

University of Tennessee, Knoxville TRACE: Tennessee Research and Creative Exchange

Doctoral Dissertations

Graduate School

8-2020

Nonhuman Agency in Speculative Ecofiction

Melinda Backer University of Tennessee, mborcher@vols.utk.edu

Follow this and additional works at: https://trace.tennessee.edu/utk_graddiss

Recommended Citation

Backer, Melinda, "Nonhuman Agency in Speculative Ecofiction." PhD diss., University of Tennessee, 2020. https://trace.tennessee.edu/utk_graddiss/5651

This Dissertation is brought to you for free and open access by the Graduate School at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a dissertation written by Melinda Backer entitled "Nonhuman Agency in Speculative Ecofiction." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in English.

Amy Elias, Major Professor

We have read this dissertation and recommend its acceptance:

Daniel Magilow Lisa King Urmila Seshagiri

Accepted for the Council:

Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

Humans with Animals: Nonhuman Agency in Speculative Ecofiction

A Dissertation Presented for the Doctor of Philosophy Degree The University of Tennessee, Knoxville

> Melinda Marie Backer August 2019

Copyright © 2019 by Melinda Backer. All rights reserved.

DEDICATION

For everyone who believed in me: my mother, my husband, my mentors, my family, and my friends.

ACKNOWLEDGEMENTS

I begin by thanking my mother, brother, and husband. Without their love and support over the years, this project would not have been possible. I would also like to thank all of my family and friends who have given so much of their time, energy, and resources to make my dream of earning a PhD a reality.

Most sincere gratitude to my dissertation advisor and chair, Dr. Amy Elias. This process has been very stressful, and Dr. Elias has constantly been a voice of reason, reassurance, and encouragement. It is thanks to her tireless dedication that this dissertation was able to come to fruition in such a timely manner. Although she had to balance her position as Director of the UT Humanities Center with her professorial duties to the English department, she always made time to meet with me and give me advice on this dissertation and so much more.

I also want to extend my gratitude and appreciation for the rest of my committee – Dr. Urmila Seshagiri, Dr. Lisa King, and Dr. Daniel Magilow – for their prompt feedback, tireless support, and enthusiasm for this project. Thanks too, for meeting with me one-on-one to discuss ideas and share resources. Their feedback has made this dissertation into a worthy accomplishment.

ABSTRACT

Speculative ecofiction creates situations that demand ethical relation to nonhumans in order to complicate definitions of "the human" and promote a neo-humanist ethic based on human stewardship. Compassion is at the core of my understanding of stewardship, and I believe that certain literary