of objective facts and a range of possible outcomes. Wappler's play with science fiction also demonstrates that pushing the expectations of a given genre is another means of bending the conversation, taking it off its tracks. The authors tap into what readers already know and are invested in as a steppingstone. By meeting readers there, they can then ease readers into changing how we view an issue.

Experiential Learning through Spaceships, Butterflies, and Plastic Bags

Plastic Bags: A Tale for the Time Being

Ozeki's *Time Being* interrogates the precarity of climate change surety through exploring aberrant migration of plastic in the ocean. *Time Being* is a bestseller and is Ozeki's most widely read of her three novels to date. The dual narrative tells the stories of Ruth – seemingly a parallel in many ways to the author herself – and a Japanese girl named Nao. We meet Ruth, recently having emigrated to a tiny rural island in Canada from New York, walking on the beach near her home. She finds a plastic bag filled with a series of objects, including the diary of the teenage girl, Nao. It appears to have travelled across the ocean from Japan in the wake of the 2011 tsunami. The novel follows Nao's daily diary entries which lead up to her proposed suicide at the

end of the diary. Simultaneously, we witness Ruth's reading of each entry as she grapples with the temporal and physical distances between herself and Nao. Facts about Ruth's environment and her own affective responses and embodied truths pull on her simultaneously as she explores the bag that arrives on her island. The diary washes ashore sooner than models of post-tsunami circulation of matter would predict. This unexpectedly early arrival illuminates the unwieldiness of plastic pollution and points to the human lives at risk due to environmental crisis. The aberrant migration brings together lives that cannot enmesh and thrive while coexisting locally, but nonetheless their livelihoods are entangled in their connection to the crisis of the sick sea. The lives of Ruth and Nao are in contact through environmental rhythms that carry evidence of current sickness and future risk.

Ruth's first encounter with the bag is a somatic and visual investigation. Initially, the bag is visually compelling. The "tiny sparkle" of sun on its surface "caught Ruth's eye" (8). The "tiny sparkle" of the bag is an excellent invocation of the vibrancy of matter that Bennett sees in the gutter.[24] For Ruth, the bag's playful visuality takes on the role of an invitation for engagement. As the seemingly inanimate object entices Ruth's engagement, it takes on its own characterization as an actant with a history. When she approaches the bag, a series of meaning-making proliferates around the interaction:

> She leaned over and nudged the heap of kelp with the toe of her sneaker then poked it with a stick. Untangling the whiplike fronds, she dislodged enough to see that what

[24] See Patricia Yaeger's work on luminous trash to explore the transition of trash from forgettable rubbish to engaging object ("Trash as Archive", 2003).

> glistened underneath was not a dying sea jelly, but something plastic, a bag. Not surprising. The ocean was full of plastic. She dug a bit more, until she could lift the bag up by its corner. It was heavier than she expected, a scarred plastic freezer bag, encrusted with barnacles that spread across its surface like a rash. It must have been in the ocean for a long time, she thought. Inside the bag, she could see a hint of something red, someone's garbage, no doubt, tossed overboard or left behind after a picnic or a rave. The sea was always heaving things up and hurling them back: fishing lines, floats, beer cans, plastic toys, tampons, Nike sneakers. A few years earlier it was severed feet. People were finding them up and down Vancouver Island, washed up on the sand. One had been found on this very beach. No one could explain what had happened to the rest of the bodies. Ruth didn't want to think about what might be rotting inside the bag. She flung it farther up the beach. She would finish her walk and then pick it up on the way back, take it home, and throw it out. (8)

The object being a plastic bag instead of a jellyfish is "[n]ot surprising" because "[t]he ocean was full of plastic" (8). Facts like these that are grounded in Ruth's culturally and socially attained knowledge stand out from her descriptive and exploratory narrative tone through their short declarative forms. She can assume some things with "no doubt", like the assumed fact that the bag is "someone's garbage" (8). Because of what she knows to be historical fact about things the ocean was "always heaving…and hurling" onto the shore, she does not want to speculate further on "what might be rotting inside the bag" (8). This description is also suggestive of the sickness of the sea, as if it is vomiting up the garbage inside of it – garbage that might contain even more

waste. Instead of dwelling on contents of the bag, Ruth tries to determine the short-term future by mapping out her interaction with the bag: "She would finish her walk and then pick it up on the way back, take it home, and throw it out" (8).

When Ruth arrives home, her husband, Oliver, wants to inspect the bag. Oliver's approach to learning contrasts deeply with Ruth's. Oliver declares that the bag is "flotsam", which he and Ruth then correct to be "jetsam," stuff that has been intentionally "jettisoned" (12, 13). The previous association of Ruth with a shorter and dialogue-ridden form is now inverted through thick paragraphs of description and exploration. Ruth's musings on the intimacy of the diary are introspective block paragraphs detailing sensation and perspective. When Oliver begins to speak, instigating a back-and-forth discussion with Ruth, the fragmented and fast-paced form returns to make room for the exchange of facts and inherited knowledge. Oliver explains that flotsam and jetsam are the start of plastic "drifters" from the large drift that is "escaping the orbit of the Pacific Gyre" – the beginning of a new migration phenomenon (14).

Here, Ozeki draws on the conventions of crime writing in her exploration of materialism. Genre play is important for understanding how the novel engages environmental conversations. *Time Being* draws on crime and horror conventions to make beach trash compelling. Through genre, the novel instigates a compelling plot around climate change and pollution. This plot experiments with the role that the issues kept peripheral by the majority of North America can play in the plot of a novel. The migratory plastic is not just junk; it also opens up a set of questions and impacts on Ruth and her beach that incite human interest and involvement. Additionally, it invites the reader to become invested in garbage. The bag becomes a storytelling

catalyst replete with the intrigue of a human corpse – which is made interesting by its history and backstory. For Ruth, the bag is enmeshed in a slew of environmental debates, material likelihoods, and affective pulls. Like Bennet's gutter, it is never just detritus – or flotsam. Migration is the bag's vibrancy.

There is the question of how unlively the bag is and how much deadness it contains. The "scarred plastic freezer bag" is "encrusted with barnacles…like a rash" (8). It carries the trauma of the sick ocean that it inhabited. However, the porousness of plastic, the permanence of it, invites an assemblage of liveliness. Plastic helps animals to remain – to literally cling on in the case of the barnacles. Understanding the bag as strictly dead or strictly toxic leaves out so much of the bag's liveliness. The diary calls upon its subject in its opening lines – "Hi! My name is Nao, and I am a time being. Do you know what a time being is?" (3) – demanding that the reader imagine the history, identity, and future of other lives that allow for the diary's arrival on the beach. Ruth considers handwriting to be "as intimate as skin" and to entice a process of slow seeing through how it "resists the eye, reveals its meaning slowly" (12). She cannot hurry through its contents, but her lingering and patient engagement with it offers a depth of information. She has a "felt sense…of the writer's presence" that allows her to know the writer is a teenage girl and to know "without a doubt that the girl's fingertips were pink and moist" (12).[25] The intimacy of exploring the book makes her feel "vaguely prurient, like an eavesdropper, or a peeping tom" – all sensations that grant the diary a liveliness such that Ruth and the reader feel

[25] It is also worth noting that Nao writes in Japanese and Ruth requires a translator to help her read the diary. The language barrier imposes another degree of resistance to visuality as the diary's contents cannot be absorbed quickly through simply reading it.

themselves to be peeping and eavesdropping (12). The diary provides a literal narrative, subject, and voice for the plastic bag and its contents. By imposing a written, human narrative on it, it is instilled with a certain kind of liveliness that draws attention to the ongoing impact between a nonhuman object and the interaction a human has had with it.

Ruth uses her nose to engage with the bag beyond visuality, choosing to sniff it for clues of its contents – an olfactory observation that will happen later in *Flight Behavior* as well. Oliver, on the other hand, compulsively wishes to touch the bag. "He couldn't help" opening the bag because "[i]t was his nature to need to know" (9). Oliver opens the bag against her will. Ruth describes his actions as a "forensic unpeeling," as though the bag is the clothing on a body (9). The chapter section in which Oliver opens the bag exchanges the interiority, fast-paced dialogue, and emotiveness of the previous sections centered on Ruth for dense paragraphs of declarative statements and a distanced narrative voice. The change in writing style carries a more conventionally masculine tone through its disengagement from subjective experience and interiority. The section opens by referring to Oliver simply as "he" and provides a list of the bag's contents as he "laid them out…in descending order of size": "a small stack of handwritten letters; a pudgy bound book with a faded red cover; a sturdy antique wristwatch with a matte black face and luminous dial", and "the Hello Kitty lunchbox that had protected the contents from the corrosive effects of the sea" (10). The passage equates touch with knowing while Ruth conveys an aversion to that method of investigation. She feels "desperate" to stop Oliver from opening the bag at all and opening the diary "felt like a desecration" (10, 11). This interaction represents the central struggle between Ruth and the plastic bag. She grapples with the bag's

inviting form for the entire novel, vacillating between wanting to know its story and feeling deeply responsible for any mishandling of its contents. Ruth's internal struggle offers a representation of what it can look like to be conscious of one's impacts on both local environments (her beach) and global environments (the sick sea and the bag's Japanese origin) while also being compelled to know and learn about change that arrives outside of one's home. While Ozeki does not deliver a conclusive set of actions that can be taken to ensure ethical interactions between humans and more-than-human arrivals, she offers a gentle model of navigating that common dilemma. Ruth performs tentative curiosity, questioning, patience, and hesitancy. Alongside her actions and introspection, the narrative encourages readers to question the need for touch and how one can know the story of a migratory body.

Spaceships: Neon Green

In *Neon Green*, touch is a hallmark of women's embodied knowledge. *Neon Green*'s protagonist's experience of touch is neither trusted nor understood amidst the sight-based scientific approaches of masculine knowledge-making that shape the narrative of alien arrival. This is Wappler's first novel and was published on a smaller scale than Ozeki and Kingsolver's works. Wappler's background is in journalism and the pop culture podcast, *Pop Rocket*. The novel imagines the year 1994 in suburban Illinois with everything quite the same as recent history, except that spaceships from Jupiter have a deal with the United States government to land in the backyards of private residences for a period of nine months. The Allen family – parents Cynthia and Ernest, and teenage children Gabe and Allison – become the hosts to a

spaceship after Gabe enters the sweepstakes that determines where the ship will land.[26] The narrative explores the family members' diverse relationships to the unfamiliar migrant ship. While the children approach the new inhabitant of their yard with open-mindedness and curiosity, Ernest is suspicious of it to the point of antagonism. As an avid environmentalist facilitating the town's Earth Day Festival, Ernest fears that the toxicity of the spaceship could be harming his family. When Cynthia is suddenly diagnosed with advanced cancer, Ernest is certain the ship has caused it. He tests the soil on which it stands for toxic chemicals and undertakes extreme reductions of any potential toxins in their home, thus alienating his family. Ironically, we later learn that the chemical runoff into the seemingly pristine suburban grass in the family's nearby park has actually caused Cynthia's sickness.

Perhaps because *Neon Green* dips its toes in the science fiction genre, it is rather unsung as a text that is actively contributing to environmental literature. Despite – or perhaps in addition to – the novel's reception as a humorous sci-fi and magical realism text, I am placing *Neon Green* in the genre of environmental novels. The narrative goes beyond aliens. It is a novel of environmental illness, disability, and ways of knowing that go against the grain. Sara Polsky writes in her review on the speculative genre website, *Strange Horizons*, "Take an ordinary life and add cancer to it; take an ordinary year and add aliens to it; take a planet and add pollutants to

[26] The similarity between the surname "Allen" and the word "alien" is certainly intelligent. Wappler playfully weaves linguistic references to extraterrestrial lore throughout the novel. Ernest's own first name is also apt in its allusion to his earnest approach to environmentalism; he is reaching toward an ideal of "environmentally-friendly" behavior and his attempts come across as intense and wholehearted – earnest.

it: each is an equally unexpected arrival, the kind of shift in a story from which it's impossible to turn back" ("Neon Green").

While the ship beeps, lights up, and emits waste, no one knows if it actually has any living inhabitants, which denies Ernest a visible villain. In a *Los Angeles Times* review, Mark Athitaks writes that "Wappler knows nothing unsettles an anxious suburbanite quite like a stranger who won't explain why he's hanging around the neighborhood" ("Suburban Alienation"). Athitaks' claim is evident in Ernest's refusal to accept ignorance in the face of difference. The clunky metal ship reveals very little about its origin or capabilities, and much of Ernest and the children's time is spent observing and logging its behaviors, at Ernest's demand. "Cynthia was the first of the family to see" the spaceship land in her backyard and she forms her perspective quietly before the rest of the family gathers and begins debating its implications (20):

> A flying saucer made of silver sheets of bolted metal hovered over the trimmed grass emitting a low humming noise that pained her teeth, like pressing sugar into a cheap metal filling. At just about twenty-five feet across, the spaceship fit snugly between the house and the weeping willow tree in the backyard. Five delicate tentacles shot out of the belly of the spacecraft and pierced the ground, one of them cleaving through the fruit of Ernest's heirloom tomato plant.
>
> "What?" she shrieked, somewhere between delight, disbelief and dread.
>
> The saucer rooted further into the grass, vrooming its engine. On top of the metal portion of the spaceship, separated by a band of lights, a dark glass top. Twirling lights

hysterically crawled around the yard, hot white lights that could shrink pupils into black dots.

Cynthia's hands dripped with the hot, soapy dishwater she'd abandoned to come to the window. "Ernest? Come here!" she screamed, planted to her spot. "Ernest, where are you?" The water, now cool, ran into her elbows as she plugged her ears. The humming reached a semi-excruciating pitch, vibrating her sternum and surging up through her feet. "Oh my god, oh my god," she moaned but she could only hear the sound of her voice muffled inside of her head.

She remembered then that Ernest was at an Earth Day meeting and wouldn't be home until late. Her relief that he'd snagged a job he enjoyed—finally!– outweighed her admittedly unreasonable irritation that she'd have to parent this disaster alone. What if they were scared? Wasn't she scared? Was that why her muscles twitched, as if she were about to leap into a dark shaft? Unable to stop watching, she waited for the kids to come down. Some strange knowledge swept in, tidal and moonlit: The spaceship, she thought, was meant to be here but she couldn't tell if it was bringing release or terror. (20-1)

Readers also get the unique nonhuman perspective of the spaceship written in the present tense.: "The spaceship hovers on a thin black line…at the edge of Earth's atmosphere" (1). A hierarchy of Earth's inhabitants includes "[p]eople, metal, trees, sand, animals, and water", as well as human activity including "chopping, building, corralling, killing, harvesting, distilling, melting, commuting" (1). Wappler continues to describe the spaceship through temporal and material contexts: "In waves, particles, and sheets, pollution regularly sloughs off into the

atmosphere…The spaceship has been waiting for days now, occasionally spinning in circles. Waiting, it stares down, taking in everything it sees" (1). The perspectives of the ship and of Cynthia demonstrate that observation is a common impulse to find ways to learn about other beings and bodies, though, as Cynthia's more physical methods of knowing demonstrate, it should only be a starting point. [27]

Cynthia's character draws me back to Adrienne Rich's search for the powerful and the womanly amidst the published and documented archives of knowledge available to her.[28] Cynthia incorporates research from encyclopedias with her curiosity and imagination about the life of the aliens or whatever might be inside of the ship, yet her affective knowledge is her compass for learning about the ship. When the family's notes in the activity log delve into speculations on the habits and histories of the aliens or engage with cultural texts to understand the ship's behavior, Ernest writes such comments as "Can we get back to business here? Why are we talking about radio shows?" (88). Cynthia writes in the log, "You can only work with what the universe gives you, no matter where you are" (89). Her flexibility in how she knows about the world becomes increasingly important when her cancer advances and changes her cognitive functions so that she knows the world in different ways that are slippery and ephemeral and rely less and less on external knowledge structures.

Cynthia holds a kinship with the ship, asserting in her dying days that "[t]he spaceship is my friend" (134). She carries a narrative of culturally-coded womanly embodied knowledge – of

[27] The three novels indulge numerous types of observation and register different levels of impact on the observed – ranging from passive like the spaceship, to forceful like Ernest, to wary like Ruth.
[28] See my discussion of Adrienne Rich in the introduction of this dissertation.

lunar cycles, maternal care, and nonverbal knowing in her relationship with the ship. The narrative of Cynthia's affective and embodied knowledge of the material world precedes the ship's arrival. She honed her awareness of embodied knowledge during her first pregnancy, when "she'd known [Gabe] was there in her body before the blood tests confirmed it" (94). She considers the "primordial being, forged in the core of herself" to be "the big bang in her body. Combustion. Light", describing an embodied engagement with materiality that makes room for non-traditional knowledge derived from experience (194). Light as a means of shaping perception of materiality returns to Cynthia when the ship inhabits her yard. While observing the ship through a window's "dusty glass", "she caught the alien ship with one neon green light pointed downward, blanching a spot of grass" (195). Illuminating the grass is seemingly an attempt at expressing to Cynthia – or the reader – that the toxic grass is where everyone's attention should be turned. Cynthia does not glean that explicit message, but she does make a correlation between the light and her illness. She asks, "Was cancer a light or was it an absence of light?...Or was the color more like the neon green of the spaceship, shining out on the green of the grass?" (195). Viewing cancer and the spaceship in light of each other leads her to collapse the tightly maintained boundaries of environmentalism and the Allens' suburban life: "The two greens were nearly indistinguishable – one alien, one natural, but nearly all the same" (195). Likewise, she relates to her cancer cells with an understanding that "they were almost like her other cells" (195). With this perspective of her sick self that does not rely on hostility, she is "OK again" (195). When Ernest disregards all of Cynthia's perspectives on the ship, treating them as "feelings" in opposition to his scientifically grounded "knowledge," he is left with only shoddy

empirical methods that ultimately prove Cynthia's intuition to be the most accurate and evidence-based way of knowing. Ernest's fervent testing for toxins from the ship which leads to him physically beating the ship – despite Cynthia's insistence that it is not the cause of her illness – proves to be futile and mislead when they learn that the park near their house is filled with toxic soil. Amidst her chemotherapy and radiation treatment, Cynthia tries to explain to Ernest that passivity is a sign of living, that "Sometimes fighting is about lying down" (163).

Ruth, in *Time Being*, also explicitly grapples with culturally gained knowledge and embodied, experiential knowledge that emerges in part out of her relationship to disability. The risk of inheriting her mother's Alzheimer's disease is enough to cause Ruth to distrust her own mind at many turns throughout the novel. She analyzes herself with the expectation of finding cognitive difference. In her mind, "[m]oments hung around like particles, diffused and suspended in standing water", a description that mirrors Oliver's explanation of the disintegration of plastic into "confetti" particles in the ocean that "[hang] around forever" (91, 93). The focus on the uselessness of the plastic and Ruth's "disengaged and fractured" thoughts gesture toward fears of futility and decay. Ruth's distrust of her mind runs so deep that she turns to biological reasons for why she has scattered thoughts that are "in and out of time": "She blamed the internet. She blamed her hormones. She blamed her DNA. She poured over websites, collecting information on ADD, ADHD, bipolar disorder, dissociative identity disorder, parasites, and even sleeping sickness, but her biggest fear was Alzheimer's" (92). Her distrust of her memory and logical faculties impacts the forms of knowing in which she chooses to place trust. Like Cynthia, for whom seeing an alien migratory body in her yard is not compelling

evidence of danger, Ruth cannot be convinced by sight that the plastic in her ocean and potentially in her body is lifeless matter.

During a short interlude, the Allen children unearth a painting in the basement of their house – another found object left behind by humans. The painting has a mysterious signature and "a woman's face but morphed with a suburban tropical paradise…lush, with her wild brown hair clogged with leaves and twigs, her glowing yellow eyes standing out from the patches of grass that composed her face" (120). Gabe describes it as "an Earth Mama" and Ernest interprets it as a "utopian hippie dream of a woman merging with nature" that becomes "a great source of comfort for him" as Cynthia's health declines (121, 122). The painting portrays a complex nature scene made up of "suburban tropical paradise" and "psychotropic lines" (120). It is an instant source of affinity for Cynthia whose rolling around in suburban grass is what led to the toxin-born disease that ravages her body and permanently alters her mind. Wappler's turn to the interpretation of nature-themed art challenges reliance on the visual through contrasting interpretations of what is natural. Ernest's environmental reference points to 1970s western environmentalism limits his visual reading of the painting. According to his philosophy, a wild woman cannot logically exist in the suburbs. Wappler, however marks the experiential knowledge within him that recognizes the pervasiveness of wilderness and the wildness of built environments as the painting makes him think about "how he wanted [Cynthia] back among the strong living things, a familiar creature loping around the unexplained wilderness" of their lives (122).

Ernest's hostility and commitment to scientific knowledge is not completely inflexible. After Cynthia's chemotherapy and radiation begins, he has a dream that "several native

varieties" of plants grew under the spaceship, which "he knew…was responsible for their growth" (137). Echoing Cynthia's perception of the ship, "He felt a great wave of tenderness toward the ship, maternal but awkward in its stiff inability to do anything physically nurturing" (137). This is another case of struggling to read a sign in such a way that sheds light on the plasticity of what it means to know something. Ernest internally debates that "[t]he spaceship was the invader from outer space…and yet his subconscious just told him it wasn't here to destroy anything" (137). The possibility that the ship "could even be a lifegiving force" moves him to tears – another moment where vision blurs during a change in perspective. However, the dream is not enough to change Ernest's methods of knowing. "In the morning, he checked" for new growth under the spaceship and when he finds none, he collects soil samples for toxicity testing (138).

The scene of Ernest processing Cynthia's death mirrors the material presence and quietude of the ship. At the very beginning of the novel when Wappler opens with the perspective of the spaceship, she writes, "The flying object cuts through layers of atmosphere, as delicate as filigree, made up of natural molecular ephemera and seminoxious particles of clingy waste…The spaceship lowers through it all, leaving behind the moon – a pink scrape in the sky – to settle in the backyard of the Allen family" (20). When Ernest imagines the decay of Cynthia's body in the earth, the passage conveys a very similar kind of gentle merging with environment: "The dirt would host her, slowly eating away at her calcium. She could last fifty or a thousand years, maybe more depending on the temperature, acidity, bacteria, and other factors. There was one thing that wouldn't ever decompose: her gold wedding ring…Ernest decided he'd get buried

with his too" (284). The descent through the homogenizing layers of atmosphere and earth until settling reframes coexistence with risk and crisis as something that is precarious, but possible.

Butterflies: Flight Behavior

Kingsolver's *Flight Behavior* is *The New York Times* bestselling author's seventh novel. It tells the story of a small rural Appalachian community and its upheaval when an unanticipated migration of monarch butterflies suddenly swarms the trees of a privately-owned forest. The heroine, Dellarobia, has married into the family that owns the woods and is the first to discover the monarchs. The narrative follows her experiences of learning about climate change through the perils of the butterflies while she hosts the visiting scientist, Ovid Byron, and his team of researchers on her family's property. The scene of Preston learning with his mother in the woods marks the first of many approaches to environmental education that I will delve into in this chapter. Kingsolver's text led me to the question, why is there so much attention given to the nature of seeing in a book about environmental science? Is seeing the butterflies at all not enough? Dellarobia is not a denier of climate change but approaches her environment with open curiosity and a critical mind. How does the narrative's focus of not understanding what is in front of your eyes move beyond the binary of skepticism and acceptance of change?

Flight Behavior very much exists in the realm of books written to respond directly to a current environmental problem; it is a high-profile member of the cli-fi genre.[29] *Goodread.com*'s

[29] Cli-fi, or climate fiction, is a category that contains an intriguing mixture of obscure and cultish genre fiction alongside mainstream bestsellers. The lists that I have referenced include such diversity as Margaret Atwood's *Oryx and Crake*, Frank Herbert's *Dune Chronicles* series, and even Dr. Suess's *The Lorax*.

features it on the "Listopia" section in such lists as "Cli-Fi: Climate Change Fiction," "Best Fiction Books about the Environment and Sustainability," and "Yet Another Climate Fiction List," signifying the significance of the novel in the genre (*Goodreads*). Kingsolver has explicitly stated that her goal was to "write a novel about how people think about climate change or why they don't" (Martyris). Journalist Nina Martyris quotes Kingsolver explaining how she sought a national platform for discussion of the novel: "I always hope for the best, in the department of life imitating art…And to help things along, I sent a copy of 'Flight Behavior' to Michelle Obama" (New Yorker). In her article, Martyris describes the butterflies as "climate change refugees" ("Barbara Kingsolver"), a point of reference that implies the success of Kingsolver in highlighting an animacy and agency in the butterflies that makes them recognizable to readers as victims of a crisis that need support.

In an article exploring the commons in *Flight Behavior* and Ann Pancake's *Strange as This Weather Has Been*, Heather Houser argues that the novel casts the butterflies as "figures for the destruction of the land and for a loss that is predicated on dreadful splendor but are productive of new futures" (101-2). Her analysis is also attuned to the visual impact of the butterflies in shaping learning, as she explains that Kingsolver "shows the compatibility of dismaying data and aesthetic pleasure" (102). Houser is referring to the brilliant beauty of the migration spectacle that demands human attention through its intense visuality. When that attention leads to knowledge formation concerning the fate of the butterflies and the climate change forces at fault, the beauty is at odds with the data. This tension leads to the educational shift in the narrative: "Loss laced with beauty inspires in Dellarobia the questions that open the

woods to locally attuned scientific learning" (Houser 102). Houser goes on to argue that "[Dellarobia] becomes attuned to the more-than-human world through a spectacular event and a dilated process of inquiry rather than from living off the woods. Environmental destruction and the loss it engenders convert the forest into a knowledge commons. (110)

Houser outlines that Hester, Dellarobia's mother-in-law is part of an Appalachian generation that had "a matrilineal tradition of supplementing wage labors with subsistence labors on the commons. By 2010 this environmental relationship has dissipated and knowledge of flora and fauna faded into ancestral memory" (103).[30] This point highlights types of learning that are present across the three novels in this chapter – generational and memory-based learning that is shared orally through social networks. Such non-traditional learning methods are present in Ruth and Dellarobia's community-based oral learning and in Cynthia's embodied learning. These are learning experiences that are not represented in institutional scientific education and, as pointed out by Houser, the means of its social circulation is inflected with gender.

The novel opens with Dellarobia trekking into the woods to meet a man with whom she plans to begin an affair. However, while hiking to their meeting place and contemplating her need to disrupt the rhythms of her unfulfilling marriage, she is struck by the vision of the trees around her, seemingly consumed by fire. Having grown up in a deeply religious community, she interprets the fire as a sign from God and turns around to go home. It is, of course, the swarm of

[30] Houser's article contains detailed discussion of the Appalachian context of *Flight Behavior* and is a good source for balancing the critiques of Kingsolver writing an Appalachian novel for a non-Appalachian audience. Houser's reading of the transformation of an Appalachian commons offers some traction for finding a positive relationship between Dellarobia and her community, which often comes under fire by critics.

monarchs in the trees that Dellarobia has seen. The butterflies do not make an appearance in this chapter explicitly, as the narrative focus is on the experience of processing something profoundly unfathomable with one's current knowledge base. Readers see the change to the woods through Dellarobia's eyes; she does not see butterflies, but instead sees the trees alight with orange:

> A small shift between cloud and sun altered the daylight, and the whole landscape intensified, brightening before her eyes. The forest blazed with its own internal flame. "Jesus," she said, not calling for help, she and Jesus weren't that close, but putting her voice in the world because nothing else present made sense. The sun slipped out by another degree, passing its warmth across the land, and the mountain seemed to explode with light. Brightness of a new intensity moved up the valley in a rippling wave, like the disturbed surface of a lake. Every bough glowed with an orange blaze. "Jesus God," she said again. No words came to her that seemed sane. Trees turned to fire, a burning bush. Moses came to mind, and Ezekiel, words from Scripture that occupied a certain space in her brain but no longer carried honest weight, if they ever had. *Burning coals of fire went up and down among the living creatures.* (13-4)

After reading this chapter, I let my eyes go fuzzy without the focus of my own glasses and I see the book's cover glinting in the brightness of the snow outside of my window reflecting back onto my desk. Harper Perennial's cover design is clever. The gilded leaf shapes extending from the branches take on the effect of fire if seen through unfocused eyes. Like Dellarobia's vision of her forest on fire, my book transforms with my tired eyes. I get a jolt of excitement to share a glimpse of her experience – a visual aid to the narrative. When I close my eyes, the three-

dimensionality of the story sinks in. Mis-seeing and obscure sight reveal different ways of knowing – not judging sight as bad or false but interrogating *why* you see in the ways you do. This reframing leads to critiques of knowledge-making and how to bridge differences in sight. The vision in the forest in which "[t]rees turned to fire, a burning bush" is a visual warping that we witness through Dellarobia's eyes (14). Amidst the layers of religious interpretation surrounding the fire (Moses encountering a burning bush), this is a scene of witnessing, of being compelled to observe and infer meaning. While lacking the vocabulary to describe what she sees, "In broad daylight with no comprehension, she watched" (14). The compulsion to observe is both fascination and a recognition of importance, which Kingsolver articulates through Dellarobia's inner monologue: "her eyes when opened could only tell her, *Fire, this place is burning*. They said, *Get out of here*" (14). Her eyes signal both "warning to her brain" and "Unearthly beauty…a vision of glory…like the inside of joy, if a person could see such a thing" (15-6).

For Dellarobia, her biblical upbringing is the most thorough education upon which to draw in the face of an overwhelming change to her family's forest. Her sense-making process is an unriddling of the knowledge to which she has access in that moment. In this case, that is the story of Moses's burning bush and "Jesus God" (14). Even though "she and Jesus weren't that close", she reacts by "putting her voice in the world because nothing else present made sense" (14). The passage draws attention to Dellarobia's distrust in ways of knowing that are not grounded in formal learning. "No words…that seemed sane" came into her head, so she turns to those that are normative and logical even if she does not actually believe their truthfulness (14).

The unshared words that she rejected may have arisen from her own embodied knowledge. While the church has not yet taught Dellarobia to recognize climate crisis in biblical signs, the butterflies, themselves, could still be a sign from God. The attempts to verbalize the moment through Dellarobia's repetitions of "Jesus" and "God" are indicative of an important tension in engaging with environmental change: the verbal and visual are so often at odds. A rhetoric of finding new sight is common amidst environmental change awareness initiatives – which will be unpacked in the final section of this chapter – as learning to recognize is a first step in finding a way to express change.

The corresponding story within Exodus 3 also has a focus on sight and seeing. Sight structures Moses's interaction with the burning bush: "the angel of the Lord *appeared* unto him in a flame of fire out of the midst of a bush: and he *looked*, and, *behold*, the bush burned with fire, and the bush was not consumed" (King James Version, Exod. 3.2; my emphasis).[31] Moses responds to the burning bush by looking at it in a different way, trying a new method of seeing; he states that "I will now turn aside, and see this great sight" (Exod. 3.3). Then, when God appears to him, "Moses hid his face" to avoid looking at God (Exod. 3.6). God describes the reason for visiting Moses with an emphasis on sight and sensation: "I have surely *seen* the affliction of my people which are in Egypt, and have *heard* their cry by reason of their taskmasters; for I *know* their sorrows" (Exod. 3.7; my emphasis). He sees, hears, and then knows – a series of steps that suggests sensing leads to knowing. In both Exodus and *Flight Behavior*,

[31] "Behold" has a number of associations, including holding and keeping. Sight is also a consistent part of its linguistic history, including regarding, looking at, and facing ("behold, v.").

seeing is an instigator of action. Kingsolver's burning forest scene is a playful subversion of the Biblical prophetic call that pays homage to the original text's investment in the visionary. In the Bible, only men seem to receive prophetic calls. Dellarobia, however, is not only a female witness but also arrives upon the burning while on her way to meet a lover and break the monogamy of her marriage. She is an unlikely prophetic figure, but encountering the fiery butterflies leads her to step into that role; she teaches her community and cultivates new knowledge about her local environment.

When Dellarobia later takes Preston to encounter the butterflies after learning herself what they are, her gift of sight involves an act of naming. Preston can see the butterflies with his eyes, but he does not know what he sees or what its significance is. Dellarobia's gift is not just the physical ability of vision, but the access to knowledge that gives meaning to that which is being witnessed. Dellarobia does not share the scientific or traditional names of the butterflies, but chooses the familiar local name shared by Preston's grandmother: King Billies. This new awareness sends Preston into a frenzy of eagerness to explore and be close to them. "'Gaaa!' he cried, breaking free of [Dellarobia's] grip" (94). His immediate impulse is to touch the cluster of butterflies on the tree trunk "causing it to writhe and awaken" (94). "[E]xpecting a reprimand", Preston waits for his mother's reaction before his next action, and she tells him, "Just be gentle, I guess" (94). Neither of them is sure of the boundaries of this encounter. Dellarobia chooses to observe visually. As a woman who often leaves the house without her glasses due to the social pressures in her community to appear more attractive to men, she describes the "viewing pleasure" of having clear glasses as a treasured means to "see where all this was going" (91).

Preston opts for scent and soft touch, "[v]ery slowly…moving his face through the last few inches between himself and this life form until his nose touched it" (95). He shares "his verdict" that the butterflies smell "good", like a "cross between lightning bugs and dirt" (95).

Ruth's aversion to Oliver's touch, Cynthia's reactions to Ernest's hostility to the spaceship, and Dellarobia's internal quandary over Preston's right to touch the butterflies to learn from them belie an affective response that understands touch as embedded in Anthropocentric, colonial violence. We can also read Dellarobia's floundering between whether or not to let Preston touch the butterflies as indicative of White Northern American discomfort in making decisions around how to interact with the more-than-human. In *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teaching of Plants*, Robin Wall Kimmerer explains that the "Western science worldview…sets human beings outside of 'nature' and judges their interactions with other species as largely negative" (63). This viewpoint leads to the belief that "the best way to protect a dwindling species was to leave it alone and keep people away" (63). Kimmerer invokes the Honorable Harvest as an example of how indigenous peoples' relationships to plant life encourages intentional decision-making rather than avoidance. She defines the Honorable Harvest as "the [collective] indigenous canon of principles and practices that govern the exchange of life for life." The Honorable Harvest encourages humans to "Harvest in a way that minimizes harm" and instructs them to "use technologies that minimize harm; do take what is given" (183, 187). For Kimmerer, interaction with the more-than-human is a complete learning experience that can be harnessed for teaching because of the layers of agency, action, and response that occur between each vitality in the setting. In her own teaching

experience, “I used to teach just the way I was taught, but now I let someone else do all the work for me. If plants are our oldest teachers, why not let them teach?” (232). As an environmental science teacher with her own identity grounded in indigenous culture, Kimmerer understands that a symbiotic and compassionate relationship with the earth requires contact and engaging in messy interactions that have the possibility of leading to harm and that present moments of choice for humans to decide how to proceed with care. Her narration of harvesting spruce roots with her students exemplifies the way in which choice structures the interactions between plants and humans. She writes that “The map in the ground asks you over and over, Which root to take?…Some roots branch. Some break. I look at the students’ faces, poised midway between childhood and adulthood. I think the tangle of choices speaks clearly to them. Which route to take? Isn’t that always the question?” (236).

In their chapter *The Common Worlds of Children and Animals*, Affrica Taylor and Veronica Pacini-Ketchabaw, offer case studies of experiential learning that delve into the balance of contact and choice by interrogating “the ethical possibilities of interspecies vulnerability” that occur when children are taught outdoors through free interaction with more-than-human beings (49). Their chapter, “Children, Ants, and Worms: An Environmental Ethics of Mutual Vulnerability” draws on the authors’ experiences teaching “between young children and worms in a wet Canadian forest and between young children and ants in a dry Australian bushland” (49). Taylor and Pacini-Ketchabaw are interested in the ethics of a global, multispecies commons, specifically regarding how children develop relationships with and ethical frameworks surrounding the more-than-human (59). The necessity of decision-making is

present in their descriptions of earthworm encounters, where "Each encounter with earthworms is unpredictable, with unintended consequences, dilemmas around responsibility, and also some elements of surprise" (54). Taylor and Pacini-Ketchabaw embrace the learning potential of finding opportunities in local environments for children to face choices and make decisions while developing relationships with animals:

> Questions about who gets to live, who gets to die, and how life is sustained emerge through these encounters. *Although they like to care for them, find new houses for them, or transport them to areas where they will not be stepped on, accidents happen….One morning during one of our visits to the forest, a child was tending a wiggly worm in Worm River. He picked up the worm with a long stick to ensure that other children running around in the water wouldn't squash it. As it was being transported, the worm fell from the end of the stick. Determined to complete the task, the child struggled to pick it up again with the stick. This time, though, perhaps because of overzealous handling, the unlucky worm broke in two*…This unintended outcome was distressing for the child, particularly so because he was trying so hard to care for it by mitigating against its vulnerability to human feet. (54-5)

This case study exemplifies the inherent potential harm to animals that can result from a child's touch. The teachers in this moment place value in the child's formation ethics in a higher position that harm to the worm through a set of intentional pedagogical decisions.

Taylor and Pacini-Ketchabaw explain that "We recognise that not all encounters are innocent and that some individual lives are more precarious than others. For instance, all large

walking animals inadvertently step on and kill small creatures, whether they are aware of it or not" (55). They situate this interaction within the value of a child "being drawn into relationship" that the child might not otherwise form due to the privilege that humans possess to pay no awareness to certain animals. "[T]he fact that the children notice that they sometimes squash worms as they walk, and that this same noticing affects them, draws them into a relationship of responsibility for the life and death of others – the foundational awareness of all ethics" (55). The authors identify value in this kind of precarious encounter because of the learning opportunities of forming relationships with the nonhuman and developing ethics through the encounters: "An ethics of responsibility comes from paying attention to our implication in the life and death of others, but it is not about aiming to be righteous, pure, and perfect. No being can exist without killing others" (55) A similar interaction plays out when the children encounter ants. "Both ants and children face a risk and pose a threat to each other in these embodied exchanges, albeit unevenly. Both register their mutual vulnerabilities. While the defensively swarming ants clearly recognise the children as a potential threat to their nests, the children are well aware that ants can bite them. They also know they can easily kill ants" (59). As with Preston touching the butterflies and Oliver opening the bag, there is a "for the greater good" sensibility that transpires in these encounters; by allowing touch, humans will gain knowledge which will benefit the greater good of their communities.

Stacy Alaimo's conclusion to *Material Feminism in the Anthropocene* frames the experience of encounter between the inorganic and animal in terms of "a formidable task" of unknowable risk. She writes that "Fish, sea birds, marine mammals and other ocean dwelling

creatures, for example, who eat bits of plastic, mistaking them for food, are not unlike Ulrich Beck's citizens within risk society, who do not possess the scientific instruments or the data necessary to assess the novel dangers lurking in what would seem to be benign" (4). In *Time Being*, Ruth's aversion to Oliver's contact with the bag suggests a moment of choice where the outcome of contact with the migratory assemblage opens a maelstrom of ambiguously balanced risk, harm, and knowledge. For Oliver, access to knowledge outweighs potential risk and harm. For Ruth, the possibility of new knowledge is outweighed by the potential harm that could come from touching the barnacles, opening the bag and the lunchbox, and revealing the vulnerable attachments of the as yet unknown owner of the items. Her lack of action allows Oliver to make the choice. These narratives of arrival demonstrate that the arrival of migratory bodies to one's local environment opens up a pandora's box of choices and questions where one must grapple with the ethics of touch, the risks and benefits of interaction, and the question how and what to learn from their migratory presences. The scene between Ruth and Oliver, in particular, underscores the fact that, from the anthropocentric position, whether either route – contact or avoidance – is taken, something is lost and something is gained.

Conclusion

Outside of Kingsolver, Ozeki, and Wappler's literary sphere, educational and activist models still heavily depend upon sight to teach and incite action among the North American public. As I conclude this chapter, I will briefly consider a series of environmental justice campaigns that represent the investment in visual evidence to arouse concern within and educate

their readers/viewers. Each campaign overlaps with one of three categories of nonhuman agents of change that the novels focus on: climate change, plastic pollution, and chemical toxicity.[32] The discourses around these three phenomena rely heavily on sight-based methods to educate the public. As pieces of digital media, these campaigns are themselves each a kind of micro-arrival, appearing in inboxes and social media feeds as missives of change. I end on this note to consider the prevalence of sight as an environmental education method even for nonvisual actants like chemical toxins. By considering this site of environmental education alongside the literary space that I explore in this chapter, I encourage my own readers to think broadly and comparatively about how environmental learning is disseminated around them.

The following image of a disturbingly thin polar bear is one that readers have likely encountered elsewhere:

[32] These categories are not mutually exclusive and feature significant overlap – for example, toxicity is a problem of plastic pollution. I will be looking at media and activism case studies that primarily target at least one of each of these three topics, but with the intention of highlighting the how each of the issues reflect broader trends in approaching environmental crises.

Figure 1: Langenberger, Kirsten. Photograph of Polar Bear. "Is this the saddest polar bear on the planet?" Mail Online, 15 Sept. 2015.

Kerstin Langenberger's photograph has become a kind of mascot of climate change evidence, inciting such headlines as "Photo of Frail Polar Bear Illuminates the Tragedy Unfolding in the Arctic" (Mountain). The photo has reached the far corners of social media and news platforms. It has been debated, though, whether the bear's condition should be linked to melting ice, with scientists arguing that the bear appears to be physically unwell from illness.[33] However, the visual impact of an emaciated bear on thin piece of ice will travel and outlast the critique of its cause. The website *I See Change* harnesses the same power of using images to share knowledge and convince skeptics that climate change exists by using the logic that seeing equals knowing. The platform allows users to share text and image evidence – called "Sightings"

[33] The Daily Mail reports that researcher Ian Stirling stated, "the bear was more likely to be old, sick or hurt – not starving because of a lack of prey or ice" (Ellicott).

– of environmental change in their local environments. The website is a "Community Weather and Climate Change Journal", describing itself as "dedicated to empowering communities to document and understand their environment, weather and climate in order to increase resilience" ("About"). The documentation focuses on visuals to challenge denial in climate change discourse where linguistic debate has refuted scientific evidence. *I See Change* emphasizes comparison as a tool for engaging visual knowledge; how does the environ depicted here differ from yesterday, or last year? Being able to eke out shifts in local climatic patterns that climate change deniers and policy makers deny is a core skill for Anthropocene citizen science projects and environmental consciousness raising. One user on the website who shared photographs of the dramatic sunset in their neighborhood writes, "It's beautiful, don't miss the skies...the ultimate red flag, when something is about to go terribly wrong..." (Munoz). When we witness the aesthetic of a landscape or a weather phenomenon that turns unusually visually striking in the context of climate change, we need to receive it with an eye for discerning causation and implications. Beauty is a warning sign.

Visual images are central to increasing awareness in discussions of plastic pollution as well. Greenpeace has a well-circulated and oft-replicated image of a snorkeler holding a disposable plastic product that has made its way into a body of water and a sign asking, "Is this yours?" In this case it is a toothbrush (see fig. 2):

Figure 2: Photograph of scuba diver holding toothbrush. "#Consumption." Greenpeace.

The photographic genre of the beach cleanup has also increased in popularity to encourage community-based action and to display which kinds of products are polluting local sites (see fig. 3) [34]:

[34] This particular image has been used by the FLOW organization's campaigns against plastic straw usage.

Figure 3: Photograph of plastic litter. FLOW: For Love of Water, 23 Feb. 2018.

One of the latest iterations of the cleanup photographic trend integrates documenting plastic pollution visually and encouraging community engagement to counteract it. Social media users implement the #trashtagchallenge to share dual images – one of the user's local littering site, such as a beach or a park, and one of the same site after the user has cleaned up all of the litter, usually sequestering it away in garbage bags to be disposed of elsewhere ("#Trashtag").

Orb Media's investigative journalism piece by Chris Tyree and Dan Morrison on plastic micro-particles in drinking water informs us that "[m]icroscopic plastic fibers are pouring out of faucets from New York to New Delhi for consumption by people, pets, and livestock" ("Invisibles"). Tyree and Morrison explain, "Where iron and steel turn to rust, plastic's only concession is to fragment into ever-smaller bits of itself down to microscopic size, a pollutant that will persist for thousands of years" ("Invisibles"). The Plastic Pollution Coalition also

centers the visual. The PPC features a video on their website homepage entitled "Open Your Eyes," in which the actor Jeff Bridges narrates a series of video clips and animations of the extent of plastic pollution and actions to counteract single-use disposable plastic (*Plastic Pollution Coalition*). Bridges' address to the viewer, "Open your eyes. When did we become a plastic society?", sheds light on the irony that plastic pollution consciousness-raising relies on making unwitting individuals aware that the planet is saturated with plastic ("Open Your Eyes").

In the realm of chemical toxicity activism, visuality is tricky but nonetheless still a common tool. The Savvy Women's Alliance for "nontoxic living, simplified" shares a "weekly mugshots" email series, giving a face to toxins to help individuals identify and remove them from their homes. The need for "savvy women" to tackle chemical pollution is a familiar refrain. It echoes in the discourse surrounding plastic pollution as well, where the examples of single-use plastic are almost exclusively drawn from the domestic sphere. Food preparation materials, menstrual care products, and childcare supplies are most frequently referenced as the littering offenders. Responsibility for the brunt of plastic impact falls back onto household routines such as grocery shopping and family hygiene. Popular environmental discourse gives little, if any, attention to corporate culpability where single-use food catering materials are rife and mass quantities of disposable stationery and office supplies are circulated daily, often in the name of increased productivity and keeping workers at their desks. The responsibility therefore falls onto those who most often govern domestic spaces, especially caregiving women who "carry the burden of sustainability policies within the household" – a demographics that has relatively

limited influence on policy-making compared to large corporations contributing consumption and pollution crises (Wheeler and Glucksmann 556).[35]

This tendency in corporate environments to defer responsibility for harm is a central concern for the environmental humanities, and environmental studies more broadly, that makes the literature of arrival such a fruitful space for women writers to cultivate their own discourse. The concern is proximity to crisis, in physical and temporal terms – and how individuals and communities respond to crisis depending on their perceived proximity. Scholarly discussions of labelling the epoch as the Anthropocene tend to focus on how the awareness of a new epoch will impact the ways in which communities will conceptualize and respond to the increasing proximity of crisis. In *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Anna Tsing uses the term "precarity" to describe how privileged communities have moved closer to an unstable future during the twenty-first century than perhaps ever before. She claims that "[p]recarity once seemed the fate of the less fortunate…In contrast to the mid-twentieth century when poets and philosophers of the global north felt caged by too much stability, now many of us, north and south, confront the condition of trouble without end" (2). Donna Haraway's monograph, *Staying with the Trouble: Making Kin in the Chthulucene*, considers the proximity of trouble to be an affect as well as a material impact. In regard to the effects of crisis she writes, "A game-over attitude imposes itself in the gale-force winds of feeling, not just knowing" (4). The affective limitations of "succumbing to abstract futurism and

[35] See Sidharth Muralidharan and Kim Sheehan's 2018 article on relationships between guilt, gender, and environmentally "responsible" behaviors for further discussion of the ways that gender roles can lead to an imbalance in where the responsibility of sustainable choices falls.

its affects of sublime despair and its politics of sublime indifference" are dangerous to material bodies which need material preparations for future change (4). It is to "stay with that trouble" that Haraway offers as an alternative to abstract futurism. "[S]taying with the trouble is both more serious and more lively" than relying on the idea of futurity to sustain humans and more-than-humans (4). Haraway's argument invites creativity to sustainability debates, including the creative opportunities afforded by art and storytelling. Tsing also invokes imagination as a solution to living "with precarity" (3). She pairs observation and imagination, proposing that "[w]e might look around to notice this strange new world, and we might stretch our imaginations to grasp its contours" (3). Through this pairing, Tsing sees opportunity in the end of progress, in precarity, and in ruins. She writes that "when [the] world starts to fall apart…our first step is to bring back curiosity" (1, 6). The literatures of arrival are a cultural site of conversation about how to know, to understand, and to react to environmental change and threat. In these novels, moments of interaction with migratory beings kickstarts curiosity. Each textual encounter with arriving migratory bodies forces a conscious awareness of entanglement in spite of the myth of isolation.

Readers can come to terms with lived realities through reading fiction, through living in Tsing's precarity through the duration of a narrative. Imagining what it might look like to see something through to its conclusion opens up space to imagine change. The novels in this chapter are not depicting radical alternative futures, such as "solving" climate change. Instead, they ask what reaction and response could look like when change arrives at your doorstep. They are approaching shifts in the seemingly *non*-precarious norm to explore what it means to survive

with change. Even the science-fiction inflected *Neon Green* approaches migratory spaceships from the realist position of posing such questions as, how would an environmentalist respond? Tsing writes that in the failure of capitalist progress, "new tools for noticing seem so important" (25). This chapter has echoed Tsing's approach to exploring environmental change by asking how literature reflects readers' tools for noticing. As the protagonists of *Flight Behavior*, *A Tale for the Time Being*, and *Neon Green* become hosts and stewards for more-than-human arrivals, they undertake journeys of noticing, witnessing, and learning from change. While for many sight is a valuable and necessary component of environmental stewardship, sight is also a restrictive regime. Moving beyond the language of sight to include a broader range of senses enables a more nuanced level of care. Sight itself cannot be isolated from all other senses. Additionally, modes of obscured sight give us access to the conditions of seeing – the normative constructs of sight and the ways in which we choose to *not* look. My approach in this project encourages seeing, sensing, and reading in new and different ways that extend beyond those aspects of the material world that have visible legibility. It involves recognition, taking stances from unusual angles, looking through obscured lenses, residing with the nonhuman, and more. The authors offer divergent epistemological approaches to responding to environmental change in the midst of national debates of denial and risk response. The women protagonists of the novels understand that witnessing can be detached from sight and that there are ways to learn about one's environment that do not rely on hegemonic knowledge structures. Through local embodied entanglements with nonhuman migrants, these characters delve into sight as a multisensory experience to recognize environmental change and crisis.

Chapter 3

The Party Place: Imagining Survivable Futures through the Genre of Speculative Fiction

So far in this dissertation, I have explored environmental learning on the cusp of precarious futures and discussed backwards-reaching texts that engage in present or recent change and crisis. These literary fields paint a picture of the temporality that influences the wider question of the dissertation: what role does literature play in how we learn about environment? For this chapter, I am turning to forward-reaching speculative fiction (hereafter, spec-fi). The pages ahead delve into practices of future-world-building that are grounded in writing. I ask, how do writers create narratives that impact future-world-building?

The texts in this chapter ask the question, what happens when narrative world-building is read with a mind open to real-world-building? I engage most closely with two texts – Petra Kuppers' *Ice Bar* and adrienne maree brown's *Emergent Strategy: Shaping Change, Changing Worlds*. [36] These works center crip experience, eco-engagement, and ecological care that are inclusive of people of color, women, disabled people, and queer individuals. Fiction is the starting place for both Kuppers and brown's praxis. Both writers also begin their speculative journeys with Octavia Butler, whose novels embody how fiction can take off in a plethora of literary, social, and material directions as each reader and writer learns their own emergence. *Emergent Strategy* is guidebook, a workbook, and theoretical exploration of how to shape the

[36] Kuppers is, of course, my dissertation chair and has been my collaborator on numerous projects that are invested in imagining new and lively futures, disability justice, and environmental care. We have also co-taught in Women's Studies where our course goals centered on helping graduating seniors to build futures where graduates and their communities can thrive.

future through visionary fictions and transformative justice. It is written specifically to support social justice organizers and draws on brown's experience as a Detroit-based organizer and facilitator. As I will explore in the pages ahead, *Emergent Strategy* follows brown's publication of a spec-fi anthology, co-edited with Walidah Imarisha. In *Emergent Strategy*, brown continues her investment in spec-fi discourse by applying the concepts and strategies of spec-fi writers to community organizing and transformational justice practices. *Ice Bar* is a short story collection that experiments in crip futurism, narrative reclamation, and multispecies imagining.[37] Kuppers writes directly in the spec-fi genre and includes a call-to-action for readers of *Ice Bar* to engage in their own spec-fi writing practices as a process of reparative and transformational world-building.

Spec-fi commits to imagining the impacts of change and crisis through world-building that grows on a foundation of present precarity and narratives of the past. This pattern of working through possible future scenarios to survive the present makes spec-fi part of the current, dominant language for coping with change. In this chapter, I am spotlighting spec-fi authors whose writing is shaped by their own marginalized identities and who are gaining a visible platform through this lively and burgeoning genre. These are writers who are women of color, queer, or disabled, or who simultaneously inhabit several of these ways of being in the world. They are published by small presses, are celebrated by non-western and non-mainstream audiences, or their works have not been incorporated into the spec-fi canon. Small press authors

[37] Crip futurism: the expansive possibilities for disabled thriving to shape future worlds.

are significant in this chapter becausesmall-scale publishing's alternative space to large publishing houses, such as Penguin Random House and HarperCollins, is a home for under-represented writer communities (Paula Mathieu et al. 4). Presses like AK Press and Spuyten Duyvil – two highlighted in this chapter – prioritize representation and diverging from popular and familiar narratives and styles to allow writers to experiment and play. *Ice Bar and Emergent Strategy* are exemplary of how smaller independent presses at which writers have greater control over their work serve as a space where generic innovation and experimentation can drive the market and draw in readers. As I dive into the texts ahead, it will become apparent how the spec-fi writers use their platforms to amplify and support the experiences of marginalized communities. By engaging these texts as part of the current of contemporary environmental literature, I ask how these works can help cultivate transformational visions of sustainability by imagining ways of surviving through multispecies and anti-racist imagining that escape the binary of utopia/dystopia.

By exploring the movement of spec-fi from niche works to mainstream texts to objects of scholarly analysis, I will follow the ways that spec-fi is becoming a wide-reaching cultural discourse for coping with change and crisis. Its genre fiction origins have expanded into the realms of film, television, self-help, art, conferences, and more.[38] In 2018, the National Women's

[38] Genre fiction refers to fiction texts that follow recognizable conventions of a genre (such as romance, Western, horror, or spec-fi novels). The term genre fiction often underscores those texts' opposition to literary fiction because genre fiction is usually treated as separate from and/or inferior to literary fiction. By using the term in this chapter, I do not mean to reinforce the valuation of that binary. Instead, I intend to draw attention to the ways that the genre fiction categorization shapes how the texts are received by publishers and readers and how they circulate on the market.

Studies Association (NWSA) annual conference theme was "Just Imagine. Imagining Justice: Feminist Visions of Freedom, Dream Making and the Radical Politics of Futurism", inviting speculative feminist methods to the forefront of the field. In the following year, the thirteenth biennial conference for The Association for the Study of Literature and Environment (ASLE), an international hub for environmental humanities networking, invited Nnedi Okorafor, the Nigerian-American author of a number of spec-fi works including *Lagoon* and the *Binti* trilogy, to serve as a plenary speaker, and "speculative" topics were the focus of numerous presentations across the five-day conference.[39] In his discussion of African American women's genre fiction, scholar Herman Beavers explains that "popular fiction…is often viewed with distrust by literary critics, despite the fact that the sales of popular fiction subsidizes "serious" or literary fiction, which does not achieve the same success in the marketplace" (264). As the environmental humanities establishes its footing, spec-fi has become a part of its canon – an unexpected position for genre fiction of any kind in literary studies due to genre fiction's tendency to be treated as "low culture".

I am also expanding my discussion of the spread of spec-fi to the broader culture of publication, circulation, and cultivating artist communities. At the end of this chapter, I will reflect on the experience of taking on an editorial role for the "Practices of Hope" issue of *About Place Journal*. With fellow editors, Petra Kuppers, DJ Lee, and Rachel Sanchez, we curated a collection of hopeful art texts that have evolved my understandings of the roles and relationships

[39] *Lagoon* (2014) was nominated for several awards and was A British Science Fiction Association Award finalist. The first *Binti* book (2015) won Hugo and Nebula Awards.

of cross-genre spec-fi. While being on the publication side of contributing to speculative and future-world-building discourse, imagining a special issue that would represent practices of hope became a speculative publishing exercise itself. I will discuss this process, including the complex task of collectively determining what constituted "hopeful" texts.

Speculative *fiction*, as I am using it here, encompasses an expansive network of mediums and genres that cannot fully be held within the term "fiction" or even the term "literature". My texts range from novels, short stories, music, film, to guides for activism. I refer to spec-fi throughout this chapter as a signifier of the genre's many constellations, knowing that fiction is a node therein and has been my own starting place for working with the genre. My textual engagements will first look at how Kuppers writes within the spec-fi genre, how brown explores community and planetary sustainability through spec-fi methods, and how she and brown apply spec-fi tools to transformational community work. Then, I will look at the emergence of genre more broadly as a cross-cultural and multi-modal site for under-represented authors and artists to contribute to sustainability discourse by imagining ways through crisis. In my research, "spec-fi" signifies the emergent genre in its expansiveness; it points toward narrative, stories, and the footprints that fiction has left across the diverse speculative texts ahead. The inclusivity of this terminology is indicative of the traces of fiction emerging in places where it might not be supposed to go.

My primary texts explore the intrinsic presence of environmental change in the worlds within spec-fi. My discussion reveals moments where the texts bring together the threads of environmental and social justice. In spec-fi, the theme of environmental justice is often deeply

bound up in the intricacies of plot, character, and setting. Like the fantasy genre, the speculative aspect of spec-fi emphasizes a setting and plot-driven narrative because of the inherent need to acquaint readers to the differences between their own world and the world of the text (setting), as well as what speculation is undertaken and where that will lead (plot). The thick world-building of these texts asks readers to engage with the theme of environmental justice in tandem with social justice and representation. In my own engagement with the texts, I focus on the urgency of bringing together the spheres of the social and the environmental for the sake of world-building. The pages ahead will encourage readers to recognize where these two spheres meet and to incorporate them into discourses of sustainability.

A key aspect of world-building that I examine centers around how Black speculative art combines social and environmental concerns amidst attention to race and racialization. Activist and writer K. D. Wilson posits that "Black Speculative Art contains the conceptual frames and aesthetic approaches for sustaining the intersectional, epistemically diverse, and non-anthropocentric forms of black study … [needed] … to develop ecological literacy in the face of erasure by environmental movements" ("This May Be Our Last"). Wilson undertakes community organizing with the goal that "[i]n the midst of such environmental racism, then, and the larger planetary crisis we are (soon to be) dealing with, Black people and other oppressed groups must reclaim radical visions of ecology" ("This May Be Our Last"). His method is running workshops using music, poetry, and breathing exercises to ask, "[h]ow can we use art to claim radical visions of ecology in a time of increasing planetary crisis" when Black people do not have a secure place in dominant environmental movements? Community and place-based

material practices recur throughout Black activism in the United States. To focus my discussion of race and anti-racism, I will be turning to the discourse of Afrofuturism where spec-fi practices are employed on individual and community levels.

We cannot approach the landscape of environmental spec-fi without also taking on an intersectional understanding of how identity affects publication, circulation of texts, and canon formation. Not only do environmental movements erase and exclude the experiences and actions of communities of color, but so do the literary canons and publication practices that preserve and uphold the voices associated with popular genres. In an article on the place of romance fiction – a cornerstone of genre fiction – in the literary canon, Valerie B. Johnson explains how inclusion and normalization within the canon affects texts by or about people within marginalized communities:

> when marginalized literatures are introduced to a long-established canon that has been actively hostile to the communities served by those literatures, the hostility of the establishment rarely vanishes. The romance novel is a literary genre whose experience with mainstream high cultural acceptance is one of continual exclusion, derision, and mockery. Discussions by critics or general populace on the topic of where novels like *Twilight* or its progeny *Fifty Shades of Grey* rank in best-seller lists demonstrates that no other genre generates such violently gendered and derogatory discourse. Thus, Rakefet Sela-Sheffy reminds critics that canonizing material is a process of "naturalizing [texts as reservoirs of cultural meaning] in a given socio-cultural order to the point they seem congenital, concealing the struggles that determined them in the first place." (186)

This process of naturalizing hostile and oppressive engagements with genre fiction is particularly apparent in high-grossing works, such as Jojo Moyes' romance novel and the ensuing film directed by Thea Sharrock, *Me Before You*. In this narrative, the representation of a romance between an able-bodied woman and paralyzed man contributes to negative stereotyping of disability experience by portraying a disabled life to be one not worth living after losing the hyper-able, adventure-driven lifestyle of a rich white man. Tendencies toward following existing generic conventions that have appealed to mass audiences previously make popular mainstream works like *Me Before You* more financially reliable than narratives that diverge from norms and tropes.

Like most forms of genre fiction, spec-fi makes itself a target for critiques of seriousness and value. Literary critic Michael Warner's analysis of uncritical reading challenges the notion that "critical reading is the only way to suture textual practice with reflection, reason, and a normative discipline of subjectivity" (16). Warner emphasizes the English discipline's reliance on critical modes of reading as the valuable and institutionally desirable method. Reading uncritically, including with "identification, self-forgetfulness, reverie, sentimentality, enthusiasm, literalism, aversion, distraction" is counterproductive to the dominant goals of literary studies (Warner 15). In *Reading the Romance: Women, Patriarchy, and Popular Literature*, Janice A. Radway explains that gendered impressions on genre shape the circulation of literature , thus contributing to the divisions of high versus low culture, what is determined to be "critical" reading, and, ultimately, the formation of canons. She explains this through shedding light on the disconnect that occurs when "literary critics tend to move immediately

from textual interpretation to sociological explanation" (19). The exchanges between booksellers and readers are shaped by "book production, distribution, advertising, and marketing techniques" (20). The levels of control held by "the institutional matrix" of the publishing industry influence how and if women's writing will be bought and circulated (19):

> …purchasing decisions are a function only of the content of a given text and of the needs of readers. In fact, they are deeply affected by a book's appearance and availability as well as by potential readers' awareness and expectations. Book buying, then, cannot be reduced to a simple interaction between a book and a reader. It is an event that is affected and at least partially controlled by the material nature of book publishing as a socially organized technology of production and distribution. (20)

Meg Sweeney continues Radway's journey through genre and gender in *Reading is My Window: Books and the Art of Reading in Women's Prisons*. The monograph presses at the question: once dominant culture fits texts into the constraints of the industry's tightly structured genre conventions, what do women do with them? Sweeney coins the term "culture of reading" to articulate her exploration of how women read in U.S. penal settings. Cultures of reading stem from genre, including how readers cultivate reading practices around certain narrative frameworks, access to different types of books, and personal engagement with those texts. The latter can look like women prisoners finding confirmation of experience in urban crime fiction and women forming book clubs in prison that "wakened a lot of us in a way we haven't been for a long time" (140-72, 241). Or it can look like taking up spec-fi writing methods in community spaces to imagine transformative justice for sustainable futures.

Sweeney's approach to genre engagement through cultures of reading helps to demonstrate how commercialized genre fiction is utilized by readers in ways not necessarily intended or expected by the heavy hands of publishing marketing teams. These kinds of texts accrue social meaning and their own kind of liveliness among readers that are influenced not just by how and by whom they are purchased, but by the spaces in which they are read, what they are reading for, and how they are shared. The liveliness that genre fiction – and in this case, spec-fi – takes on is present when and where readers become more than readers and books become more than books. Through genre fiction, readers cross lines to become writers, critical and creative thinkers, and agents of change. The book, then, is not only a narrative but also a bridge between a moment in history, and a vision of the future. It becomes a catalyst for readers to become change-makers through their own writing.

This chapter is about genre, disciplinary norms, and writing for change. These are big foundations with many of their own moving parts, but I aim to narrow the distances between them by focusing on their common attribute – investment in future world-building. I explore the liberatory potentials of the broad genre of speculative thought in writing through crisis, and how speculative imaginaries and reading and writing together offer a new space for expansive thought and action that resist destructive humanist patterns. The textual spaces of imaginaries and community writing that I focus on represent the role of genre in responding to exclusion through their processes of imagining alternatives to environmental world-ending. The methodology of this chapter diverges from the norms of close reading-driven literary criticism. Rather than focusing on the micro of the texts through close reading, I take a macro approach to think

laterally across the vast generic category of spec-fi that crosses over into multiple literary genres. By approaching the texts from the perspectives of circulation and genre, I am able to conceptualize genre movements and how communities form through writing and publication. I trace how the decision to write within the conventions of an area of genre fiction – or the decision to diverge from the norms within that genre – turns the literary text into a voice within environmental and future-world-building discourse.

Reader-writers

Melanie Ramdarshan Bold has written extensively across the subjects of small press publishing, diversity in publishing, and representation in contemporary literature. Bold explains that the effects of money-seeking practices on content are at the center of critiques toward mainstream publishing: "Critics of modern publishing castigate the relationship between business and the creation of cultural content: the corporate structures, brought about by conglomeration, are criticised as possible threats to the creativity and risk-taking that is at publishing's core as a creative industry" ("An 'Accidental Profession'" 87). These practices lead to exclusion and gatekeeping that directly affect the diversity of content and what kind of writer is permitted to become a widely known published author. Small press publishing offers a counterbalance to the homogeneity and lack of opportunities for writers with marginalized identities. According to Bold, scholars theorize that small presses developed specifically to counteract "hegemonic" publishing houses (93). Small presses play the role of being "most well known for working in distinct literary niches…which are not mainstream and thus often

neglected by larger publishers" (Bold, "An 'Accidental Profession'" 92). In response to mainstream publishing's control over literary representation, Bold asserts that "it is clear that we have a collective responsibility as publishers, booksellers, literary agents, librarians, educators, readers, etc., to redress the imbalance by publishing, selling, teaching, promoting, and reading quality books by and about minoritised people" ("The Construction").

Small press author adrienne maree brown is a Detroit-based writer and activist who utilizes a wide range of mediums in her social justice journey. She works as a healer, doula, and coach, and has served as a facilitator for Allied Media Projects and director for The Ruckus Society. In addition to *Emergent Strategy*, brown has written *Pleasure Activism: The Politics of Feeling Good* (2019) and co-edited with Walidah Imarisha the short story collection, *Octavia's Brood: Science Fiction Stories from Social Justice Movements* (2015). *Octavia's Brood*, like many of the texts to be discussed ahead, continues the writing traditions of Octavia Butler's Black feminist spec-fi including *Kindred* (1979) and *The Parable of the Sower* (1993). Another core inspiration for brown's practice is the futurism of science fiction. She describes her "writing path" as being "grounded in the belief that we must train ourselves to 'imagine a new possible' into being, building compelling futures that make us want to survive" ("Book Me"). *Emergent Strategy* is published by the small, "worker-run" AK Press, which is organized on a foundation of anarchism in the form of a collective ("About AK Press").[40] In *Emergent Strategy*, brown writes that juxtaposing "emergence and strategy was what made the most sense to me when I

[40] Alexis Pauline Gumbs, who I engage with in other parts of this dissertation, is also published by AK Press and even as part of their Emergent Strategy Series that extends from brown's work.

was trying to explain the kind of leadership I see in Octavia's books" (20). Emergent strategy is a "strategy for building complex patterns and systems of change through relatively small interactions" (2). The book is designed as a self-help guide for community organizers, combining theory, creative practices, exercises, and other playful genre-mixing. Ultimately, emergent strategy is a collaboration between decolonization, liberatory art-practices, and intentional relationship-building with the nonhuman. brown has applied emergent strategy in her own organizational and facilitative work within such projects as the Allied Media Conference, the Octavia Butler and Emergent Strategy Reading Network, Detroit Summer, and The Ruckus Society.

In *Emergent Strategy*, brown makes a direct address to readers – a move which we will also see in Kuppers' book. By engaging with their readers through first-person instruction, brown and Kuppers engage reading as a practice of world-building where emergent reading is encouraged. brown instructs readers to situate themselves in time and space, paying attention to their bodies, breath, and being:

> Wherever you are beginning this, take a deep breath and notice how you feel in your body, and how the world around you feels.
>
> Take a breath for the day you have had so far.
>
> And a breath for this precious moment, which cannot be recreated.
>
> Now another the day and night coming.
>
> Here you are, in the cycle between the past and the future, choosing to spend your miraculous time in the exploration of how humans, especially those seeking to grow

> liberation and justice, can learn from the world around us how to best collaborate, how to shape change. (1)

These actions draw readers into thinking about what being alive at the moment of reading (being a lively reader, if you will) looks like in their bodyminds. Aligning this present moment awareness with histories and futures that impact environmental and social aspects of the future is a way to grant agency to the role of the reader in their engagement with the book. brown invites readers into thinking-with her conceptual movement in the pages to come, which equips readers with tools to engage in speculative future-world-building alongside of her.

brown's writerly tools turn over the critical and creative voice to the communities of readers, specifically through organizing. As previously mentioned, before publishing *Emergent Strategy* brown and Imarisha co-edited a collection of visionary fiction written by social justice organizers and activists. Imarisha coined the term "visionary fiction" to facilitate discourse around "fantastical writing that helps us imagine new just worlds." The categorization also fits within the bounds of spec-fi, keeping in mind the goal of speculating *just* worlds ("What is 'Visionary Fiction'?"). brown's move from curating visionary fiction to guiding community organizing is indicative of the fluidity between speculative fiction and community-based justice. Narrative reclamation and change are at the core of her justice methods. In addition to representation and righting historical erasure, she also hopes to do differently in the present so that future narratives will shift. brown's set of tools focuses on giving space and recognition to the reader's own often ignored responses and feelings toward change, and to guide groups that aim to instigate community-based transformation – hence the focus on "visionary". "Assess

Yourself: your emergent strategy journal" is included as an interactive journaling resource to be done alone or in a group setting. The prompts encourage participants to evaluate their contributions to the dynamics of the communities of which they are a part and how they feel and respond to change (183-190). brown asks questions such as "[d]o you know that your existence – who and how you are – is in and of itself a contribution to the people and place around you?" (90). She follows this question with a poem, "Love is an Emergent Process" and a list of "things I have to do repeatedly toward interdependence" (93). Item number four on the list is "Ask for, and receive, what I need", providing tools for personal wellbeing that construct community care and promote just community dynamics (95). Examples of questions include: "Can you stop my pain?", "Can you open the door?", "Can you heal me?" (95). Changing the present experience on individual and community levels (with an awareness that your experience is also part of the community experience) is an immediate way to effect change in the future. Of course, one of brown's tools to achieve this is writing: "The best way to practice visionary fiction is to get to writing…You have worlds inside you" (198). Writing visionary fiction is a community and individual project that "is a way to practice the future in our minds, alone and together" (197). brown expounds that spec-fi writing invites intentional adaption through exploring transformation. Using visionary practices invites the individual into narratives and worlds that might otherwise exclude or be violent toward them and their communities. Through visionary speculative writing practices, marginalized individuals can participate in futurities where they are afforded the opportunity to thrive.

Kuppers' *Ice Bar* represents another kind of readerly and writerly practice in imagining futurity for marginalized subjects. The collection of spec-fi stories incorporates dystopian, post-apocalyptic, horror, and other genre-fiction tropes with focuses on disability representation, multispecies presences, and environmental toxicity and change. Its publisher, Spuyten Duyvil, proudly proclaims that the press "satisfies no demand in any market" ("Mission"). Spuyten Duyvil is itself a speculative venture; .its mission statement describes its content as "honest and reality-based imaginative texts to a readership that may or may not exist" ("Mission"). Publishing texts in a speculative and future-oriented position is part of the writing culture that Spuyten Duyvil cultivates, because "Not knowing who's in the audience, or whether this audience exists in the present or future, releases writers from writing for a specific tribe or campsite" ("Mission"). Kuppers is writing within disability culture.She is a longstanding activist, artist, and scholar of disability and has published across several genres, including academic texts, poetry, and short stories. Devoting much of her work to community art and performance practices, Kuppers is adept at moving between the public and academic spheres. By leading community disability arts workshops while producing critical publications within disability studies, for example, her work is able to engage with embodied knowledge, intersectional experiences of oppression, and theoretical polemics to deepen understandings of how art and disability interact. In Kuppers' *Ice Bar*, the intersections of disability and race are visible at the levels of content, genre, and circulation. (We will see later that these intersections are shared with brown's *Emergent Strategy*.)

Ice Bar gives reader-writers a space to play with self-representation of one's own roles in history, narrative, and world-building through the "Field Notes" included at the end of the collection. The section is similar in form to an explanatory, scholarly introduction but is reserved for the wake of the short stories and engages the reader as a participant in world-building – that is, envisioning a world in which a future that is different from one's own present moment will transpire. "Field Notes"– a title alluding to Kuppers' experiential, place-based method of writing – is a kind of manifesto for the use of speculative fiction as a tool for activism, representation, and helping individuals to find lively futures that fit their own bodyminds during crisis. Kuppers explains that the origins of the stories in the collection are based on her lived experiences and engagements. Some are firsthand projects, including performing in "old asylum spaces" and the ensuing Asylum Project workshops where Kuppers and collaborators lead "community participants" in exploring their relationships to "the term 'asylum'" through place-based, somatic practices (175).[41] Others are relational experiences of being in solidarity with activism in response to "police and state atrocities" such as the Dakota Access Pipeline protests and Anishinaabe Women Water Protectors actions (175). Kuppers gives *Octavia's Brood* and other works and writers of spec-fi credit in her acknowledgements as well.[42] "Field Notes" also provides a transparency for the writing process, with explicit discussion of methodology. Kuppers' writing engages the speculative on two different levels. One is the plot conventions of

[41] The Asylum Project is part of Kuppers' larger project, The Olimpias, which is a disability performance artists' collective that runs community-based workshops all over the world.
[42] Some of these works include *Accessing the Future: A Disability Themed Anthology of Speculative Fiction*, *Lagoon* by Nnedi Okorafor, and the cli-fi genre (Kuppers 177).

imagining future. What does it mean for a writer to reimagine what constitutes genre-fiction by bringing the presences of minoritized identities into their narratives? The agency and narrative focus afforded to more-than-human presences in the stories opens up speculative worlds in which power difference is more visible and more easily critiqued.

At the very end of "Field Notes" is an "invitation" for readers to become writers (176). As evident in her prolific community activism and arts work, Kuppers is invested in writing as a tool for community-building. The act of shaping familiar narratives and myths to fit an individual's intersectional experience changes the flow of power. In "Field Notes", Kuppers invites the reader to:

> Take up your own storytelling ability: imagine the world differently. Take a story that obsesses you, and shift it so it reaches toward the contours of the world you want to see. What values power your story? Where do you place your emphasis…Find others to read to, to write with, to imagine together. What can bodyminds do, in this new world? What do they do to socialize, to hang out, to take a load off, to celebrate being alive? (176)

This narrative reclamation is a step toward encouraging communities of writers to envision futures in which they and people like them can flourish. Kuppers' call to action highlights the agency that reader-writers have over future-world-building. By inviting readers into transformational speculative practices, Kuppers and brown show how imagination and storytelling are agentic acts for cultivating worlds where readers want to live and thrive.

Genre Emergence

brown's pedagogical description of humans' ability "to learn with our whole bodies the ways of this world" resonates with reading practices that I have engaged with throughout this dissertation (6). In *Ice Bar*, specifically, learning the ways of the world with one's whole body comes through Kuppers' exploration of how disabled bodies meet the edges and entrances of more-than-human matter to find different ways of surviving. Full-bodied learning is part of the inclusive and intersectional approach to future-world-building in brown's work as well as the speculative fiction texts that I have been exploring. One of the core questions of the book is "How do we turn our collective full-bodied intelligence towards collaboration, if that is the way we will survive?" (9). The centering of intelligence that lives beyond the brain and takes into account the multidimensionality of knowing that occurs in an individual's bodymind is a liberatory form of knowing and learning – of recognizing non-traditional forms of knowledge. With her goal of "co-creating the future," brown intendsfor the book itself to be collaborative with multidimensional readers (6). brown addresses readers with the imperative: "imagine [the future] as a place of justice and pleasure" and she invites readers to "feel free to play with all these observations and add their own…I don't want to be the owner of this, just a joyful conduit" (164, 7). By releasing authority, brown encourages a non-hierarchical form of scholarship, reading, and social justice leadership.

In addition to full-bodied learning, brown diverges in another major way from theoretical norms by asserting that "there's no such thing as a blank canvas, an empty land or a new idea – but everywhere there is complex, ancient, fertile ground full of potential" (10). Recognizing the recycled (or, as Donna Haraway would put it, composted) narratives upon which innovations are

built and paying homage to conceptual origins is part of the lesson that spec-fi teaches. brown's commitment to genre fiction as the site for the work of visionary futurism demonstrates this concept in action. "Science fiction is not fluffy stuff," so there should be no devaluing of a genre with a strong set of conventions and norms (brown 164). All intellectual and creative work is built out of repetitive use of conventions, like fiction that builds on genre norms or, as brown finds most edifying, the behavioral patterns of starlings, mycelium, and other more-than-human kin (164). Specifically, the Afrofuturist realm of spec-fi is a social justice space that needs to be valued for its tangible impact on real-world-building: "Afrofuturism is not just the coolest look that ever existed. The future is not an escapist place to occupy" (brown 164). To brown, the concept that "we bend the world to assert and embody that Black lives matter" embodies Afrofuturism (161). New explorations emerge out of previous exciting ideas, and it is there that exciting work happens – not through the commitment to blank canvases. For environmental future-world-building, brown shows readers that learning from the patterns and practices of plants and animals might lead to harmonious and just futures.

The collaborative knowledge production that brown encourages is part of building better futures. She argues that "[w]e must imagine new worlds that transition ideologies and norms, so that no one sees Black people as murderers, or Brown people as terrorists and aliens, but all of us as potential cultural and economic innovators" (19). Integrating full-bodied learning and fertile grounds for intellectual work is a path for social justice. Utopia, however, is not the solution. brown critiques utopic narratives that are built on a "monoculture" where every person behaves in the same manner and is invested in the same values (57). One such familiar monoculture

might be models of sustainability in which communities are expected to adhere to a narrow frame of behavior that does not account enough for difference. brown asserts that "[w]e have to create futures in which everyone doesn't have to be the same kind of person…Compelling futures…must allow for our growth and innovation. I want an interdependence of lots of kinds of people with lots of belief systems, *and* continued evolution" (57).

The spec-fi genre is a site where brown's argument for non-monolithic culture and justice practices is starting to manifest from the perspective of publication and circulation. As the genre of spec-fi develops, it is gaining a great deal of traction in the cultural mainstream and writers of color are finally finding lucrative publication success. It would be difficult to engage the current moment in literary criticism without noticing the recent growth of speculative narratives all around Anglophone literature and popular culture. From *Black Panther* to *Black Mirror* to Margaret Atwood's reboot of *The Handmaid's Tale*, readers and writers' interest in literary landscapes that imagine worlds out of the question "what if?" are booming.[43] Any reader of this chapter may have developed their own relationship with spec-fi through one of its many sub-genres, such as dystopian, utopian, post-apocalyptic, alternative historical, or climate fiction – to name only a few. Spec-fi used to be confined to a lesser-known part of the genre-fiction community, linked closely to its more densely populated cousin, science fiction. Now the genre is moving from being niche and little-discussed in critical circles to being a fast-growing

[43] A prime example of this is that twenty-four years after publishing *The Handmaid's Tale*, Atwood has written the sequel, *The Testaments*, following so much renewed interest in her 1985 novel and its recent television adaptation. Bestselling authors like Louise Erdrich have also begun dipping their toes into speculative fiction. Erdrich's book *Future Home of the Living God* explores environmental crisis from the intersections of reproductive rights and Native American identity (2017).

influence on mainstream popular culture and literature. As I have suggested, spec-fi is developing into a kind of language used to process, respond to, and communicate about environmental change and crisis.

This is even visible across mainstream cultural texts. For instance, blockbuster films like *Downsizing* and *Interstellar* use the tropes of spec-fi to express widely shared fears of western audiences and imagine what surviving could look like if reality were a little bit different. Adjacent to the high-profile and primarily American growth of the genre, a widespread global community of writers committed to spec-fi, originating from small presses and/or from underrepresented demographics, also grows. Particularly in the sub-genre of Afrofuturism, Nnedi Okorafor has risen to international fame and is in the company of authors such as N. K. Jemisin and Nalo Hopkinson. Feminist news and pop-culture outlets that compile lists of book recommendations are now filled with spec-fi novels by both well-established authors like Jemisin and up-and-coming writers such as Rebecca Roanhorse.[44]

This is to say that many American spec-fi writers with marginalized identities, including writers of color and queer writers, are being drawn into the spotlight where well-known spec-fi examples used to be primarily the likes of Kim Stanley Robinson and Margaret Atwood. Now common reference points for spec-fi include Janelle Monae's *Dirty Computer* and Marvel Studio's *Black Panther*. The *Dirty Computer* concept album and accompanying film tell the story of a near-future society that refers to its citizens as computers. Monae's character is

[44] See *The Verge*'s "Our Favorite Science Fiction and Fantasy Books of 2018" and *Bitch Media*'s "After Wakanda: 5 Black Sci-Fi Writers You Should Know".

designated a "dirty computer," and white male governmental workers erase her joyful and queer memories in order to wield power over her life and body. The text is an example of how queer artists of color are utilizing spec-fi as a space for political critique – in this case of identity suppression, racism, and totalitarian regimes. Monae's collaborator, Tessa Thompson, specifically references spec-fi when describing her generic inspirations and explains that the fantastical space of spec-fi supports discursive growth: "I'm a huge fan of science fiction and speculative fiction. I think inside that space you can sort of talk about where we're going as humans and it's more palpable, and people have an easier time digesting ideas inside of a space that feels like it's a skosh from reality" (Nordstrom). Thompson's observation is something that is often seen in the context of climate crisis which through its vast scale can be inconceivable. Amitav Ghosh's call for literature that engages with climate change signals the role that storytelling can fill in making the inconceivable something that people can start to fathom.[45] While Ghosh calls for literary fiction to step up to the task, Thompson recognizes that spec-fi occupies an ideal position for doing so.

Spec-fi is proving to be a genre that allows for intersectional exploration of identity, social justice, and futurity. For *Bitch Media*, Sarah Mirk interviews Ann Vandermeer, co-editor of the collection *Sisters of the Revolution: A Feminist Speculative Fiction Anthology*, who wants "to show how many different ways there are to explore gender, to explore equality, and community" (Mirk). Vandermeer specifically explains that "[w]e were trying to explore

[45] See the dissertation introduction for further discussion of Ghosh.

intersectionality" (Mirk). For Vandermeer, spec-fi is valuable for an intersectional feminist exploration of a hopeful future. Because of the growing popularity and visibility that she points out, spec-fi now generates significant revenue, opening up lucrative and high-profile publication opportunities for its author community. Vandermeer identifies the "commercial viability" of the genre, where growth might be attributed to the fact that "the rest of the world is starting to catch up with what we've known all along: how cool it is" (Mirk). Vandermeer still sees the genre as being attached to its investments in global change beyond its popularity and monetary growth, stating that "to me, the fiction of science fiction is hopeful because human beings are still wanting to have a better world. And sometimes fiction can help the world change" (Mirk). The fact that intersectional literature is becoming financially viable, and even lucrative, through spec-fi is a paradoxical and exciting phenomenon. The growth of the intersectional space that spec-fi offers is a step toward ensuring the longevity of those authors voices within literary discourse. By offering intersectional representation, spec-fi strengthens its perspectives and visions of environmental and social justice by building worlds that recognize and find ways to recover from historical traumas and present violences to humans and more-than-humans.[46]

There is a long heritage of spec-fi being a platform for social justice discourse, such as Marge Piercy's mental health advocacy in *Woman on the Edge of Time* (1976) and the racial justice of Octavia Butler's *Parable of the Sower* (1993).[47] I want to emphasize that

[46] The intersectionality of spec-fi is in both the writers' own identities and cultural positions, as well as in the characters and narratives of the texts themselves.

[47] Piercy's novel is an example of an older spec-fi text, like *The Handmaid's Tale*, that gained critical recognition and national acclaim, though both of these novels have been particularly heralded as a cornerstones of feminist literary fiction rather than genre-fiction.

environmental justice is also inherently a part of these feminist futures. Piercy's utopian world of Mattapoisett in her aforementioned novel is built on the foundation of humans maintaining a sustainable relationship with the environment. The freedom from environmental degradation impacts the health and wellbeing of the inhabitants and working with the land influences the equitable economic and labor structures of the society. In *Parable of the Sower*, protagonist Lauren, who creates a religion called Earthseed – the inspiration of brown's emergent strategy, writes, "[a]ll that you touch you change. All that you change changes you. The only lasting truth is change" (Butler). These verses compel followers of Earthseed to develop intentional relationships with everything in their lives, from other humans to their environments. The authors of spec-fi who are widely inspired by Butler's work weave the relationship between the human and the nonhuman into their speculative storytelling. By recognizing the mutual dependence of human and environment, they imagine a state of liberation and thriving beyond current crises.

The entanglement of environmental spec-fi with feminist care is not, however, represented across literary scholarship's engagement with the genre. The exclusion of major author communities, including women, queer, and disabled writers and writers of color from the environmental literary canon is indicative of tensions between western literary canons and genre-fiction. Adeline Johns-Putra claims that "[f]or better or worse, a canon of climate change literature, particularly climate change fiction, is now developing, with the novels of Gee, Kingsolver, McCarthy, McEwan, and Robinson emerging as key texts" (Johns-Putra 272). Johns-Putra refers to Adam Trexler's monograph, *Anthropocene Fictions: The Novel in a Time*

of Climate Change, as one such site where these authors are converged in the discussion of the canon (272-3). *Cli-Fi: A Companion*, Johns-Putra and Alex Goodbody's book, also foregrounds the same community of authors as canon, while recognizing the broad geographical stretch of climate-fiction including works such as Bong Joon-Ho's 2013 film *Snowpiercer*. They recognize that inclusion of more non-anglophone texts is limited by the lack of translation for non-English writers (Goodbody and Johns-Putra 6). Anthropocene fiction, climate fiction, and contemporary environmental fiction Anglophone canons have all been inhabited by an overwhelming number of white western authors.

Identity, geography, and genre inextricably contribute to how an author's work circulates. These intersecting vectors define texts' presence in literary marketplaces. When arguing for the value of incorporating crime fiction into the African American canon, Nicole King describes how syllabus design coupled with limited classroom time is influenced by "a pedagogical imperative to concentrate only on canonical texts and to sacrifice popular or genre fiction when teaching an African American module" (49-50). The problem of racial inclusivity and diversity in departmental offerings is an active force in shaping canons as cuts are made to compensate for the lack of a deep range of courses highlighting non-white and western canon works. Scholar Moradewun Adejunmobi explains that the same relationship between genre and literary fiction is not necessarily true for the African literary canon. He argues that when it comes to African texts, genre-fiction makes opportunities for broader textual circulation, accessing a wide range of reader communities:

> One of the more important attributes of genre, in my opinion, is an ability to generate a distinct circuit of transmission that is peculiar to the individual genre and allows for many types of encounter with the individual work. A novel by Nnedi Okorafor, for instance, circulates in relation to discursive networks dedicated to young adult fiction, speculative fiction, and African literature, among others. By virtue of possessing a recognizable generic classification as science fiction or crime fiction, among others, African and African diasporic genre fiction is often able to move among and beyond those publics committed to interacting with a corpus of works specifically designated as African literature. (262-3)

The engagement of reader communities is therefore an important factor in the publicity and growth for African authors. Adejunmobi goes on to argue that "[t]he close affinity between issues animating African literary fiction and African science and crime fiction undoubtedly accounts for higher levels of scholarly interest in the latter genres" (263). Adejunmobi's picture of African literature circulation just begins to touch on the range of influences that impact which kinds of texts earn positions in close proximity to literary fiction – i.e. that which is widely deemed worthy of scholarly attention. In this case, geography, reading communities, and generic conventions are key to African consumption of spec-fi.

In addition to African literature, literature by disabled writers benefits from the circulation of genre-fiction. Disabled genre fiction writer and editor, Joselle Vanderhooft, writes in *Accessing the Future: A Disability-Themed Anthology of Speculative Fiction* that "[g]iven the number of pioneering SF authors and creators who were disabled…the ableism in SF is

especially baffling and awful" (vi). Disability studies scholar Ria Cheyne writes that "[g]enre fiction has always told stories about disability", yet "it is only very recently that cultural disability scholars have begun seriously to consider genre fiction, and genre scholars to embrace disability-informed perspectives" (185). Cheyne explains that "[t]he intersection of disability and genre can encourage readers to think differently about disability…The conventions of individual genres enable particular types of disability narrative, and while some of these genre-shaped stories of disability shore up dominant discourses, others challenge them" (186).

In her 2007 monograph, *Scar of Visibility: Medical Performances and Contemporary Art*, Kuppers explores how the ways that writers and artists interact with dominant disability discourses become politicized. She explains that even though the landscape of sci-fi and horror narratives can be, on some levels, an unsafe territory for readers and writers with marginalized identities, "[t]he desire to turn to the phantasmic can be grounded in political, social change" (129). The danger lies in the fact that "[s]cience fiction and horror writing are often understood to be essentially conservative genres, since they displace the imagination of a different world into the fantastical instead of the supposedly more direct forces of realism with their privileged relation to existing sociocultural relations" (129-30). However, Kuppers understands that these genres hold subversive and liberatory powers for altering familiar narrative conventions that might have histories of harm and marginalization:

> …I value the alternative fantasies for their complex relation to dominant stories, time, and space. In writing on the literatures of the fantastic, writers and critics have challenged the conservative argument, echoing other cultural studies writers who champion minor or

genre pleasures.[48] Rosemary Jackson's definition of the fantastic, for example, elucidates the power of the genre by focusing on its presentation of that which exceeds the known, destabilizing the chain of significations that structure social intelligibility: "There can be no adequate linguistic representation of this 'other.' . . . Undoing those signifying structures upon which social order depends, fantasy functions to subvert and undermine cultural stability." One of these signifying structures under assault by contemporary popular cultural representation is the so-called natural body, and the stability of the human body as a contained category. (129-30)

Kuppers' own *Ice Bar* demonstrates the vast capacity of spec-fi for the distances between able and disabled bodies and human and nonhuman bodies to be destabilized.

One of *Ice Bar's* short stories, "Grave Weed", imagines the fertile ground of psychiatric institution graveyards, where protagonists Marcia and Bear chase the high of "botanical hallucinogens" by scraping the lichen off of gravestones to cook and smoke (16). Bear tells Marcia that "[t]he theory was that some mixture of madness, medication and exposure created mineral-rich bones, a special fertilizer for these lichen" (14-5). Marcia and Bear were both "left alone" by loved ones who were taken away from them "by the barred gate, by the concrete marker, by the pills and the electric surge" of asylums (22-3). Their highs take them to those sites of trauma where they search for the people that they have lost to the institutionalization of mental illness. Bear asserts the mantra "[l]ive and let live" while they chase psychiatric histories

[48] Note the mention of pleasure, a topic to which I will return.

through the "bizarre, probably dangerous, likely toxic" concoctions of lichen mixed with medication-laced corpses (21, 20). In this story, the grave weed becomes a medium between the living and the dead, the institutionalized and those on the outside. Marcia travels as far as the Netherlands to find her mother, who may or may not be alive after their twenty-two-year separation. The long-term effects of the grave weed are revealed through a fellow user whose "pale and haggard" face gives a sense of resembling the abating characteristics of lichen and the corpses below: "half-vanished, eaten, as if the bones in his cheek had crumpled like waxed paper, leaving little cuts on the inside of this skin" (21). But even in that waning state, there is a sense of ongoingness. The crumpling and vanishing cheek belongs to "*this* skin" (my emphasis), leaving the possibility of the man finding longevity in a different skin, rather than fading and dying. The lichen, already a hybrid organism, is a site for potential new life forms to attach to and evolve along with its inherent fungi and alga. Through this organic and chemical-laced assemblage space, Marcia and Bear are able to drift between time and space to push against the boundaries of living and dead, sane and insane, and together and apart in the wake of psychiatry's institutionalized violence to both patients and their communities.

"Grave Weed" outlines how subverting the distinctions between subject and other in explorations of bodies and space can push against the stability of able-minded and able-bodied narration. Fellow disabled authors find transformation in the space of the literary other, as well. Vanderhooft's preface to Djibril al-Ayad and Kathryn Allan's *Accessing the Future* demonstrates what it might look like for characterization to disrupt the trope of aliens as other in genre fiction by characterizing herself as an alien within dominant structures of ableism. She

writes, “My life is a familiar piece of science fiction. You probably know at least a dozen like it. Extraterrestrial gets stranded on Earth. At first they’re baffled and a little bit frightened by the culture, but they quickly learn to hide and disguise themselves” (vi). As a disabled person, “being an alien in an alien land is such an accurate description [for] my life that calling it a metaphor feels like lying” (vi). For Vanderhooft, disability maps onto the alien-on-Earth narrative because it “can be isolating, frustrating, and even dangerous at times, given that we live in a world that expects bodies and minds to perform to certain standards and seems unable to cope when they don’t” (vi). In chapter two of this dissertation, the disability-driven paradigm shift of alien as other to alien as kin occurs in Margaret Wappler’s *Neon Green*. Cynthia’s experience of cancer draws her closer to understanding the spaceship in her yard. As her husband fears it as a hostile presence, she shares empathy and companionship with it.[49]

Despite the tendency of ableist works to rise to the visible surface of the genre, Vanderhooft proposes that “much of science fiction is, at its heart, the story of the search for accessibility or what happens when something we can’t access now – outer space, time travel, telepathy – is or becomes accessible to us,” although she emphasizes that deciding “for whom” access is available is “the ultimate question” that differentiates ableist narratives from those of disabled and disability-allied writers (vii). The preface closes with Vanderhooft’s reflection that after reading the anthology of stories, “I think that I am now more comfortable in my alienness” and “[b]eing alien isn’t necessarily a bad thing. It can be a neutral thing – or even a good thing”

[49] *Neon Green* is itself a work of speculative fiction as Wappler builds a narrative around the question of how a suburban family would respond if a spaceship landed in their yard. The novel plays with spec-fi genre conventions without committing substantially to them.

(ix). To read works about disability is potentially to partake in de-othering, even if the other is still *other* – for the othered subject to emerge from a transformative reading experience to feel a sense of community and inclusion where there used to be isolation.

Kuppers offers modes of de-othering by engaging with disability, race, and the more-than-human. She dives deep into her own white German history in "Viking Ship" in which a recently disabled-by-shark-bite protagonist of European heritage is stuck alone on an island. The horror story's narrator survives on the island, a place they characterize as "clean" and "light" until a vacant Viking ship arrives and enacts a violent encounter with the nonhuman that fills the narrator's body with black tar. The narrator leaves the island no longer as a powerful individual mastering nature, but as a "we" containing an assemblage of more-than-human entities in their body. The story plays with Robinson Crusoe style colonial narratives. An encounter with the other, like Crusoe's encounter with Friday, ensues, but instead of enslavement and subjugation, the story ends with a transformation of the self through disability and trauma.

Afrofuturist World Building

In *Emergent Strategy*, brown emphasizes that building a thriving and healthy planet is deeply intertwined with building an antiracist world. Interviewer Justin Scott Campbell asks brown, "You have referred to it as a radical self/planet help book. What do you mean by that?" ("Earning Our Place"). brown explains that while the term was coined by her editor, "We think of self-care and self-healing as something we go off and do individually. [But] there's nothing that happens in a vacuum and there's no such thing as a pure individual. We live in a super

interconnected world. This means that anything we do that improves how we are being with each other is of benefit to the entire planet" ("Earning Our Place"). I am now going to engage with the discourse of Afrofuturism to further unpack the relationships between narrative and real-world-building, as it is a space where brown's cornerstones of race, future, and environment are treated as co-emerging entities. The community of Afrofuturism has taken up narrative as a future-shaping tool to escape the limiting colonialist norms of futures, especially those that rely on the dichotomy of utopia/dystopia.

The field of Afrofuturism is a critical site for understanding how genre play can help to heal experiences of racism and racial violence. Afrofuturism allows writers with multiple intersecting marginalized identities to explore freer futures. Taking notes from Afrofuturism's temporal assertion that the past and future simultaneously interact, Ytasha L. Womack situates contemporary spec-fi amidst a history of speculative writing from writers such as W.E.B. Du Bois and Pauline Hopkins in her monograph on Afrofuturism:

> The idea of using sci-fi and speculative fiction to spur social change, to reexamine race, and to explore self-expression for people of color…is clearly nothing new. The black visionaries of the past who sought to alleviate the debilitating system and end the racial divide used these genres as devices to articulate their issues and visions. This tradition continued with Samuel Delany, Octavia Butler, and Nalo Hopkinson, all of whom merged issues of race, class, sex, sexuality, culture, and identity to make sense of the changing times. Their worlds included people of color, but the issue of otherness was

> wrapped in a sci-fi space saga that zapped from shape-shifters to gender benders to alien pods, time travel, and killer bodysuits. (124)

Given Afrofuturism's innovative use of temporality to transform oppressive narratives, it is not surprising that it is contributing many texts to the spec-fi genre.

Womack asserts that "[t]he narrative of hope that spews from change agents working for social equality is no accident," demonstrating that like the commitment to combatting oppression, the effects of Afrofuturism also move between past, present, and future (41). She explains that because "Dr. Martin Luther King, Rev. Jesse Jackson Sr., even President Barack Obama centered their missions and speeches on hope", it is evident that "the results of a changed mind backed by a bit of empowerment can turn a conflicted world on its head" (41). The entanglements of "[i]magination, hope, and the expectation for transformative change" mark how Afrofuturism moves between art and practice – between representation and experience (42). Those three elements comprise "a through line that undergirds most Afrofuturistic art, literature, music, and criticism. It is the collective weighted belief that anchors the aesthetic. It is the prism through which some create their way of life" (42). Those elements of imagination, hope, and expectation for transformative change overlap with the elements of spec-fi, but for Afrofuturism, they are even more grounded in a need for reparative and liberatory change which enables hopeful and anti-racist future-world-building.

In Afrofuturist spec-fi discourse, scholars commonly discuss how real-world-building and building fictional worlds in Afrofuturist spec-fi connect to the ways in which Afrofuturistic literature brings present and future together. In her article on Nalo Hopkinson's engagement with

liberal values in her spec-fi novels, Maureen Moynagh argues that integrating speculative history and fiction plays an important role in the social relevance of the texts: "the political purchase of the fantasy and science fiction in Hopkinson's novels lies in their staging of the fantastic histories and equally fantastic social relations that structure diasporic lives in the Americas" (220). Her article explores how Hopkinson makes "the antinomies of realism and speculative fiction 'wobble'" through the relationships between history and future-world-building (211). In regard to Hopkinson's *Midnight Robber*, "[f]antasy and history are so intertwined…as to be nearly inseparable, and their respective political valences are similarly entangled" (217).[50] Moynagh suggests that "[i]f, as Hopkinson herself has pointed out, the ultimate 'no-no' in genre fiction is to dispel the fantasy at the end…there are nonetheless ways in which her speculative fiction points readers to real, historical injustices within the parameters of the fantastic worlds of her novels (Simpson 106)" ("Speculative Pasts" 212).[51]

Womack addresses her readers by stating that "Readers, our future is now" and instructs them to find "guideposts on this worded journey through the cosmos" (1). The guideposts are "archetypes that anchor the imagination" (1). Womack (interviewed by Stephen W. Thrasher) explains that Afrofuturism is a site for intersectional feminist imagining. Her articulation of race as both "a technology" and "a fiction" is central to how Afrofuturism utilizes race to "[offer] us a way out through the black imagination" (Thrasher). According to Womack, "black people have had their imaginations 'hijacked': we have been duped into only believing one narrative about

[50] *Midnight Robber* is Hopkinson's second novel, published in 2000.
[51] Here, Moynagh references: Simpson, Hyacinth. "Fantastic Alternatives: Journeys into the Imagination, a Conversation with Nalo Hopkinson." Journal of West Indian Literature 14.1-2 (2005): 96-112.

ourselves. And this creates a co-constitutive process in which we imagine a limited sense of possibility and create limited lives in this image" (Thrasher). In her monograph, Womack describes Afrofuturism as a "worded journey" and a "dance through time travel" that weaves together different temporal stages through narrative (2). She asserts there is a need for spec-fi in Afrofuturism because literature, and specifically storytelling, are liberatory. The hijacking of imaginations through limited narrative representation is a problem of both history and of culture. As a consequence, mainstream genre fiction limits itself to a narrow range of narratives that rarely include authors of color.

Like in Afrofuturism, temporality plays an important role in spec-fi's narratives; spec-fi writers see an urgency in literature. Reshaping humans' relationships to the notion of the future is an undertaking of writers who work deeply within the communities of genre-fiction, and specifically small press authors like Kuppers and brown. The mainstream bestselling and blockbusting texts that leverage spec-fi as a money-making endeavor have limited range in terms of narrative and world-building. There will always be a wild and weird spec-fi subculture that does not make it to the mainstream. The spaces where writing and activism gain the most traction with each other are amidst the smaller, independent presses. For example, in *Emergent Strategy*, brown is not hemmed in by standard textual conventions of self-help or scholarly texts, despite being a nonfiction guidebook that integrates research. The book's lack of an index or traditional bibliography encourages readers to engage with the content in a different way than they might other books about transformative justice. In my own readings, I found that this format encouraged me to engage with the content in more spontaneous ways and through deeper reading

because I could not look up a specific topic through the index. brown is also able to use an informal voice that switches between first person singular, second person, and first person plural voices to play with relationships to her readers, sometimes addressing the readers as participants: "I want to hear what y'all think, and what you're practicing in the spirit of transformative justice/ Toward wholeness and evolution, loves" (150). Small press authors take spec-fi out of the publishing world into that of the social and environmental justice practitioner. The space carved out by writers of marginalized identities with oppressive histories, presents, and futures have a vested commitment to the urgent potential of literature to impact futures. Narrative collapses the present and the future for readers and writers. Through reading, the audience imagines and sculpts future worlds that have the potential to fulfill justice and sustainability goals that are not yet being achieved around them in real time.

Multispecies Emergence

brown is enacting the very process that I am articulating in this dissertation – learning about the lived world through literature and creating a multidirectional current between reading, writing, and real-world-building. brown articulates emergent strategy as a "strategy for building complex patterns and systems of change through relatively small interactions" (2). She explains that it began as a language for Octavia Butler's "adaptive and relational leadership model" that we see through her fiction and in the inspired work of *Octavia's Brood* (23). brown describes Butler's work as "case studies that teach how to lead inside of change, shaping change. I've been calling what I learn from her work emergent strategy. Based in the science of emergence, it's

relational, adaptive, fractal, interdependent, decentralized, transformative" (56). Butler's writing builds on what brown describes as "a coherent visionary exploration of humanity and…emergent strategies for being better humans" (17). Juxtaposing "emergence and strategy was what made the most sense to me when I was trying to explain the kind of leadership I see in Octavia's books" (20). Emergent strategy became a multidimensional creature, including "plans of action, personal practices, and collective organizing tools that account for constant change and rely on the strength of relationship for adaption. With a crush on biomimicry and permaculture" (23). The last piece in the definition is important; emergent strategy is built on learning from nonhuman behaviors and human interaction with their environments. Most chapters include a section called "grounding in nature" that connects the themes of the chapter to quotes from other people about how their approaches to the topic are informed by in relationships with the more-than-human. For example, in the chapter "Resilience: how we recover and transform", brown includes a quote from JoLillian T. Zwerdling where Zwerdling shares a community resiliency lesson from starfish: "From Starfish I have learned that if we keep our core intact, we can regenerate…We can grow so many different arms, depending on what kind of starfish we are. We have to nourish ourselves with the resources we are surrounded by, with our community assets" (124).

brown's method involves learning with the nonhuman world to find and learn with life-forms and ways of living that already thrive around – and in spite of – humans. The ecological approach of emergent strategy is rooted in an earth-based practice of sustaining and improving quality of life and possibilities for the future. She explains that "[m]atter doesn't disappear, it

transforms. Energy is the same way. The Earth is layer upon layer of all that has existed, remembered by the dirt" (49). brown aligns the theoretical basis of emergent strategy with natural patterns. Natural, here, signifies something lively that can be witnessed currently or historically in the material world. To brown, all the components of emergent strategy can be found in the nonhuman world – models for collaborative and care-based transformation and justice. She argues that evidence for any point of view can be found in the natural world if searched for, so searching for *just* ways of being is required (4).

Drawing on the methods of emergence to shape community organizing provides the means of moving "forward…instead of repeating lessons we have already learned" (6). brown joins other speculative texts by engaging with the ways that futurism requires a nuanced relationship with history—a repository from which we can craft new narratives but also preserve earlier lessons. brown's example of the Complex Movements artist collective is "a snapshot of theory in perpetual motion" through its modelling of natural forms as "learning properties" (44-5). The collective has an emblem system that includes "ferns, ants, wavicles, mycelium, and more" (44). Their social justice model is built on learning with diverse forms of life and growing community emergence. The book's interweaving of multispecies knowledge and the experiences of other writers and activists alongside brown's own narrative that invites readers to participate leads to a diverse assemblage of voices and actants within the text. It might break the mold of a self-help text or workbook taking on an expert voice that tells readers how to transform their lives, instead opting for a collaborative being-with approach.

Kuppers' writing also embraces breaking out of cultural and historical patterns by turning to the more-than-human. In *Ice Bar* this plays out particularly through genre experimentation. The horror conventions in Kuppers' stories destabilize the literary trope of individualism and the stability of the able-bodied human protagonist at the center of a narrative. This trope is so often found in genre fiction with an intrepid and adventuring protagonist. From the tentacular takeover of "Viking Ship" to the oceanic "Pool Shark" villain who eats the misogynist poolside harasser, there is a playfulness in how Kuppers' nonhuman presences can be unbridled in their strength and unpredictability to change the human – a refreshing shift from familiar narratives of the human changing the nonhuman. For Kuppers, writing at the intersections of myth, narrative, and privilege leads to a practice that is girded by recognition, space-making, and reclamation. She situates herself as "a wheelchair-using disability culture activist" as well as a person with her own "white…and settler" origins (174-5). Her writing practice is grounded in "scrutinizing the foundations of [white settler] myths and entitlements" (175-6). Kuppers describes the project as "disability culture reclamation" that "reinvents myths of otherness, and…reaches toward the party place" (174). The simultaneous experiences of power and vulnerability in an individual body are central to Kuppers' narrative world-building. The speculative effect is that the communities and kinships in her stories are complex assemblages of diverse beings that find pleasure and play amidst difference – but where violence and horror are fully visible to the reader.

The motif of "the party place" is fully realized in the titular short story, "Ice Bar". The narrator, a woman named Alissa who is one of a number of survivors of an undefined ecological

disaster, “emerged into the bright sunshine, some daynight after” with “too-muchness in the air” where the sun looks “different” and shadows are “unfamiliar” (3). Readers do not know the temporality or particulars of what the story is coming “after,” though hints are given that something cataclysmic has occurred. Alissa is at risk of getting “kicked in the butt by sunlight or radiation” if she stays in one place for too long. She encounters a “hopeless” woman who “did not wish to live past the apocalypse, who saw the demise of internet, telephony and petrol-driven life as a reason to hasten their own demise, too” (4). Alissa wishes her, “[d]ie well” (4). The story is invested in seeing crisis through, past the point of “no return” that is familiar to readers in a world permeated with climate crisis media. The choices available to Alissa are “heat death or cave death” because “[n]o one had imagined other options or real viable life after” (4). When she finds the underground haven of the Ice Bar with water and mystery meat to spare, she turns to pleasure as a source of thriving. The sadomasochistic party environment allows her to step outside of old narratives of survival ethics to find joy in a dystopian world: “Ice Bar. Dance on the volcano. We will survive” (6). Like brown and the community of spec-fi writers, Kuppers pushes against the utopia/dystopia binary to dwell in the messy moments of reaching toward “the party place” and emergence amidst crisis. By challenging that binary, the writers encourage readers to consider what it might mean to not only survive but also to thrive and sustain their communities when the world is changing radically. Such a shift in perspective pushes against limiting reactions to climate change and environmental crisis, instead moving toward a focus on how to make the most of a changing world and to cultivate sustainability and liveliness locally.

The crip perspective of the collection lends an awareness to the ways in which the more-than-human can take on volatility and liveliness as a result of anthropogenic harm, leading to the vulnerability of human bodies who also bear privilege and species-wide fault. In "Grave Weed", the lichen growing on the graves of asylum patients have intoxicating effects on the human protagonists because the pharmaceuticals taken by the patients fertilize and alter the surrounding organisms. The story "The Road Under the Bay" features another vengeful shark attack and a history of anthropomorphism in the San Francisco Bay. The more-than-human transformations lead to attuned awareness to environmental health and shifts in toxicity and movement in "the sickness of sea passages" (113): "I can feel the change…I can feel it here in the ancient water. Salts, pressure, the way the sound drives through the ocean" (116). Kuppers describes the process of this story as "I crip the little mermaid while paying ecopoetic attention to the histories of the Bay Area" (176). Instead of nihilistic death, there is becoming. Human characters overtaken by the other species become more-than-human and lively in different, emerging ways. Even in new, risky frontiers, there is pleasure-seeking. We can locate a history of violence in any utopian narrative. It is more difficult to read for dystopic pleasure than to find the "party" moments, as Kuppers might say. Seeking pleasure and playfulness in a narrative can encourage readers to continually find hopefulness and means of thriving during crisis, which is vital for real-world-building in which individuals support their multispecies communities during change without giving in to despondency.

Taking Speculative Fiction Seriously

Kuppers' engagement with pleasure gestures to the larger role of pleasure at play in the nexus of future-world-building. In this section I am going to draw out the ways that pleasure is considered in environmental discourse and how that interacts with the valuing of serious versus non-serious literature and the power of finding pleasure in non-serious literature. Eschewing certain pleasures is part of widespread sustainability practices. In Jonathan Safran Foer's recent book on the importance of reducing animal product consumption in order to slow climate change, *We Are the Weather: Saving the Planet Begins at Breakfast*, he places pleasure in opposition to sustainability. Foer describes the pleasure of "eating a burger behind a locked door" and states that "[w]e are killing ourselves…[b]ecause short-term pleasure is more seductive than long-term survival. Because no one wants to exercise their capacity for intentional behavior until someone else does" (*We Are the Weather*). Not only is pleasure indulgent (read: consumption-focused) and, therefore, guilty, but it is also a neighbor to unintentional behavior (read: wasteful). Jeremy L. Caradonna's expansive exploration of sustainability, *Sustainability: A History*, does not contain the word pleasure at any point as Caradonna explores the evolution of mainstream and global understandings of what it means to cultivate sustainable communities and countries. Caradonna does, however, discuss happiness, specifically when describing measurable benefits of following institutionally recognized sustainability measures: "Sustainists contend that a sustainable society is one that not only preserves natural capital, eliminates waste, and establishes economic stability but also promotes human happiness, equality, and well-being" (220). Within queer studies, Sara Ahmed has taught that "Where we find happiness teaches us what we value rather than simply what is of value" and happiness constructs the goodness of

things and behaviors (*The Promise of Happiness* 13). Ahmed posits that "[t]o be happily queer might mean that one agrees to be the cause of unhappiness…as well as to be happy with where we get to if we go beyond the straight lines of happiness scripts" (115). A speculative world inclusive of queer experience will then value happiness behaviors that promote pleasure as an intentional experience. In her notes, to *The Promise of Happiness*, Ahmed writes that "[t]he importance of thinking about happiness as contiguous with pleasure sensations is that it allows us to keep our attention on the bodily dimensions of happiness. I do not want to take the body out of happiness" (232).

In spec-fi, pleasure is a key storytelling component for creating a lively and livable future-world. Pleasure influences the connection between readers and writers through the question of how readable and escapist the text is. For the texts that I am working with, pleasure is also central to plot and narrative imagining of what a future world looks like during the day-to-day. Melody Jue argues that Okorafor's *Lagoon* "risks not being taken seriously as literature" because of its non-realist blending of sci-fi and folklore (173-4). Despite the significance of bringing these elements together for African readers, novels must still follow the norms of western realist writing in order to be considered serious literature. Jue expounds,

> As Ainehi Edoro observes, referencing the debates between Chinua Achebe and Ayi Kwei Armah from the 1970s, "African writers—especially those who aren't writing highbrow realist fiction—are always under pressure to justify their aesthetic choices," given that "stories that experiment with non-realist forms stand a greater chance of being dismissed as imitative, inauthentic, and unserious" (2015). (173-4)

Lagoon achieves the balance between literary conventions and reading pleasure (174). However, most spec-fi texts do not gain that level of critical notoriety, nor do they necessarily prioritize the elements that would appeal to mainstream audiences.

The method by which spec-fi undertakes storytelling has made the genre a target for debate about the value and seriousness of the texts themselves. Some spec-fi novels use explicit political messaging as the core of their narratives. For example, Robinson's *Forty Signs of Rain* or Christine Dalcher's *Vox* have both political plots and a political perspective to their narrative voices. Robinson's novel is set amidst the National Science Foundation offices in Washington DC while characters try to make an impact on research funding and policy to fight impending climate change that threatens the city itself. Dalcher imagines the United States if women were only allowed to speak one-hundred words per day. The direct politicism of these writers comes into friction with literary studies in the academic sphere where the role of the critic and the literary value of any given text is thrown into debate when either the literature or its ensuing scholarship might be viewed as didactic or invested with too obvious of an agenda. Spec-fi puts tension on this relationship between reading practices and seriousness. Likewise, does the seriousness of brown's community organizing change because of its alignment with genre-fiction and storytelling? As an author of a subsequent book on pleasure activism, brown's position is at odds with the environmental approach to divesting material pleasures in favor of sustaining a livable future.

Scholar Zackary Vernon addresses the impasse between literary studies and activism in his article "Environmental Pedagogy, Activism, and Literature in the U.S. South." His work

represents one of the ways in which spec-fi is being taken more seriously; through – rather than in spite of – its social justice commitments, circles of readers who are committed to environmental justice are granting the genre intrinsic value. Vernon's article is a direct response to what he calls scholar Jon Smith's "[disparagement of] the potential environmentalist work done in literary studies courses" (226). Vernon addresses an important criticism of the spaces where literature and activism overlap – that the integrity and rigor of literary studies and literature itself are somehow at risk when reading and teaching the texts is mutually implicated in environmental justice. Vernon's article, as a whole, maps well onto spec-fi in order to help understand the meeting points of activism and literature, and the need for reshaping how that relationship is received in literary studies. His focus on the value of bringing literature and environmental justice together complements my own argument on the pedagogies of literature. He argues that in regard to the value of literature that is politicized, "[t]he artist's attentive vision can, in other words, make our own vision all the more keen" (229). He poses a question that resonates with the phenomenon that I see taking place in the speculative writing community: "why can't we engage in activism and literary analysis simultaneously? Moreover, can't literary analysis, in this case ecocriticism, be activism?" (227).

Scholars are now talking in depth about the value of inserting climate change into literary worlds, even though the genres in which this happens most often (spec-fi, sci-fi, and cli-fi or climate fiction, specifically) are still deemed non-serious to canonical literary studies. Lisa Yaszek, quoted in an article by Zoe Saylor, says that "[c]limate fiction is sort of a virtual laboratory…It can dramatize our hopes and offer us different visions of the future" (qtd. in

Saylor). Yaszek's description of climate fiction as "a virtual laboratory" is indicative of another way in which narrative spaces are being viewed as contributory toward real-world-building (qtd. in Saylor), therefore demonstrating that literature is itself acting in response to environmental change – being a space for experimenting with real-world-building. When climate fiction is used as an umbrella term for numerous genres that engage with climate change, it is important to keep in mind that both sci-fi and spec-fi, while adjacent, are not identical. Sci-fi deals in imaginaries that are grounded in the potential for possibility within the bounds of science and technology, whereas spec-fi is invested in questions of what could happen if reality were different than its current capacities. Spec-fi is more likely to delve into narrative thematics of horror, pleasure, and sensation that might be outside the bounds of a science-grounded fictions. These categorizations should not be treated as circumscriptive, though; many texts play with these genre edges, such as N.K. Jemisin's *Broken Earth* Trilogy.

Charlie Jane Anders' article, "Why Science Fiction Authors Need to Be Writing About Climate Change Right Now", provides an overview of the relationship between climate change, writing, and science fiction, not taking as a given the codependence of Earth's changing fate and fiction that envisions the future of technology and humans. Her quotes from Jemisin ascribe plausibility to including climate change in the world of a sci-fi novel, while Anders' argument is focused more on the value of bringing sci-fi, which is endowed with the tools of imagination, to the discourse of climate change. "Imagination gives rise to ingenuity and experimentation, which we're going to need if humans are going to survive the highly localized effects of a global problem" so "imaginative storytelling" is, for Anders, an obvious strategy for building a real-

world future out of current crisis (Anders). Additionally, Jemisin argues that including climate change in a spec-fi story is a means of narrative plausibility: "anyone who's writing about the present or future of *this* world needs to include climate change, simply because otherwise it's not going to be plausible, and even fantasy needs plausibility" (qtd. in Anders). For spec-fi authors, the relationship between storytelling and addressing environmental change is explicitly clear. From Jemisin's perspective, "[w]e need to imagine the future in order to survive it" (qtd. in Anders). Anders also delineates the need for utilizing imaginative narrative skills alongside technology:

> …any real-life solution to climate change is going to depend on imagination as much as technical ingenuity, which is one reason why imaginative storytelling is so vitally important. Imagination gives rise to ingenuity and experimentation, which we're going to need if humans are going to survive the highly localized effects of a global problem. Plus imagination makes us more flexible and adaptable, allowing us to cope with massive changes more quickly. (Anders)

Mirk holds a similar stance in regard to the impact of fiction on world-building, which she sees as a matter of bringing hope to the process of envisioning change: "to me, the fiction of science fiction is hopeful because human beings are still wanting to have a better world. And sometimes fiction can help the world change" ("Sisters of the Revolution").

As is the focus of this dissertation, the texts showcased in this chapter approach questions and fears about the future through building worlds that do not avoid the reality of environmental sustainability's precarity. Kuppers' story "Ice Bar" plays with this message through a horror plot.

The Ice Bar is kept cool by an air conditioning unit that is fueled by "[drinking] its fill of patrons and performers alike" (10). Protagonist Alissa decides that "It seemed fair…everything needs fuel, and humans had used up their allocation. Why not be the fuel, and enjoy the process of heating oneself to the right temperature? Dancing away…" (10). Of course, this is not a utopian turn of events for surviving an ecological crisis, but the Alissa's joy helps the narrative to resist the falling into the realm of dystopia. The situation is very much imperfect, but in the party place, the characters' former life "was gone and done, beyond a crystal rainbow curtain" (11). They accept the change and they dance.

Richard Crownshaw describes Anthropocene fiction as circling around speculative and future-focused narratives: "In mapping the widening scales of recent literary criticism and theory, and its accommodation of future-oriented historical fiction, [Crownshaw] argues that fictions of the Anthropocene might also be characterised as fictions of future or, what I call, speculative memory" (889). With a reading of Paolo Bacigalupi's speculative novel, *The Water Knife*, Crownshaw conceptualizes the generic category of speculative memory characterized through "a form of post-melancholic speculation on the future" (908). By identifying speculative memory, he finds a narrative trend in which readers' impulses amidst crisis, genre categorizations, and temporality play together. Jemisin's *Broken Earth* trilogy is a compelling example of speculative memory at play in Afrofuturist genre-fiction. The series imagines a species called the orogenes who experience the tremors happening within the earth and who are able to control earthquakes to stave off a disastrous new season that threatens all inhabitants. Their setting – a continent called the Stillness – is an unstable part of the planet, but the earth's

instability is their phenomenological reality. Jemisin speculates what it looks like to live through crisis. Jemisin's *Broken Earth* follows the current of *Kindred* by avoiding ascent into utopia or descent into dystopia. Womack describes Butler's antebellum time-travel novel, *Kindred*, as a brave genre-defying feat because of its courage to time travel to where "[n]o one wants to revisit" (156). She locates the impact of Butler's work in its decision to forego dystopia for history: "Forget the scariness of a dystopian future; the transatlantic slave trade is a reminder of where collective memories don't want to go, even if the trip is in their imagination" (156). Her analysis highlights the impact that unburying old lessons can have on creating new narratives – both in fiction and in real-world-building. Butler does not need to build a dystopian world but rather speculates within the familiar parameters of history. Likewise, Jemisin does not portray the orogenes as utopian because of their powerful insight into the material world or as a dystopian horror world even though the Stillness hosts imprisonment and torture. The orogenes experience pleasure and pain, engaging in bondage play and polyamorous relationships while protecting their communities. The significance of these narrative choices is in the ability to immerse readers into a world where liveliness and survival are present not just in the far edges of the fantastical but also in the messier everyday periods of living in a speculative world.

Likewise, brown's approach to self-help for community thriving takes lessons from immersing oneself in the nuances of everyday survival. Imarisha and brown spell out their method of drawing on individual, intersectional experiential, and embodied learning of the world in their introduction to *Octavia's Brood*:

> We have been articulating our work as visionary fiction: we are working to generate fiction that intentionally disrupts the status quo, examines change as a collective, bottom up process, centers marginalized communities – and is neither utopian nor dystopian. The reason for that last piece is that dystopia leaves us with no hope. Utopia basically does the same thing, by creating a future that is unattainable and has so little to do with present day experience that it isn't useful. We are instead interested in generating stories, visions and futures that are hard and realistic and hopeful. This means, for instance, that we don't seek or generate stories where no one sees color. ("Science Fiction")

brown's commentary here speaks to the tensions surrounding genre-fiction within EH. Spec-fi is a genre that holds in paradox the fantastical and the real; it offers something that neither realism nor fantasy on their own can offer readers. The genre engages with social justice through its commitment to messy and unsatisfying realities amidst hopeful futures, imagining about what reality could be. Building the world from the point of fantasy meeting realism, brown's community of fellow writers and activists recognizes storytelling as more than writing, inclusive of "stories, visions, and futures" however those narratives take form.

The role of pleasure and the seriousness of genre-fiction overlaps with how representation shapes readers' relationships to the text. In *Bodyminds Reimagined: (Dis)Ability, Race, and Gender in Black Women's Speculative Fiction*, Sami Schalk shows that representation is intrinsic to the lively relationship between readers and texts, explaining that "representation

matters in material, concrete, and life-affirming – life-changing – ways" (2).[52] As she explains, writers who foster non-passive representations can give agency to readers: "[s]peculative fiction can move people with disabilities, black women, and disabled black women from objects to subjects by making them the main characters, resisting stereotypes, and providing controlled, selected access into the various experiences of these populations" (22). Specifically in the spec-fi genre, "[c]ontemporary black women's speculative fiction changes the rules of reality" in creating worlds with "new and different" bodyminds at the junctures of disability, gender, and race, and more-than-human forms of life (Schalk 3). Schalk argues that "in doing so these texts also require a change in how we read and interpret these categories" (3). Dianca London Potts' interview with spec-fi author Tananarive Due also locates the dynamic between readers and writers in the issue of how a complementary relationship can and should exist between enjoying texts and wanting to make material impact. Potts writes, "Much like [Octavia] Butler, Due is a pioneer in Afrofuturism whose work has helped readers and activists envision a brighter and more just future" (Potts). Due states that "I hope that there's something in everything that I write that will change a reader's awareness of racial history and help spur them to create change" (qtd. in Potts). Due's hope that her writing will incite change and learning from history points to the impact that spec-fi can have on real-world-building. The work that women of color, such as Due, are contributing to the genre is critical to creating more just forms of environmental and social change.

[52] Schalk notes that "*Bodyminds Reimagined* is the first monograph to focus on the representation of disability by black authors" (3).

It is no coincidence that genre fiction, which frequently represents under-represented marginalized identities, often receives disproportionate criticism that it is not serious literature. In *Emergent Strategy*, brown puts pressure on the treatment of Black narratives and Black agency when she asks, "How do we need to be for Black lives to matter? What do we need to heal in ourselves in order to offer a future of any real peace? Or to become the protagonists of this human story – and earn the flip of the page of all the sentient life in the universe?" (164). Narrative reclamation and reformation are woven into her understanding of justice and change making. Responding to the uncritical treatment of African American popular fiction written by women, Herman Beavers asserts that readers "are adept at holding the world, the text, and their sense of self in a critical tension that allows them to engage what they read in ways that may serve a didactic function in their lives as it also complicates what it means for them to experience pleasure" (276). This is an assurance that texts have a life within the hands of their readers that extends beyond the reach of critique and generic value. The "we" in brown's questions accesses agency through the ability to create life-sustaining pleasure by engaging with spec-fi. In spite of the ways that sustainability discourse denies pleasure, spec-fi communities use pleasure for world-building storytelling practices.

Hope is Speculative

As I am nearing the end of this chapter in the midst of COVID-19, I am experiencing speculative futures in a way that is more immersive and critical than when I started writing. When the news comes of the first reported case of coronavirus in my state, I have been waiting

for days, expecting that there have been cases accumulating and undetected for quite some time. It feels as if a dam is breaking. Finally, there can be a little less guessing, convincing, or unconvincing. The future takes a shape, for a few days at least. With lockdowns and personal precautions taken, life pares down to that which is most essential where I am, and pleasure seems to be stripped back along with it. But even as work, chores, and services are reduced to essential duties, people, and travel, I am also pushed closer to comforts and small pleasures found in close and sheltered places. What is essential and who is doing the measuring?

I could not have predicted that 2020 would take this particular shape. I, myself, have my own speculative practice for this time. Like many people, it is part of my conditioning in the world to imagine the possibilities of near-future crisis. In the recent past, the scenarios that I imagined simmered with rising temperatures. I thought especially of body-to-body contact. Outraged and clashing communities. Breaking points and melting points. Lost habitats and living on top of one another. People and creatures facing down their coexistence. Where I am now, my communities sequestered away behind closed doors, gloves, and masks, is not the future that I expected. The body contact that is happening takes place inside hospitals and grocery stores that I avoid at all costs. I see very little of this crisis. How quickly I have become fluent in a new vocabulary of social distancing, no-contact, and self-quarantine. This experience of being faced with crisis emphasizes for me the primacy of the imaginary in speculative futures. They are transient and flexible, never leading to an exact reality. Their non-reality allows for such play and experimentation.

In the process of writing this chapter under shelter-in-place conditions, I have served on an editorial team for the *About Place Journal* special issue, "Practices of Hope." *About Place* is a multimodal journal published by the Black Earth Institute (BEI) think tank. BEI describes its mission as upholding art as "a sacred path to wisdom" and "[celebrating] the artist as a seeker whose work benefits the entire human community" ("About"). For our "Practices of Hope" issue, we invited pieces that balanced individual voices with an investment in care for their broader social and planetary cohabitants. We juried hundreds of submissions, including fiction, poetry, photography, video, and other creative forms. While the issue did not explicitly solicit spec-fi, we received many speculative submissions and, more importantly, the focus of hope summoned a vibrant periphery of spec-fi. Through engaging hope, the works imagine futures worthy of commitment and care in the present.

My co-editors, Petra Kuppers, DJ Lee, and Rachel Sanchez, and I worked together across digital pathways to synthesize our readerly perspectives into a cohesive perspective. Over the submission management website Submittable, we reviewed writing, visual art, film, and audio and communicated with each other through comment threads on each submission. Our quadrumvirate led to four sets of "Editorial Comments" to introduce the "Practices of Hope" issue. These introductory pieces, while written in physically distanced isolation during the early days of COVID-19, speak to and with each other in numerous ways. Lee describes the process of connecting with all of us amdist "reading and discussing the artistic expressions of our times" while "the novel coronavirus swept the globe and news of its spread seeped into almost all facets of our lives" as a "lifeline" ("Editorial Comments"). Kuppers also uses "lifeline" to express the

experience of connecting with artists and fellow editors amidst "[finishing] the editing process in a changed world" ("Editorial Comments"). I share in Lee's experience that "the ritual turned into its own practice of hope" ("Editorial Comments").

In her introductory comments, Kuppers pinpoints ways in which engaging with work invested in hope manifests as a hopeful ritual:

> I have found comrades who work in the aftermath of viral lives (Marc Arthur, and his futurist Detroit, an AIDS infection fantasy where the virus has a new valency field) or who look for new out-of-space living in a white supremacist world (Syrus Marcus Ware, and his vision of a future Antarctica settlement). Hong-Kong based performance artist Kanta Kochhar-Lindgren calls us to a practice of "the house on my back," re-inventing The Tempest within an Afro-Asian futurism of migrations and connections. There will be opportunities for new kinds of growth, a shifting of goals and perspectives on capitalism, climate catastrophe, and the ability of the world population to respond to pressures. We can pool resources, ground ourselves in respectful practice, learn from each other. ("Editorial Comments")

Sanchez furthers Kuppers' connection between speculative art and finding new ways of surviving by positing that "[f]or artists, action is creation" ("Editorial Comments"). She positions hope as a part of the process of learning from history, as she writes "[t]he future cannot erase who we are no more than we can erase what we have done (to our world, to each other). We can only try again, try better" ("Editorial Comments").

With the new language of safer-at-home and isolation shaping my mind, the pieces that our editorial team spent several months curating are now interacting in compelling new ways. The call for submissions described itself as casting "a wide net" – an image that evokes a process of catching. I am intrigued, though, by how the call attracted unexpected catches. It makes me curious about the works that climbed into our net unanticipated, setting up camp next to unlikely neighbors. As an editor, I have had to think expansively about what kind of world-building is being done by an assemblage of texts that have migrated together from previously disparate places. The journey of those texts and artists resonates with the unexpected migratory shifts happening in the more-than-human world around us. While one in four species risk extinction from human-caused climate change, there are other shifts in biodiversity that are simultaneously bringing about unexpected or unusual kinds of thriving. Grey nurse sharks come to mind as a species that has found a lifeline amidst global warming. Scientists have found that two distinct populations of the threatened species of shark have the opportunity to migrate together ("Climate Change"). The temperature drop in the waters of the Bass Strait separated them from each other for an estimated 100,000 years ("Climate Change"). As their environment warms, the sharks may be able to unite through migration and increase their population ("Climate Change"). In the story of the grey nurse shark, in addition to disrupting, challenging, and threatening, I see that forced migration brings about contact between distanced beings. As artists who hope for futures of thriving, the contributors to the Practices of Hope issue have found a home together that has nourishment and community for them.

Our call for submissions invited work from people who "showcase creative practices as activist tools, ways of making change, as well as forms that can bring people together" (Kuppers and Lee). We asked participants to think about how hopeful work shapes more-than-human futures and how the activist tools of their creative practices were also eco-tools: "How can we invent new appreciation of and new embodiment practices for humans and other fellow creatures? What can 'speculative' or 'non-realist' forms mean, and how can we make them resonant for eco-arts?" (Kuppers and Lee). We recognized that not all speculative work is oriented around more-than-human thriving and invited explorations of a hope as a multispecies project. The call also encouraged participants to dig into the process of resisting dystopia to see what that kind of hopeful survival can look like:

> Many of us cannot afford purely apocalyptic and dystopic fantasies. What else can activate new relationships to climate crisis, species extinction, and environmentally located social pressures in racist, ableist, classist, ageist, and sexist times? How can we imagine a different future with more of us in it? What hope can we afford? What hope do we need? (Kuppers and Lee)

Rather than "better" or "ideal" futures, we invited "different" and "affordable" avenues of hope from the individual positions of each of our contributors.

Editing this journal issue was a communal speculative practice. Not only did we need to weave together our four individual editorial perspectives of and relationships to "practices of hope", with their many overlaps and divergences, but we also faced the task of collecting submissions that reflected the diversity of voices and ways of being in the world that we had

received. To be a successful issue, this collection would put forward a chorus that honored difference while collectively sharing a sense of where hope could carry us. As editors, this process required a speculative imaginary of what the issue might look like as we engaged with the many submissions. We followed the crumbs and fragments of each other's languages of hope as we read, watched, listened, and viewed each piece in order to imagine the collective nest that would hold the final collection of works.

The editorial process allowed me to see speculative texts as a constellating network that allows readers, writers, and artists to imagine new futures between and beyond genres and mediums. Understanding how a video of ruminant breathing (Michał Krawczyk and Giulia Lepori's contribution) interacts with a poem that honors the life of preserved berries (Katherine Smith's contribution) extends into and beyond publishing. The process is part of building material futures within a changing and precarious planet. A shared hopeful and speculative practice hovers above the modes in which the artists are creating. As editors, we must ask, who is qualified to determine what hope looks like between mediums? How can one judge literary hope as well as photographic, performative, or cinematic hope? There is something lively in the heterogeneity that this issue showcases: a practice. Stitching together unusually paired elements to sustain community and to sustain art becomes an imperative practice. Poetry contributions including Dan MacIsaac's "Bioluminescence" and Smith's "Preserves" ignite the multispecies network that our issue knits together. MacIsaac commands, "[l]et be the light" in the lively "lure" of "tungsten glow of ghost fungus" and "ice-comet tail of arctic krill, / titan squid's x-ray glare" ("Bioluminescence"). We find hope in MacIssac's network of lively and earthy presences.

Meanwhile, “Preserves” finds hope in the brevity of ironweed, blackberries, and forget-me-nots: “You don’t even have to open your mouth / to call sugar to this world. / The berries tumble towards you, curious, / as large dark eyes” (“Preserves”). The meeting of these texts preserves vulnerable beings and persistent hopes, passing on their practices to a community of readers.

Michael Bishop’s “The Lottery of Birth”, a short story in “Practices of Hope”, imagines futures of people who are reincarnated but their new lives are governed by all too familiar and worrying statistics pertaining to global survival. The story reminds me that hopefulness is grounded in speculation, due to the hopefulness of the characters’ second chance at life yet their material fates in that life are dependent on their new race, ethnicity, socioeconomic status, etc. Through the lottery of who the characters will be reborn as, hope imagines ongoingness where there is a chance that there might not be any. Hope is a practice of speculation, of believing in ongoingness. It is a practice of working for a tomorrow that holds space for one’s communities. The points of contact between unassociated genres emphasize the significance of speculation as an emergent and unruly genre. If there is one thing that I wish readers to take away from this chapter, it is that speculation is not contained within a set of textual constraints. Reading and writing spec-fi with space for inclusivity of representation, free movement between convention and innovation, and openness to expanding one’s community inspires the kind of real and future world-building that Kuppers and brown, for example, offer in their speculative projects. The party place is within reach, somewhere beyond the boundaries of utopia and dystopia.

Chapter 4
Tracks for Teaching: Forging an Experiential Feminist Pedagogy at the Brink of Pain and Change

The Greenland shark is a master of waiting. Somniosus microcephalus, in Latin. The longest-living vertebrate in the world, Greenland sharks inhabit North Atlantic and Arctic oceans for a lifespan of around 500 years. Imagine that you can witness 500 years of Earth. What are you waiting for in those waters?

Known for their slow lifestyle, Greenland sharks belong to the Somniosidae family of sleeper sharks. The sleepy shark is a tortoise in the evolutionary race. A slow burner. They take their time, usually swimming at less than one mile per hour. *International Union for Conservation of Nature* labels them as a near-threatened species. The precise level and causes of threat are unknown because Greenland sharks are faraway, deep sea creatures whose staying power far exceeds that of human scientists. The *IUCN* cites fishing industries as a likely threat to this "extremely long-lived and slow-growing elasmobranch with limited reproductive capacity" (Kyne 37). The pollution of the ocean through chemicals and plastic particles is not mentioned as a threat. Lying in wait for pain to subside as I experience the drag of sleepiness without the restoration of sleep, I tell myself that maybe the sharks are far enough and deep enough not to be touched by our violences.

Having a chronic illness is all about waiting. Much to the dismay of the people in my life who care so much about my wellbeing and have not experienced such sickness themselves, there

is no bookend to my experience. There is not an appointment somewhere on the horizon that has any of the following:

a) Answer

b) Cure

c) Panacea

Think of a time in your life when you felt like you were treading water, waiting for a significant change (a move, a birth, the end of a season). Now think of treading *underwater* while waiting for a shift. Like most things experienced through the veil of chronic illness, there is an element of drowning. Or, in this case, waiting to drown. You begin to wonder if you were ever above the surface at all. Perhaps you were born underwater – some kind of mer-person who has fallen ill and does not fit above or below water. Are gills a symptom of endometriosis? (Alexa, remind me to Google that at 2 A.M. tonight.)

My mind is overcome with the presence of the shark's gills. Those billowing slits waft water between outside and in, between ocean and body. How much of the ocean has been breathed by Greenland sharks? How much of this bath in which I am lying? So many ounces of water cycle and recycle through the filtration systems of innumerable fish. What if my body is being lifted by their breath, by water that has seen the insides of so many of them, beyond their scales, gills, and skin? The thought makes me less lonely in this windowless room at the center of my pain.

At this moment, I am waiting for an appointment with a specialist. This is the last seventy-two hours of a three month wait. These last few hours don't go by quickly – they are stagnant and cloying. I feel a little lonely without having to call the receptionists this week to check for cancellations. Those women know my birthday and home address, and I only know their apologetic voices.

The sharks aren't as alone as they seem. The Ommatokoita elongate crustacean is their close companion, a parasite that attaches to the sharks' eyes causing them to experience the world through varying levels of blindness. They rely on other senses to find food and to go about their business. The subtleties of their ability to know the ancient world through their bodies astounds me. It stirs up an energy inside of me. Slow, sleepy, and disabled. What are you waiting for, shark?

I am glad that they are not alone.

As I lie in my bathtub, waiting for the water to go cold around my thrumming muscles, I imagine with closed eyes the slow movement of the Greenland shark through its own temperature-changing waters. I create waves with the undulations of my body.

Do they know what they're waiting for?

In chronicity, those with chronic illness learn the art of waiting for pain to subside. Waiting for pain to begin again. For medical discoveries (don't hold out for this, love). For the doctor to see me. For the nurse to call back. For the prescription to be filled. For energy to return. For my body to wake up. For my brain fog to lift. For a positive or a negative. For a centimeter

of growth. For a rupture. For someone to call. For something to shift. I think that chronic illness is a deep process of waiting for change. Something to break up the monotony of pain, fatigue, and flare.

Change reminds me that I am alive, that I am still in the water. I can't give an end to this to my loved ones. I seldom even let my own mind drift in that direction. The trick is to sense the subtler milestones and flickers of development amidst the waiting. Remember that something always changes. Witnessing *500 years* of change, the slow-moving, limited-reproducing shark knows most of all that nothing is permanent. Eventually, a ripple in the water will reach our tired limbs, no matter how deep we find ourselves.

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Alexis Pauline Gumbs asks what would happen if we, humans, follow the rhythm of sea creatures and "release ourselves from an internalized time clock and remember that slow is efficient, slow is effective, slow is beautiful?" (141). Gumbs' endeavor of learning from "marine mammal kindred" in *Undrowned: Black Feminist Lessons from Marine Mammals* draws me into the tension that lies in the urgency of (re)connecting with the more-than-human and the pace at which that relationship unfolds (2). The balance between urgency for change and presence in learning during the current moment was woven into the speculative art practices showcased in the previous chapter. Here, that balance surrounds practices of being-with other species, beings, and vitalities in order to cultivate care, survival, and sustainable thriving. Throughout this dissertation, I have drawn on feminist new materialist perceptions of bodies (both human and otherwise) as intra-active, transcorporeal, and porous – a wide-ranging lexis for understanding

that bodies and matter are always open and vulnerable and always in contact and acting together.[53] The permeability of bodies is an opportunity for learning from embodiment, both your own and that of the vitalities all around you. Gumbs shares the interest in interdependent and interconnected bodies, starting with breath as a connective force between species, environments, and time periods. Gumbs opens *Undrowned* with a question that becomes a central motif of the book: "What is the scale of breathing?" (1). This question is a tool for interrogating and situating oneself within the interconnections of vitalities currently on the planet and throughout history. The extension of that question travels into Gumbs' title and central theme, as she asserts, "if the scale of breathing is collective, beyond species and sentience, then so is the impact of drowning" (1). For Gumbs, the relations between beings that extend outward from the drowning and undrowning of enslaved Africans on the middle passage are a "context" in which she is working (2). She reaches back to that history while taking on the role of "marine mammal apprentice", finding ways to get closer to marine kin and oceanic heritage (9). Amidst describing the living history of water making its way through and around marine mammals, resonating with my own Greenland shark who floats with me in my long-lasting pain, she recognizes the vulnerability of bodies as pedagogical: "I wonder what our sensitive edges have to teach us" (61).

Gumbs' writing embodies and gestures toward a new generation of environmental work. It is a generation where writers think with the more-than-human – not just think about – and

[53] See Karen Barad's *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (2007), Stacy Alaimo's *Bodily Natures: Science, Environment, and the Material Self* (2010), and Nancy Tuana's "Viscous Porosity: Witnessing Katrina" (2008).

where they are not afraid to incorporate lived experience. This kind of writing relies on publishers lifting up writers of color and books that unapologetically discuss oppression and pain alongside envisioning futures of thriving and repair. Gumbs' declaration that "Breathing in unbreathable circumstances is what we do every day in the chokehold of racial gendered ableist capitalism" shows what it can look like to not turn away from violence that coexists in the topic of a book that encourages meditation, care, and joyfulness (2). adrienne maree brown calls Gumbs' work "emergent strategy from the deep" (*Undrowned* 4). brown pictures Gumbs as a guide for readers' journeys to learn how to learn from the more-than-human world, as Gumbs "is leading us through the ocean, inviting us to grab onto her fin as she takes us deep and teaches us depth" (4).

I am learning from Gumbs' ability to close the gaps of disconnection and detachment between humans and our multispecies co-presences while not avoiding the inescapable gulfs between us, like breathing underwater. Both the sensitivity of marine mammals and the sensitivity of human bodies are learning opportunities that Gumbs can access from varying degrees of closeness and distance. Gumbs asks, "Marine mammals live in a volatile substance whose temperature is changing for reasons not of their own making. Their skin is always exposed, they are surrounded on all sides by depth. What could enable us to live more porously, more mindful of the infinite changeability of our context, more open to each other and to our own needs?" (61). The question pushes at the distinction of closeness versus distance, as living more porously necessitates that humans recognize their closeness to vitalities that feel far away.

I am approaching this chapter from a position of distanced engagement. The need for physical rest and slowing down has defined my writing and research this year. I am in a position of succumbing to a rhythm of productivity that is much different than what is described or encouraged by disciplinary norms. The limitations of my chronic pain have generated new outlooks on what it means to teach, participate, and experience. In academia, we so often encourage each other to leave written projects "to rest" for a time, to wait to return to them for as long as possible to gain distance. The resting phase is intrinsic to our work, even if we do not necessarily spend that time resting. As a person with chronic pain, resting occurs more frequently and assertively in my scholarly practice. However, the kind of resting that I submit to looks different than the kind that I used to – in my more energetic days – ignore in favor of productivity. This rest is demanding and singularly focused. No multitasking can thrive in that space. Leaving the writer to rest is rarely a priority in our individual academic schedules. When we do discuss the need for stepping back and practicing balance in life, we say it half-veiled through self-deprecating jokes about being worn thin or contracting end of semester colds and burnout. The "we", here, is the public majority of fellow scholars with whom I associate in department offices and hallways, which is, of course, fully veiled by professional performance. There is also another "we" – a sub-group that lives within the folds of that larger veil, sometimes visible and sometimes not. We are the ones with pain, illness, disabilities, or somatic differences. Scholars like us have a habit of finding each other, in spite of the larger we's tendency to hide, withhold, and perform. Workers like us have to develop a more graceful relationship to rest, because it is too dangerous not to loosen our clench-jawed desires for constant productivity. We

create a community experience across distance when we cannot make it out of our homes or our towns because of complicated bodyminds. We broach the subject of physical rest, recognizing that rest is not just for the work but for ourselves. With a sore and tired bodymind, my needs for writing rest and embodied rest find a meeting place. For me, that place is wild.

As someone who is invested in experiential environmental scholarship, I am pushed to think about what distance means for my own work. English literature is a field that encourages "critical distance" from one's object of study, letting go of personal responses to texts in order to access something akin to objectivity when reading texts. Yet in environmental studies – both in the sciences and humanities, immersion is heralded as a favored method of research and learning, from courses that take students into wooded mountains to field work to solitary writing in isolated terrains. In his article on narratives of retreat, Neil Badmington draws attention to the ways in which moving away from one environment to go deeper into another is not a clear-cut process of immersion. Badmington calls Henry David Thoreau's *Walden*, the quintessential canonical account of environmental immersion, a "book of interruptions" (424). Even Thoreau's immersion is paradoxical, as Badmington explains, "[w]hen Thoreau describes the surfacing of 'civilized life' within the woods…he is describing a difficulty faced often by those who retreat: leaving a way of life behind is never easy, never pure, for the simple reason that traces of what has been abandoned tend to invade the experience and the environment of withdrawal…distance becomes a distant dream" (425). These forms of immersion are physically inaccessible to many, including myself. However, my experience of conducting research amidst chronic pain has drawn me closer to the nonhuman parts of my local environments. Unpacking the dance between

distance and contact, immersion and retreat, human and more-than-human, demonstrates that disability and engagement with one's bodymind alters many tenets of the environmental humanities that are often taken for granted in western scholarship.

While I am not able to immerse myself in a secluded and rugged wilderness that is cut off from technology and urban resources, I do not feel distant from the nonhuman. My dissertation up to this point has encouraged getting closer to wildness and leaning in to one's environment, but I have also been emphasizing the presence of the nonhuman in every human space and the flimsiness of the barriers that suggest otherwise. The topics of this dissertation are the environmental humanities and feminist theory. These topics are not separate from my pedagogy or my way of living; they are, if anything, critically *close*. My writing practice is deeply entwined with attention to my local environments. Just outside of the window in front of my writing desk, I have hung a birdfeeder. There are layers of distance that affect my proximity to this site of nonhuman life: the window between me and the feeder, the species difference between me and the birds. I watch the feeder while writing, thinking, and emailing. For days all of the visitors that I see are sparrows in droves, frenetic about occupying the feeder and being the first to dine on the seeds that they knock onto the patio below. Today a downy woodpecker swoops in and takes over. The sparrows hover in the air around the woodpecker momentarily before darting back into the nearby tree to keep watch. The second time the woodpecker lands, the sparrows are bolder. They take turns clinging onto the feeder next to the downy. Eventually an airborne scuffle ensues, but then eventually things settle, and the two species tolerate each other until everyone has had their fill.

I find energy in these moments of observation. Learning the names of the characters with whom I share a yard provides a sense of connectedness that wakes me up – breaking through the foggy-headedness of body-soreness. My partner and I find ourselves missing minutes at a time of the television show that we are currently speeding through over lunch. Instead, our eyes lock onto what is happening outside of the window. Of course, this moment might seem like a fairly cliché example of millennials being surprised by what happens when they look away from their screens, but my intention for sharing it is to highlight what the effect has been for my embodied experience with pain. This view keeps me pinned to my desk, grateful for my touch-typing ability that lets me keep my eyes on the feeder during long stretches of writing. I am not alone in this working day. Those birds are working furiously, too, as they prepare to survive the cold months ahead, gaining weight and changing plumage. I also cannot predict what will happen out there. That is the thrill of birding that keeps me hooked to the seemingly slow and quiet sport. During my next break, I will look up recipes for suet balls to keep my feeder a popular place to spend the winter waking hours.

To find a source of energy in an unexpected place is a reward if you have chronic pain, where every day, normal activities seem to find nefarious ways of detracting from your energy reserves. It is not easy to convey to friends and family how staying in the car with a sketchbook and our dogs while the humans hike through a nature preserve is imperative to my healing when I can barely walk due to back spasms. Explaining that staying home would be worse is not easy when those who understand healing as resting and resting as seclusion. We learn together new relationships of care, support, and inter-reliance. With the birds outside my window, I activate

awareness of subtle changes to my space. Time feels very different to me when I engage with the nonhuman. I mark the differences with changes in light, temperature, and species. Pulling from my memory to know the names and features of each type of local bird cuts through heavy-headedness. I am taken out of myself at the same time as being grounded in my relationship to these creatures. Pain is no longer the compass for my body.

I surround myself with animals whenever possible, both wild and domestic. Frequently, I pet-sit for neighbors and friends. Their warm bodies with varying levels of lethargy and excitement bring my day into crisp focus. I waste no moment of my working hours when I know that soon they will require attention and care. My own dog, Gracie, a retired racing greyhound, is with me constantly, shaping my routine around her needs and inclinations. The svelte bodies of greyhounds hold the story of a long history of care between their breed and human culture. The racing and hunting that they are required to perform cause wear and stress on their bodies. For centuries, they lived closer to humans than most other canine breeds through their industrious positions as working dogs, and during the middle ages, clergymen in Europe undertook conservation efforts to protect greyhounds from famine (Jeffers). As can be seen by their roles through the centuries, hounds have always been with humans as a companion species, bringing food to and earning money for humans and needing reciprocal care from their owners. Today a subculture of dog rescuers has formed around learning to care for and rehabilitate retired hounds. Greyhounds continue to exist in a liminal space between commodity, labor force, and friend.

I have become a part of that subculture by adopting Gracie and learning to care for her fellow retirees. I am outdoors constantly as she exercises and relieves herself. Never have I spent

so much time walking after dark, privy to the movements of bats and skunks, or in frigid winter conditions, where I kneel on the sidewalk to rub clumps of ice out from between the pads of her paws. Her acutely curious nose teaches me to pay attention to how much a space changes after a rainstorm or when a high wind stirs up the foliage. Gracie, like most greyhounds, is a migrant, travelling from balmy Florida to the weather extremes of Michigan. Together, we explore the state, little by little.

All around me in this town are bubbles of environmental history. Human-made or naturally grown, they trace their own map that is rooted in the slow growth and tenacious branches of a many-species story of the place where we all live. Think of the trees that grow so wide your arms cannot encircle them. I imagine the rings as years of records for Tree Town, indexing a wealth of embodied knowledge that cannot be accessed through search engines, card catalogues, research, or data collection.[54] You must try something different. I let my own companion animal help me to sniff them out.

There are innumerable reasons for my love of being in the company of the nonhuman. Evergreens, rain, hawks. To connect to histories of place, to care for other beings, to bask in the antithesis of technology. My experience of being in a sore and tired body has made clearer and more tangible my understanding of what it means to be vital and lively, to act as a co-constitutive being in this world. However, finding the language to convey to others all the possibilities that I find in the more-than-human world is an ongoing hurdle for my work as a feminist

[54] Tree Town is a beloved local name for Ann Arbor.

environmental humanities teacher and researcher. In Robin Wall Kimmerer's exploration of botany, ecology, and cosmology, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants*, she observes that an expansion of language can take place in seemingly non-linguistic, more-than spaces, because "[l]istening in wild places, we are audience to conversations in a language not our own" (48). Kimmerer pushes against the inadequacies of Western science's language – the dominant lexis for naming animal, vegetable, and mineral – for knowing the more-than-human world through a comparison of the Potawatomi word Puhpowee. Puhpowee is translated by Keewaydinoquay as "the force which causes mushrooms to push up from the earth overnight" (Keewaydinoquay qtd. in Kimmerer 49). The nuanced noun takes on the role of "a signpost" for Kimmerer as a stolen indigenous language that is able to grasp at meanings that English can only attempt to reach toward, and it is a language that she would like to inhabit. She explains that "[t]he makers of this word understood a world of being, full of unseen energies that animate everything" (49).

Reading *Braiding Sweetgrass*, I sit with this resonance of energy as an animator and a source of agency and liveliness that can be found stirring in growing mushrooms and ancient sharks. It can be found in the branches that shake with the landing of a rare or familiar bird. It can be found in the roots of trees that break through city sidewalks. If I am to treat energy as a central concept for the chapter ahead, then I will define energy as being more-than-human. In the animal and the lively elements of the environments in which I immerse myself, I find movement, impetus, and change. The more-than-human is the energy of not knowing what is coming next. The happenings of the nonhuman are unscripted, even chaotic. My affective pull toward local

wildness is characterized by the agency and actions that bring me into rhythm with something more than my bodymind. When I go out in the world with my books, I lay down tracks for others to follow me into that nearby wild. The pedagogy that I cultivate leads us into a dance with the energy of everything that is surviving around us. I will set you loose to make your way. Find a tree, rest against its ample body, and read at the speed and surety of its growth.

Gumbs poses a question of pedagogical and structural growth by asking, "Are we ready for a dolphin-informed replacement of the patriarchal family with 'schools' of unlearning?" (51). She asks her question in the context of what it means "to function as a group in a changing environment" and how that might be shaped by learning from the emergent strategy of collective and collaborative dolphin mothering (51-2). "These dolphin schools are organizational structures for learning, nurturance, and survival" through which Gumbs envisions teaching and learning as "a unit of care" "where we are learning and re-learning how to honor each other, how to go deep, how to take turns, how to find nourishing light again and again" (56). I, too, am ready to evolve learning through the lessons of the material world around me. My own questions of pedagogical growth reach toward what Gumbs finds in the dolphin pods and what I find outside my window. How can I invigorate my teaching with the energy of the more-than-human world, in ways that respect those vulnerable and lively presences? How can I honor what the multispecies teachers out there have to offer my carefully planned lessons?

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It is cold and I don't know what I am doing. The weather has turned. An overnight freeze and snow flurries have crept up on us humans overnight. The skin on my hands chaps and my

joints crack when I face my four-hourly dog walks. Under her double layers of fleece and wool, Gracie relieves herself efficiently and urges me around the corner to take us back to our heated apartment quickly. She knows the shortcuts home and decides for herself whether she needs exercise, warmth, or something else. Unlike the squirrels that populate our town and have their lunch atop frosted lawns, Gracie does not have body fat to spare. Every gram of her fat and muscles has been cultivated by centuries of human-dictated breeding to bring in money or find food. My mother sews coats for her and I donate all of my old blankets to be her bedding. Those reading this will have their own embodied knowledge of the human body also being woefully ill-suited for weather extremes. We need all sorts of accoutrements to reach a level of physical safety, let alone comfort. The cold draws me into myself, so I can feel, hear, sense everything going on within me. I am a creaking old house.

It is so cold and I don't what I'm doing. I am trying to write a syllabus. It has been open on my desktop for weeks now, gathering footnotes and marginal comments but no units, no assignments. I am teaching a course called Writing the Future next month. I will be interweaving composition, close reading, and experiential learning to guide my students in examining how their roles as literate beings influences the sustainability of their futures on this planet. The task looms like a berg, freezing me in my tracks whenever I try to work on my grand plan.

In his book *Beyond Learning by Doing: Theoretical Currents in Experiential Education*, Jay W. Roberts points out "the taken-for-granted sense" that there is a collective understanding among educators of what experiential education entails (2). By not interrogating experiential

education and by treating it as a fixed pedagogical category, the consequences are to not use it to its fullest extent and repeat unhelpful patterns such as inaccessibility and exclusion. Roberts urges readers to "use our imaginations again when it comes to considering the role of experience in education" (2). While Roberts finds that "[m]ost often, experiential education is framed as 'learning by doing'", making a distinction between experiential learning and experiential education is important (3-4). Experiential *education* is unique in its commitment to the epistemological "process" that informs a teacher's pedagogy, while experiential learning is a "*method* or *technique*" that is "[employed] to meet certain instructional objectives" (4).[55] Under these conditions, "[e]xperience becomes not organic, interactive, and continuous but rather a scripted, timed, and located 'activity'" (5). Roberts chooses to label environmental education as a field, rather than a philosophy (6-7). While the different formations of environmental education are vast and diverse – Roberts mentions outdoor education, adventure education, place-based education, service learning, and environmental education, to name a few – their shared "belief in the educative power of experience, of direct contact…becomes the warp thread linking the disparate strands together" (7, 8). What Roberts signals here is a pedagogy in which experience is woven into every stage of the educational process, from setting objectives to designing lesson plans to engaging with students. In my process, I am unfolding an experiment of experiential education with the hope of transforming the relationships between students and more-than-

[55] Roberts refers to Richard Rorty's explication of a process of individuation and socialization to differentiate education from learning.

human vitalities. I am drawing of map of learning through experience as materially engaged readers and writers.

There are many case studies in the field of education that point to the strengths of experiential education in cultivating conscientious and engaged relationships between students and the more-than-human. Ria Ann Dunkley's study finds that experiential environmental education "enable[s] novel confrontations of current ecological crises, including climate change. For some, the experience influenced perceptions of how such crises might affect their futures" (214). Dunkley explains that "[a] key study insight is that pedagogic experiences offered by eco-attractions can help to re-establish affective connections between the natural world and young people's everyday lives. In particular, the experience appears to have afforded them a new appreciation of the significance of plants" (219). For Dunkley, experiential education expands students' understanding of the concepts of environmental harm and climate change, as well as their connection to the material vitalities in their environments on a local level. I cannot shake the thought of the plants. Could I truly change how my students find value in switchgrass, oak trees, milkweed? Puhpowee.

Chip away at it, bit by bit, and you'll finish it off in no time, they recommend for productivity slumps. *Don't think about the big picture*. *Focus on one thing that you are doing today.*

But I am thinking about the big picture. It is all around me, filling my field of vision until I am swimming in images of the end of the world. Every time I breathe in the cold air, it comes out of me in a visual representation of what there is to lose: winter. Cold climates. Arctic animals. Islands. People. This body in the snow. How do I teach writing urgently? Where – and how loudly – do I begin?

Allison B. Wallace integrates gardening into her environmental ethics course with the intention that "students will begin to learn, literally first-hand, the ecological reasons for an ethical relationship to nature" ("Garden Variety"). For Wallace, drawing on the material process of gardening to teach ethics in the abstract is a fluid process, particularly because of the questions that gardening brings to environmental ethics. She explains that "[agriculture] remains an excellent subject with which to raise Socrates's age-old question 'How shall we live?'….we must now pose the question with a twenty-first-century twist: How shall we live such that other life--that which is the source of our daily bread--and its supportive habitats can also flourish?" ("Garden Variety"). In response to anticipated pushback for her pedagogical choices, such as queries of "how is gardening an appropriate subject for high-ability college students?", Wallace asserts, "[t]o the extent that efforts to raise plants by relatively nonviolent means teaches and disciplines students in an ethical way to be in the world, I feel no need to apologize for a seminar in organic horticulture" ("Garden Variety").

Wallace's course includes reading, writing (reading responses, gardening meditations, and papers), working with the earth, and class dinners in which students cook with the produce

that they have grown. The course illustrates how experiential education provides an answer to the complex question of where to start with environment education. Should one start by focusing a syllabus on the local? The macro? The material? The legal? By teaching through material engagement with the students' current environment alongside reading, writing, and discussion – by working on the latter traditional pedagogical forms through the lens of the former – students are able to begin approaching those potential starting points simultaneously.

Start from the end, it is recommended for cohesive course design. *Reverse outlining and backwards course design.*

This is a clever strategy – moving back from final project ideas and ultimate objectives. It is not right here, though. The end of this future is dark. It is unlively and unpopulated by humans and our companion species, human behavior chipping away too deep, too far, too much. Our cup is neither half full nor half empty; everyone and everything has drowned in it.

I had a nightmare days ago where I looked at the sun-bleached and cloudless blue over my neighborhood and something was wrong with the sky. It was made of metal, a grid, domed walls curving over my head, suspended like something dead in the water. I pointed for my neighbors, shouting questions and warnings, but no one saw it as a threat. It must be a trick of the light, a NASA satellite, a new kind of drone being test-flown. The truth was that we were being

trapped. Somehow when we hadn't been looking, the sky was replaced by a cage. My dream isn't speculative fiction. It is horror.

Where do I begin?

Tomaž Grušovnik and Ana Arzenšek published a study in which they used an outdoor field trip to examine the impact of experiential education on teaching environmental ethics and changing students' views around environmental denial (104). Their study seeks to find "whether the students were less prone to deny the detrimental impacts of human activity on the environment" after the implantation of experiential education in humanities curriculum (104). Their core finding asserts that "[e]nvironmental denial, a belief caused by mechanisms closely related to identity formation process, was shown to be successfully overcome with educational practices that focused on changing environmental outlooks in subjects by employing field trip and video making as educational techniques" (108). Another outcome of the study states that "students now fully acknowledged our impact on the environment and there were no students who still denied the detrimental anthropogenic impact on the natural world (compared to one third of the population that did so before the excursion took place)" (106).

While the circumstances of the study do not represent the all-encompassing kind of commitment to a process of shaping education through experience and contact, the supporting discussion for choosing experiential education as the method of their study contributes greatly to critical approaches for shaping human and earthy relationships through pedagogy. Grušovnik and

Arzenšek argue that human identity is tied to anthropogenic climate change and environmentally harmful patterns of behaviors. Their work shapes a question that pushes me forward as I try to plan my class: how does one go about cultivating an education that sustains identity and agency, while healing the relationship between human and more-than-human?

I imagine that I am teaching a class of environmental activists, seasoned and well-read. The kinds of students who will know more than me from day one. I would show them something new, give them texts from writers whose perspectives will challenge their solid wealth of knowledge. I would have them put pen to paper and pose problems and ideas from day one; let's think big and fast and differently.

I imagine that I am teaching a group of seven-year-olds, lively and clueless, up for anything. Tell them, *imagine that you are your favorite animal. Show me, how do they walk. Tell me, what sounds do they make? What do they eat? Do they get along with the animal sitting next to you? Write four sentences telling me about what your animal needs to be happy.*

I imagine that I am teaching a herd of buffalo, imposing and forceful, many the same age as the average freshman. These are the students who I cannot lead, only learn and be led by. I spend class-time in observation, noting their inherent social ease amongst each other, and in service, watching for what they need. I bring them water and roughage, keep traffic off of their paths, and pick out burrs from their fur.

Picturing each make-believe class eases my panic about the end of the world the tiniest bit. A gentleness, a steadfastness. Keeping up with and slowing down for. A values check-in. Somewhere between plans for my activists, children, and bovids, there is a seed of something for my actual undergraduates.

Kimmerer critiques science as "a language of distance which reduces a being to its working parts", which leads me to wonder what might a distanced engagement look like when it cultivates a language of presence and liveliness (49)? The anecdote from Kimmerer's teaching that was mentioned in the introduction of this dissertation locates a quintessential issue in broaching the challenge of teaching a mutually beneficial relationship between human and more-than-human vitalities in the classroom. In a survey given to her ecology class, Kimmerer asks students to "rate their knowledge of positive interactions between people and land" (6). The average answer of "none" leaves her "stunned" and ruminating over the question, "How is it possible that in twenty years of education they cannot think of any beneficial relationships between people and environment?" (6). Kimmerer considers that her students lacked the tools to be able to "even imagine what beneficial relations between their species and others might look like" (6). A language of co-thriving is out of their reach.

When I teach Writing the Future, I want to make space for finding that language. I know it might be a long shot or a pipe dream, but I must be hopeful that my students have the capacity to find that future, if only slowly, word by word. The objective that I record on the syllabus is to

guide students to understand how to use the skills of writing to effect change. That objective overlaps smoothly enough with my own specific hope to show them that writing is a vital tool for creating just and sustainable futures. I design lessons to convey to students that climate change and environmental crisis needs to be impacted by writing in collaboration with science. They do not need to make a choice between taking the STEM road in order to engage with world-building necessary to alter Anthropocentric outcomes. The work of data collection, analysis, and invention is not the only way to save a future – nor is science the only site where that takes place. Likewise, the hallmark of the humanities may be writing, but every field integrates it and needs stronger and more creative writers at every turn.

The barrier of dualities and boundaries such as this tripped up my footing throughout my experience teaching the course. I danced between the choice to tap into feminist engagement, the body, or the environment. I asked myself how to stitch them together – if the students needed me to explicate those connective pathways or if they would manifest naturally. I did, of course, know that those three components are mutually imbricated and always emerging together, but my students did not all know this as explicitly as a seasoned grad student does. A degree of breaking down the individual building blocks is necessary in order to introduce an understanding that the blocks are actually a tapestry. Over the time that I have spent constructing my own representation of that tapestry as a graduate student, a number of conversations with people in my communities (peers, students, neighbors) has stressed the need for an intentional process of stitching the pieces together.

- While signing a copy of his book for me, a bestselling and award-winning author asks for my research topic and (sardonically) replies, “Like *mother*, [audible pause] *earth*.”
- In the hallway of our yoga studio, a fellow student asks which I write about, “loving nature or conserving it?”

Having taught Women’s Studies classes where we practice experiential work that tunes us into our own embodiment, the divisions between these felt tangible at the beginning of making lesson plans for a writing class. Just like the demands of the question of how I connect the feminist with the environmental, parsing my approach to place-based environmental engagement is too micro-focused. I cannot be distracted from what can be learned through dwelling in the organic meeting points of each element.

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At age nine, I am instructed to choose a topic for the project that I will present at my school’s science fair. Around our dinner table, I brainstorm with my parents. They have ready suggestions for projects at which they can easily succeed: how film photography works orthe science of baking bread. Being intentionally unintuitive to their hints, I propose my own out of the blue inquiry: how to predict the weather. My mother sighs and shakes her head, but my father acquiesces to the topic that is just familiar enough to fit at the edge of his wheelhouse as a mathematician. Success.

The research stage did not go in the hands-on direction that I thought it would. Instead of beginning outdoors “with the weather” (logical to a fourth grader) or in some scientific laboratory where science projects surely took place, my father took me to the local library. The

library did not make sense because that was *my* wheelhouse. Reading and writing came easily while science was distant and vague. I had chosen my weather topic because of its outdoorsy and material prospects that promised field work and uniquely technical methods. The library was nowhere near exotic enough for my intentions.

A conversation took place between my dad and a librarian several feet over my head, and the woman led us to nook furnished with a table, chairs, and a wide chest of drawers. The chest held, in heavy, bound volumes, the archive of local weather records. My father told me that I was going to learn how to read them. Over the following hour, I acquired a new vocabulary. Meteorology, NOAA, yearly average highs and lows. We mapped out ten years of temperature and precipitation data from our town to understand the relationship between recorded data and future predictions. For the first time, I got to apply the math class concept of calculating averages to something practical while using tissue-like graph paper. If it rained 0.73 inches in July 1999, 0.75 in July 2000, and 0.72 in July 2001, what is the likely rainfall for July 2002?

We came back to conduct this research several more times in the following weeks, but after leaving the library on the first day, I had found my takeaway. By opening those heavy drawers and spending time with so many columns of climatic history, I was seeing a relationship form. The world of western science that I was exploring was entrenched in written knowledge. The environmental knowledge that it enabled was built upon record-keeping and referring back to records from the past. This, then, must mean that writing – written records of all sorts – are how we know about the world. My terrain of books as fictive and imaginary worlds shot outwards, expanding into infinite miles of where material knowledge comes from.

This is my first memorable experience of learning about my environment from somewhere other than outdoors or a textbook. It felt like an intermediary secret space where I might unearth something that isn't in a science book and didn't revolve around field work. There is a painting in the art museum on my current university campus that revives this feeling of expansive knowledge at the edge of something marginal and vast. A friend has pointed out to me that certain European works like this one can be dated by the inclusion of icy conditions in the landscapes, like glaciers. The backgrounds are indicative of the Little Ice Age. Like the weather report archive, the painting is a piece of data teaching me about the material world in a place where I didn't expect to find it. Something more-than-human in the deeply human spaces of art and research. There are ways to know the earth that are not stuck within the binary of fieldwork and written work, of science and humanities, of masculine and feminine. I slip the museum into my collection, another tab in my index of environmental archives that fill this town, waiting for students.

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Annette Gough and Hilary Whitehouse suggest that a new direction for environmental education should be deeper exploration of "the implications of postnature and post-human-nature" (345). They explain that "[t]he whole notion of connecting children with urban and non-urban 'nature' can be conceptualized differently if we accept that a nature untouched by humanity no longer exists anywhere on the planet" (345). In order to teach effectively, those of us practicing environmental education need to commit to shifting how we define nature and that which is "environmental".

The university at which I studied as an undergraduate was situated in a uniquely picturesque environment on a remote coast in southwest England. Their marketing materials herald the opportunities for studying outdoors with almost comical hyperbole. I distinctly remember the promises of one photograph from the prospectus in particular when I was applying to their English literature program: a young Asian woman standing outside reading a book, smiling, nestled between two lush, leafy bushes. A brief visit to the university's website today greets me with multiple similarly posed images, including a woman balancing atop a twisted horizontal tree trunk balancing her book on her knees, a group of men sitting in a grassy knoll and talking about a stack of papers that lays on the ground, women with binoculars standing on a forested path while writing in a notebook, and a several more of people reading books while sitting and squatting on outdoor stone steps. As I have discussed in chapter two, visuality is a powerful tool for conveying messages about environmental experience. These photos make a clear connection between campus life and the local environment, while also connecting the study of literature to more than a touch of colonial civility.

As I prepared to start my degree, my younger self responded affectively to the images in the prospectus by associating my future studies with being immersed in the oceanic space. I would wear flip-flops every day, read books on the beach, take up camping on the weekends, tone my muscles with miles of hiking, and find my voice as an environmental literature scholar. The promise was not unfounded; there were significantly more opportunities to spend time in lively and wild spaces in that campus than at most other universities I might have attended. Students did sit around fires on the beach, coastal walks were a common form of social invitation

between friends, and there were surfers and sea-swimmers abound. To this day, my friends from that school seem to have a deep sense of environmental care. But distance chased at my heels. When I started my studies, the environmental literature requirement was dropped due to a lack of interest from former students and their frustration at having one less opportunity to take an elective course. The structured guide to critically engaging with space was lost and it would be several years until I found such structure again. I began to realize how much planning needed to go into spending a day reading at the beach. The reams of printing required for all of our electronic assigned readings drew me to spending more time in the library than outside with the flora. I became closely attached to wide windows that allowed me to witness weather and sea from beside my books and computer. As I made my way through the program and my workload became heavier and my goals more stress-inducing, for the first time in my adult life I learned how healing it could be to surround myself with the surging cacophony of four-foot waves and gale-force winds during a Cornish storm and *not* think about work. Eventually, I would fall in love with my partner during the hours we spent walking the coastline.

There is liveliness where people are not looking. From my window seats and stormy walks, I catch their movements in the corner of my eye like a possum caught in a streetlight.

At my current institution, the arboretum is a local treasure. The photographic trope of reading outdoors is not part of the university's core marketing vocabulary (although there is the occasional snapshot of a student sitting outside stooped over a laptop). Their cultivated image of

outdoor experience is instead focused on movement. This is perhaps not surprising for a Big Ten school that conjures up thoughts of athleticism and physical prowess, particularly when it comes to the lucrative undergraduate community. The arboretum is showcased online with landscape photography and pictures of people running and walking the trails in athleisure apparel.

My friends and I keep a running joke about how many times we say we will – or recommend that incoming students should – visit "the Arb" yet only make it there a couple of times per year.[56] The excuses are valid. Frequently cited is a lack of transportation to or from the city center campus where humanities facilities are housed. Weather – both too hot or too cold for extensive outdoor activity – also keep people away. The Michigan climate has extremes on both ends with scorching summers and frozen, snow-blanketed winters. I, myself, am kept away from the Arb for a combination of these reasons. Spending four years of my PhD without a car, I have had to factor in swaths of surplus time and energy for walking to such frivolously out of the way places as a forest where I cannot do sustained work at my computer. Add in the slick coating of ice found on every low-traffic sidewalk in the winter, a sunburn-inducing and dehydrating heatwave, or the chance of being caught out in the woods after an early sunset as a woman walking alone, and I end up leaving months in between visits. It feels like distance is following me still. But how, with all of my limitations, do I find myself inching closer to the wild?

During a class that I drop in on to learn with visiting disability culture poet Denise Leto, we meet in the Arb. A friend and I travel together and work as a pair when instructed to explore

[56] The local vernacular refers to the arboretum as the Arb.

the space while looking for more-than-human presences. We are both familiar with chronic illness and fatigue. My friend experiences physical healing like an endurance sport as her body welcomes a transplanted organ into its formidable network of sensitive yet tenacious immune system safeguards. With her immunosuppressant medication regimen, sickness comes easily and rebuilding strength happens slowly. Together, we share the trepidation of over-exertion. That day, though, we walk with a bounce in our steps. We feel lively: we are caffeinated, out of our houses at a respectable hour of the morning, and stimulated by the group discussions preceding this experiential activity. We talk a mile a minute – not necessarily the goal of sending the undergraduate class out into the woods, but perhaps a valuable modification for us isolated grad students. Our minds and bodies are excited.

The air is crisp and nippy, reminding us that seasons do still change. We are not yet stuck in a monolithic summer. We point out birds that we recognize. A group of boisterous waterfowl at the river enthralls us. Naturally, we forget to head back to the meeting place on time for the rest of the class. I empower her to take on an uphill dirt path, staying behind her, ready to catch or lift if her footing slips. We reach the top of the hill giddy, breathing gustily, and laughing, leaning against tree trunks for a moment of rest. My mind turns to how many students struggle to visit this space without the burden of knowing that they are giving up time and energy that needs to be spent studying, working, healing.

We come back together as a group to share about our little journeys, and one student's story grows into something strong and transformative as her words fill the space. She tells us that she found a stump of a tree that had been chopped down.

"Next to the stump was a sign that explains that the tree was chopped down because it had developed a sickness. I realized that even though the arboretum provided an explanation for its human visitors, I doubt that anyone explained to the tree why it was chopped down. So I sat down next to the stump and told it what happened to it."

I think about her sitting with the tree stump every time that I enter the arboretum and every time that I teach. She taught us something about how to be with the more-than-human and to dwell on moments where cross-species communication can occur. How long did the tree wait to learn its own story?

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Browsing the academic career listings, I see a university job posting for an experiential environmental education instructor with a background in literary studies. From the title, this should be a fit for me; it shares many of my professional intersections. Reading further, though, reveals that the search committee is seeking candidates with wilderness survival skills, adventure training, and confidence in working with outdoor obstacle courses. There is nothing in the job description about how candidates' relationships to the nonhuman should shape their pedagogy or whether prospective applicants should have experience of reading literature with undergraduates outside.

My vexation at this position stems description's limited imagination of the shapes that experiential environmental education can take. Will starting with physical prowess and traditional wilderness training lead to finding the strongest candidate for teaching humanities students with experiential environmental pedagogy? Promoting such a position leads into a trap

of perpetuating a model of relationships between human and more-than-human that excludes participation from many and limits opportunities for transformational environmental education. In their article "Social Justice in Outdoor Experiential Education", Karen Warren et al. write that just as "[n]ature and the meanings ascribed to the natural environment are rooted in history, gender, race, and culture" so are "constructs of the concept of adventure" (90). They break down the relationships of race, class, gender, and ability to the constructs of nature spaces to demonstrate that "any meanings ascribed to nature or perceptions of place, as well as how adventure is defined, have not always fit the traditional Eurocentric, able-bodied, male paradigm" (91). Drawing on Warren's previous scholarship on outdoor adventure education, they assert that "the entire structure of outdoor programs needs systemic analysis, with change emanating from attempts to break entrenched paradigms that support an uncritical culture of outdoor adventure (Warren, 2012)" (95). This brings me back to the question, where does one start teaching within a broken system? When I recall Gumbs' question of whether we are ready for "dolphin-informed…'schools' of unlearning", I shout, emphatically, *yes*. But then I hesitate, wondering if everyone else is really ready yet, too.

Disability studies teaches that making experiential learning accessible can open the opportunity for creating numerous paths for new knowledge. Sarah Reddington and Deborah Price ask "[w]hat might happen if we gave increased attention to the emergent body?" in an inquiry into "[destabilizing] dominant medical models that ground Canadian and Australian inclusive design" (1). They turn to new materialism to "consider children and youth with disabilities' connections to all kinds of matter and how a person's connections to matter (i.e.

objects, spaces, and other non-human things) can inform the multiplicity of their subjectivities" (1). Reddington and Price ultimately argue that "[i]t is through a new materialist pedagogical approach that we can begin to decenter medicalized framework models [of disability] and advance towards a space where alterity and variation is prioritized" (5).

Disability studies scholar Brenda Jo Brueggemann asserts that "[d]isability can create knowledge, open doors wider, build ramps to awareness that we all essentially have in us anyway. This happens when any body leads anybody" (800). Brueggeman writes about how structuring her composition course around disability allowed her to "[move] closer to an enabling pedagogy" (814). The relationship between disability, bodies, and environment unfolds in the classroom when space is made for learning from embodied knowledge. Brueggemann points out how the failure of "'classic' and 'mainstream'" literature to provide accurate and ethical representations of disability causes "incongruity" for readers (793). Upon encountering "first-person disability narratives or documentaries", the "lie" of mainstream texts becomes visible (793). The reading experience is thus disenchanted and leaves in its wake a "representational dilemma" of how disabled reader-writers should represent themselves (794). Because of this, it is crucial to inundate syllabuses with texts that cause disenchantment and incongruity. By learning within that site of discomfort, students can change the shape of their relationships to canon and representation and find language to enact their own representation. I want to teach my students how to experience reading and writing as full-bodied. I want them to know that there is something to be gained through embracing their immediate environment in all of its messiness – and the messiness of their own embodiment within that space.

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To reach toward a full-bodied writing experience that centers each student's individual voice and bodymind, I hand out worksheets when we leave the classroom. These worksheets are a starting point for students to translate embodied experience into written words – or even sometimes art – while still immersed in that non-classroom space. They capture quick, unedited perspectives, ideas, and questions that can later serve as brainstorming material for essays and other writing forms. I am enthralled by the chaos of collecting and interpreting a pile of loose-leaf worksheets filled with handwritten notes in varying levels of legibility. These worksheets represent one of my favorite pedagogical methods for experiential activities: providing open-ended prompts to help students structure and record their thoughts, feelings, and reactions to a non-traditional learning space. In my writing class, a worksheet guides us through a "field trip" to the University of Michigan Museum of Natural History.

The natural history museum is a quiet place during a work week morning. I let the students move ahead in pairs at their own pace and allow myself to go slowly. Relaxing my high-energy teaching mindset, I observe the exhibits without reading. I watch and occasionally touch, often comparing my stature to the heights and widths of the prehistoric and taxidermized figures on display. These bodies make up another strange archive of Michigan history and environmental pasts.

Even though we are surrounded by lifeless forms, there is a still sense of liveliness in this museum of lost vitalities. In *The Breathless Zoo: Taxidermy and the Cultures of Longing*, Rachel Poloquin identifies the sensation that I am describing as a "bodily knowledge" that transpires

when one encounters taxidermy (39). She explains that "The meaning is there; you can sense an understanding, but you cannot necessarily translate that understanding into clear thought or precise words" (39). As a class, my students gesture toward that imprecise meaning. They also briefly touch on the volatile histories of how the animal corpses came to be preserved in this museum. It is a difficult subject to broach in a ninety-minute writing class. We hold space for it, but we do not go far enough. We are still learning how to learn from painful histories.

Given our class's interest in environment change, thinking about the past to learn about the future, and general love of animals, the on-campus museum is a perfect opportunity to explore a non-traditional learning space. We spend most of the class time exploring the museum while filling in worksheets. Near the end of our ninety minutes together, we gather in the wide, lofty lobby and sit in a circle on the stone floor to discuss our worksheets alongside our syllabus texts. Our worksheet is entitled "Museum Scavenger Hunt" and asks students to record the following:

- One thing that connects to our readings (and how)
- A question that an exhibit or object generates for you
- Something cool
- Free-write space

Like a strange contemporary archive, I parse a student's chicken-scrawl handwriting to unearth a question prompted by the museum: "There was an exhibit where it was unsure if [the animal] lived in the land or sea which seems crazy…[W]hat does it mean for the future that we know so

little about the past?".[57] As may be expected, the free-write space tends to elicit the most intriguing and compelling insights into students' experiences of going outside of the classroom during a writing class. Having been to the museum before, the same student writes, "It's such a cool feeling returning to the room filled with huge fossils, and having all these memories of my elementary school field trip coming rushing back. That was a really cool experience I didn't expect." Like many of their classmates, this student notes nostalgia from memories of early education where field trips are a core part of their learning.

A year or more later, I will visit the museum as a participant in a disability culture workshop and experience it in an entirely new way: describing each exhibit to a closed-eyes partner as we wander slowly through the rooms and place their hands on touchable objects. Vitality feels different during that encounter as we fill the museum with sound and movement. Gumbs asks how echolocation, learned from marine mammals like dolphins, can "change our understandings of 'vision' and visionary action" (15-20). The question can feel intangible and loose without practice, but her search for "transformative and revolutionary" sensing becomes very tangible when you enter disability culture spaces (15). In our group, there is no silent visual observation of the museum. No quietly stepping from one display to the next. We practice seeing with our hands and with each other's voices. We are audible, tactile, and lively.

My students' writing is invigorated by engaging with texts through the museum space. For one student, the museum became an opportunity for temporal analysis of class themes on

[57] See Student Writing A

environmental change: “I find it amazing that so many things can be learned about pre-historic life at this museum. I think that it is important for English classes to come to places like this because it allows for an observation of how times change in the world. It is as if we are the future observing the past”.[58] Another student also made connections between past, present, and environmental crisis in their response. They write,

> Going to a museum brings a certain realization that life before our time was very different. Being able to see all of the different animals and how they fit in was fascinating. Extinction is inevitable, it makes me wonder what will make our species go extinct or if our current habits are forging us that way. Going to a different physical place allowed my imagination on futuristic issues to grow.[59]

Connecting texts from the past to present-moment experience is often a challenging task for students, especially those in a freshman writing class. Students who have a fiery commitment to changing the world can find themselves stultified by dwelling on historical moments that require critical engagement to understand their applicability to current issues. As these responses indicate, adding an experiential, place-based learning activity that appeals, in particular, to visual and kinesthetic learners can ease the process of synthesizing lessons from the past with problems of the present and future.[60]

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[58] See Student Writing B.
[59] See Student Writing C.
[60] Here I am referring to learning styles as outlined by Neil Fleming’s VARK (visual, aural, read-write, and kinesthetic) system (1-2). Each individual student has a unique set of learning style preferences. Most traditional university teaching tends to appeal heavily to aural and read-write learning styles due to the prevalence of lectures, required reading, written and oral assessments, so finding opportunities to incorporate visual and kinesthetic learning is important to engage every kind of student in class material.

I encourage my students to play with theoretical and material connections between our multi-genre set of readings through free-writing, both in and outside of our classroom. In a free-writing exercise asking students to reflect on how our texts fit into the class theme of "the future", a student explains that they could identify real-world connections in both fiction and nonfiction texts, which can be another area of struggle for students that are new to literary analysis. The student writes that "When looking at [texts] about the future, the topics within them can be endless. From writing about dystopian societies to global warming, these all represent a possible future for our world".[61] Another student uses the same free-write to develop a framework for how to interrogate environmental texts across different genres:

> There are many connections that can be made across the literary pieces we have studied as a class. Since all relate in some way to the future, we can connect ideas, like the future of technology and the future of health. We can examine different genres, and how they influence our understanding of the future. We can also look at the types of questions these authors are asking about the future.
>
> > What will it look like if we continue ___?
> >
> > How can we change our lives based on predictions of the future?
> >
> > Why is understanding future consequences so important?
>
> The interactions of all our texts [allow] us to better interpret the varying ideas brought up, offering depth to how we read.[62]

[61] See Student Writing D.
[62] See Student Writing E.

"Depth to how we read" is at the core of our class-wide endeavor. By integrating disparate genres and taking our bodies outside of standard learning spaces, we explore how we learn about the world as embodied readers. We read Diane Ackerman as humans sitting in an air-conditioned building in a high-income city of a Midwestern state. We read Margaret Atwood as people with intersecting identities amidst and in the wake of Trump's presidency. We read bell hooks as a class dominated by white, male voices gazing upon animal bodies in the Museum of Natural History, facing our shared commitment to healing our relationships with the planet before it is too late.

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In her foreword to *Undrowned*, adrienne maree brown draws out the pedagogical relationship between humans and marine mammals that Gumbs showcases, when she explains that *Undrowned* "offers back to us a set of ancestors, sibling species, a variety of solidarities that can teach me about myself" (4). I embrace the challenge of finding these ancestors, siblings, and solidarities in (sub)urban spaces where the ancient wild things feel so far away. I find ways to make field work physically accessible on campus by scouting out less-traversed paved walking paths and level ground that are lined by greenery where plant and animal life still thrive. Recognize the presence of the environmental and the more-than-human in these kinds of built-and-lively spaces requires a combination of patience and curiosity, playfulness and stillness. While filling our worksheets in the shady pathway between two tall buildings that protects a thriving green space on campus, our class becomes a rabbit's object of study. It leaps over the path and takes in our sprawling presence before descending back into a shrub. Sibling species.

When serving as a guest teacher for a Women's Studies class on queer and feminist approaches to environmental justice, I was presented with just such an unexpected collision of human and more-than-human campus coexistence. I came prepared with a lesson plan including place-based activities to think about how the campus supports and or threatens diverse embodiments and livelinesses through interrogating the concept of "clear-cut" as a method of forest resource extraction and a method of feminist epistemology. Required reading included Sara Ahmed's *Queer Phenomenology: Orientations, Objects, Others* and Adrienne Rich's *Your Native Land, Your Life*. This was, of course, an early application of my dissertation chapter on clear-cuts in women's life writing. The class had an established tradition of practicing mindfulness at the very beginning of each meeting which included "checking in" with a flourishing tree outside the large windows that faced the Diag (University of Michigan's equivalent of a quad). Coincidentally, on the day that I taught, a team of tree surgeons were cutting down an adjacent tree. The entire class had an intense immediate emotional reaction to witnessing the felling. Part of our common ground was a deep investment in environmental care. Seeing a tree being chopped down, the loss of its height and reach that shaped the airspace of the Diag, cut deeply into our experience of that space and also of the class material.

The opportunity to lean into our collective guttural reaction to what was happening on the other side of the glass dangled in front of me as I led the students through a discussion of the readings. I planned for an indoor class because of the rain forecast, but when the day came it was clear and mild. The felling of the tree invited the inspiration to go outside to think about the lost livelihood and our own orientations to that campus space. When the tree surgeons disappeared, I

took our class outside. I had, naturally, no plan for exactly what we do in that moment. What came to mind on the way out of the building was a guiding prompt for everyone to go up to what remained of the tree and observe it in whatever way felt appropriate to each student. What transpired was unexpected and remarkable. Everyone gathered around the stump which sat rough and raw, honey-orange from its fresh cut and gilded in sawdust. Students knelt, stood, and sat. One placed her hands on along its age rings. Another climbed atop it, standing in the center of the exposed heartwood.

I am so often in awe of my students' tactile engagement when we learn outside. Their bravery to go hands-first into a gentle exploration of touch gives me an entirely deeper perspective of what the class is learning. I did not take notes during the outside part of the class, choosing instead to actively participate and take in the experience. Conversations were had, eulogistic tributes made. We speculated whether the tree had been sick. One student made a wry comment: "It's just like American healthcare. The tree shows signs of sickness and they decide to just cut the whole thing down instead of treating it." We imagined an alternate reality where trees are sentient giants with the power to take revenge against men with chainsaws. Ahmed and Rich's words gave shape to the moment of environmental trauma. We learned to read outside that day.

A sister experience to the student talking with the tree stump in the Arb, these stories of grieving trees that once grew monumentally tall and now are exist almost entirely as roots are beautiful, but painful. I know that that is why there is just as much silence as there is discussion during the encounters; we sit with grief when we do not know how to speak about it. Aliesan,

Doubiago, and Grover showed us how to find quiet and dark (de)forested spaces for grieving and making sense of loss and harm in their life writing. I see each of them in that student who stood on the tree stump, giving height back to the tree through her own body.

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In a deep, cold winter, my Women's Studies co-teacher and I take our class to the Matthaei Botanical Gardens. The botanical gardens host a greenhouse that is particularly suited to the Midwest climate, providing deep, damp warmth in an expansive glass edifice with biomes, walkways, and landing spots for cold bodies. The curation of plants offers warmth, air, and knowledge. We arrived after dark and descended into the greenery with the lights of the greenhouse reflecting back against the windowed walls. I do not over-script the time that we spend in this space. A worksheet is all that is needed to facilitate everyone's learning. The prompts are simple: what is something that is surviving here? What does the conservatory offer to its visitors? How can people engage with the space? What is something you learned? And a free-space for notes, drawing, poetry, etc. Students fill the sheets with plant names – scientific, local, and idiomatic, sketches of cacti, facts about germination, questions about anything, and meditations on being in a green and oxygen-filled space. A theme in the free-space arises: "thank you", "I didn't know I needed this", "I needed this so much. It's been the most valuable class of the semester." We gather to talk about things that are alive, that breathe, and that are dormant in the winter months. Like Gumbs, the students remind all of us the importance and beauty in breathing. "Your breathing. It is your breathing that we need" (Gumbs 27).

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No one's memories are free from the history of their local environments. No one is untouched by those harms. Humans are not invincible. Teresa Lloro-Bidary and Keri Semenko write that self-care for environmental educators is a necessity as our care stretched to include more and more of the more-than-human world (19). Examining the burden of "emotional exhaustion" that accompanies teaching about climate change and the urgency of caring for the nonhuman draws them to the conclusion that "[t]eaching, particularly teaching about socioenvironmental issues impacting nonhuman animals, is a form of care work that burdens environmental educators with significant emotional costs" (20, 23). I am tending to a class of students who are facing their own trauma from environmental harm on a daily basis. I constantly question what care can, and should, I give to them amidst an ongoing crisis?

In an article that introduces a feminist disability studies pedagogy perspective into the debates on trigger warnings in the classroom, Angela M. Carter asserts that "[w]hether or not we consider the affect and effects of trauma on pedagogy is a choice only for those whose lives are not already shaped by trauma" ("Teaching with Trauma"). She frames trauma as "a disabling affective structure" ("Teaching with Trauma"). My students' experiences of trauma from anthropogenic climate change meet at the intersections of disability and environment justice. Carter explains that "[t]hose in opposition to trigger warnings in classroom reinforce the individual model of disability suggesting that the traumatized or trigged individual seek help on their own from the proper medical establishments" ("Teaching with Trauma").That model approaches disability as necessitating that "[i]t is the responsibility of the traumatized to deal with their excessive bodymind, not the society that produces and then pathologizes it as such"

("Teaching with Trauma"). This perspective leads to misunderstandings such as "the conflation of access with safety" and a disregard of "what students are actually requesting: recognition of their lived experiences and institutional support regard how those experiences influence their education" ("Teaching with Trauma").

The relationship between trauma and environmental crisis has been outlined very clearly demonstrated by teenage climate activist Greta Thunberg. At the United Nations Climate Action Summit, Thunberg told world leaders, "You have stolen my dreams and my childhood with your empty words. And yet I'm one of the lucky ones. People are suffering. People are dying. Entire ecosystems are collapsing. We are in the beginning of a mass extinction, and all you can talk about is money and fairy tales of eternal economic growth. How dare you!" Special names have been given by several scholars and writers to pinpoint the specific psychological affects of living amidst climate change, including Glenn A. Albrecht's "solastagia" – "the pain or distress caused by the ongoing loss of solace and the sense of desolation connected to the present state of one's home and territory" (38) and Daniel Goleman's "eco-angst" – "the moment a new bit of unpleasant ecological information about some product or other plunges us into a moment (or more) of despair at the planet's condition and the fragility of our place on it" ("The Age of Eco-Angst"). Mental health practitioners continue to pathologize the psychological impacts of climate change as trauma that manifests out of environmental crisis remains unaddressed by other institutions.[63] Thunberg emphasizes recognition, one of Carter's hallmarks of effective response

[63] See "Climate Change and Mental Health: A Causal Pathways Framework" by Helen Louise Berry et al.

to trauma, effusively saying to the Climate Summit participants that "[y]ou say you hear us and that you understand the urgency. But no matter how sad and angry I am, I do not want to believe that. Because if you really understood the situation and still kept on failing to act, then you would be evil. And that I refuse to believe." Environmental crisis sits in a precarious position of rampant trauma with minimal response from those in power and only a modicum of recognition that both human and more-than-human lives are suffering.

In her memoir *Untamed*, author Glennon Doyle devotes a chapter to her daughter Tish's reaction to learning about global warming during kindergarten in order to explore themes of emotional sensitivity and parenting in a precarious world. The chapter, entitled "Polar Bears", describes Tish's response to hearing facts about how diminishing resources are causing polar bears to die and seeing a picture of an affected bear: "The rest of the kindergarteners thought that this was sad information but not sad enough to them from, you know, soldiering on to recess. Not Tish…Tish remained seated, alone, mouth wide open, stunned into paralysis" (13). Tish asks her teacher such accountability-seeking questions as, "Do the grown-ups know about this? What are they going to do?" (14). Doyle's series of actions to mitigate her child's emotional pain is cyclical: "I coddled her, I snapped at her, and finally I just lied to her" (14). The lying involves asking a friend "to send me an 'official' email pretending to be the 'President of Antarctica,' announcing that, once and for all, the ice caps were fixed and all the polar bears were suddenly A-OK" (14). The attempt does not convince Tish, though. She still asserts to her mother that "[i]t's the polar bears now. But nobody cares. So next, it's gonna be us" (15).

A similar crisis plays out in the *HBO* drama television show, *Big Little Lies*.[64] A mother, Renata, played by Laura Dern, is infuriated to learn that her second-grade daughter, Amabella, had an anxiety attack at school and was found lying down in the classroom closet. While her parents' marital problems are understood to be impacting Amabella's mental wellbeing, a child psychologist reports that it is "mostly the end of the world" that has given Amabella "the message that we're doomed" – "we" presumably being the human species as her class had recently had a lesson on the realities of climate change. Reese Witherspoon plays the role of another mother, and a friend of Renata, addressing teachers and parents at a school assembly by arguing that "[c]limate change is important but it's also a lot to load up on a lot of second graders". Her own message loses its way, though, as she – like Amabella – becomes overwhelmed by the numerous disturbing parts of her life. She rambles into the microphone while appearing panicked, eventually suggesting that a more realistic education is the way to go: "We lie to our kids…We don't prepare them. We fill their heads full of happy endings and happy stories and lies…We have to tell them that life is an illusion and doesn't work out sometimes!"

The thought of a Generation Z child being alone with the mental impact of anthropogenic climate change is of particular concern to me.[65] How can it be that this is not a class-wide problem? While the principal in *Big Little Lies* states that "anxiety is an epidemic in our school", he still conveys to Renata that Amabella is not the only child in the school and that they must teach about climate change for everyone's benefit, rather than not teaching it for the emotional

[64] The show is based on a novel by Liane Moriarty.
[65] According to Pew Research, Generation Z (colloquially known as Gen Z), the generation following the Millennial generation, includes those born from 1997 onward (Dimock).

safety of a single child. Both *Untamed* and *Big Little Lies* present climate change as an isolating problem; one sensitive child in each classroom is so affected by the lesson that they need to be soothed, reassured, and ultimately lied to in order to allow learning-as-usual to continue. However, if these narratives are viewed through the lens of trauma in educational settings, the likelihood of isolation fades away. Tish and Amabella exhibit a highly recognizable trauma response that elicits responsiveness from adults and has clearly visible "edges" of beginning and end. Doyle writes that "*[Tish is] not crazy to be heartbroken over the polar bears; the rest of us are crazy not to be.* Tish couldn't go to recess because she was paying attention to what her teacher said…Tish is sensitive…Tish senses" (15). Rather than condemning the rest of the kindergarteners as insensitive, distractable students, consider how they might be carrying the heavy knowledge from that lesson and responding to the potential trauma of it in different ways.

Brenda Jo Brueggemann draws attention to the tension of teaching with safety in mind, pointing out that "[f]eminist educators have written extensively about safety in the classroom and the necessity of discomfort as part of learning. Most notably, in *Teaching to Transgress* bell hooks describes how 'safety' has been used by people with privilege to silence the voices of "those of us on the margins" who spoke about social justice and changing the academy (30, 39-40). In *Untamed* and *Big Little Lies*, the children and parents in question are white and are growing up in privileged, middle and/or upper-class environments. Safety is clearly at play in these settings where enough of a buffer exists between environmental threat and everyday life that children can be lied to consistently for extended portions of their education. In "Teaching with Trauma", Carter poses a model of "feminist disability studies pedagogy" that:

> would understand psychosomatic and affective responses, like the experience of being triggered, as appropriate responses to the horrors of structural inequality. Rather than attempting to relegate trauma outside of the bounds of academia, instructors would imagine what it might look like to honestly teach *with* the trauma that maybe present in their student's bodyminds, and perhaps even in their own. (Carter)

Carter explains that "While this may seem unnecessarily, or overly laborious for instructors such measures are actually methodological in nature – instructing students on *how* to learn with one another not just *what* to learn" ("Teaching with Trauma"). To navigate the volatility of teaching an environmentally-focused class while change is happening outside and reported in news headlines on a daily basis, I have begun treating environmental trauma as an expected presence in our classroom. My syllabus outlines this in the form of a content warning, stating that "[m]any of our texts include a discussion of difficult and possibly triggering content ranging from gender and sexual violence to police brutality to environmental violence toward many different life forms, physical effects of toxicity, and extinction." The syllabus is the first point of interaction between the instructor and most of our students – a point at which they see the course content explained in my own words. It is often weeks before I can engage one-on-one with every single one of my students – and that is in the case of a small class. For this reason, a paragraph of syllabus text, such a content warning, takes on a high degree of importance. I want that first interaction to convey so much more than is possible: cognition, my ethics, an invitation, a challenge, a reassurance.

At several points over the years of teaching through climate change, elections, protests, and other presences that loomed large and loud beside my measured and focused lesson plans, I have discussed with fellow teachers the power in moments of speaking to your class; students hear your words and carry them out of the classroom, whether they agree or disagree, whether they are open or narrowminded. They cannot "unhear". I believe in the learning process of how they take knowledge, stories, and reflections out into their lives when the class ends. Gumbs shares my hopefulness in listening "across species, across extinction, across harm" (15). Her multisensorial understanding of listening frames it as a chance for community transformation that transcends ears and sound: "Listening is not only about the normative ability to hear, it is a transformative and revolutionary resource that requires quieting down and tuning in" (Gumbs 15). While a test or written assessment might not always reflect it, the words have a way of sticking. Tish and Amabella are not the only listeners in their classes. The other children have an awareness of climate change and extinction – how could they not? – and they are not emotionless toward that. But without reciprocal listening and action from teachers, and without an education that centers care and repair toward relationships between humans and the more-than-human, there are very few places for an entire generation of children to put that trauma. How can young students be guided toward a shared and ongoing language with which to talk about a global phenomenon that pushes at the edges of their curriculum? I follow Gumbs' belief in listening *for* and *as* change, presence, and being-with our environments. Listening, on all sides, is a step in the direction of "trans-species communion" (Gumbs 15).

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The tree outside of my window holds an old sparrow nest crafted by a meticulous mother. The baby birds have long since fledged and moved on in the world, but the nest stays intact, its architecture flawless and hardy. It doesn't feel like the palm-sized sculpture will last a gusty winter of freezing and melting, but in the spring it will still be there, and I will watch another sparrow scope out the tree's desirable real estate. She will start to add her own sticks and twine and remind me of well-built, long-lasting things and things that grow from being built upon again and again, season by season.

***

By the end of *Undrowned*, Gumbs is at peace with the distance between herself and marine mammals, avowing that "What I know is that distance has grown me. And I can be with the ocean of myself" (154). I, too, have made friends with my distance. I know where my wildness is. As a teacher, my path becomes clearer with each lesson and each connection made through being-with and listening. I can map what I am able and unable to achieve, for now. I cannot make every student love nature. I cannot provide a guide for students to stop climate change. I cannot control my students' consumption habits. I cannot teach every class outside. I cannot fix my students' histories and traumas. I cannot make everyone feel compassion for each other. I cannot make everyone listen to everyone and everything. What I can do branches out ahead of me, growing from a thick foundation of concentric rings of learning, reading, writing, and teaching. I can show that how you use your written words has impact. I can shift the center of literary canons. I can complicate the notions of nature and wildness. I can make space for individual embodied knowledge. I can provide accessibility. I can listen.

Arriving here has not happened in a bubble of course design. I am unfolding a narrative of experience that has led me here. It is not a straightforward map to similar course design. It is more like tracks on my path, meandering and bumpy, that can be traced to find what might be important, for me, in environmental education at this precarious time. The moment faces regrets from shared pasts, further mistakes that are being set in motion still at this very minute, and rugged, insistent hope for the future.

Appendix

Museum Scavenger Hunt

One thing that connects to our readings (and how):

Tree was an exhibit where it was unsure if it lived in the land or sea which seemed crazy.

A question that an exhibit or object generates for you (identify the object and the question):

With the above exhibit, what does it mean about for the future that we know so little about the past.

Something cool: That dragon-like thing hanging from the ceiling that lived in Nebraska Basilosaurus Isis

Free-write space:

It's such a cool feeling returning to the room filled with huge fossils, and having all these memories of my elementary school field trip coming rushing back. That was a really cool experience I didn't expect.

Figure 4: Student Writing A.

Museum Scavenger Hunt

One thing that connects to our readings (and how):

What fault in the environment led to the extinction of so many species.

A question that an exhibit or object generates for you (identify the object and the question):

How did the desmatosuchus compete against competition for food.

Something cool: Desmatosuchus, back structure looks really sweet. covered in armor almost. Nice horns too.

Free-write space:

One of the questions that had come up for me was relating to how all of these exhibits were obtained and what kind of effort takes to preserve such exhibits I find it amazing that so many things can be learned about pre-history like at this museum. I think that it is important for English classes to come to places like this because it allows for an observation of how times change in the world. It is as if we are the future observing the past

Figure 5: Student Writing B.

One thing that connects to our readings (and how):

The fear that current animals are on the brink of extinction.

A question that an exhibit or object generates for you (identify the object and the question):

Do zebra Mussels have a fast reproduction rate?

What will make us go extinct?

Something cool:

- The allosaurus would stand in an upright position with its tail against the ground to appear more threatening.
- It is interesting how some features of extinct animals have been passed on and can be seen today.

Free-write space:

Carboniferous - coal is composed almost completely of carbon

Going to a museum brings a certain realization that life before our time was very different. Being able to see all of the different animals and how they fit in was fascinating. Extinction is inevitable, it makes me wonder what will make our species go extinct or if ~~we~~ our current habits ~~are forging~~ are forging us that way. Going to a different physical place allowed my imagination on futuristic issues to

Figure 6: Student Writing C.

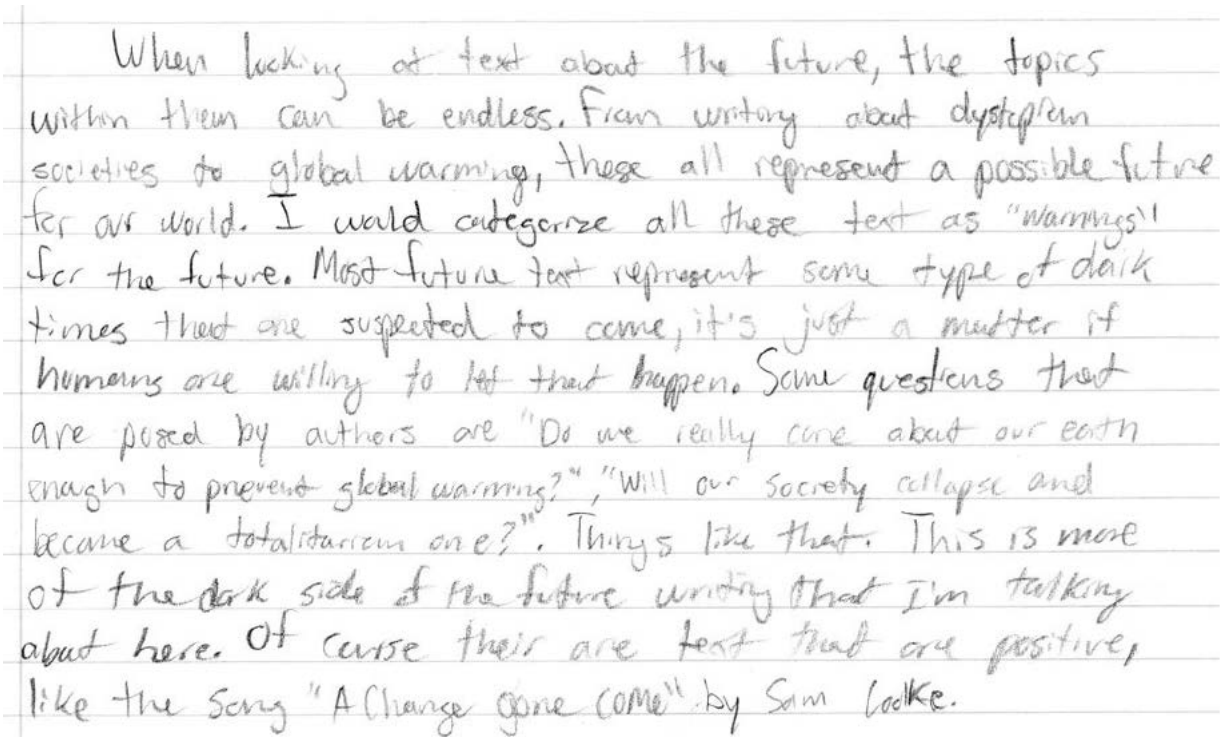
When looking at text about the future, the topics within them can be endless. From writing about dystopian societies to global warming, these all represent a possible future for our world. I would categorize all these text as "warnings" for the future. Most future text represent some type of dark times that are suspected to come, it's just a matter if humans are willing to let that happen. Some questions that are posed by authors are "Do we really care about our earth enough to prevent global warming?", "Will our society collapse and became a totalitarian one?". Things like that. This is more of the dark side of the future writing that I'm talking about here. Of curse their are text that are positive, like the song "A Change gone come" by Sam Cooke.

Figure 7: Student Writing D.

There are many connections that can be made across the literary pieces we have studied as a class. Since all relate in some way to the future, we can connect ideas, like the future of technology and the future of health. We can examine different genres, and how they influence our understanding of the future. We can also look at the types of questions these authors are asking about the future.

What will it look like if we continue ____?
How can we change our lives based on predictions of the future?
Why is understanding future consequences so important?

The interactions of all our texts allows us to better interpret the varying ideas brought up, offering depth to how we read.

Figure 8: Student Writing E.

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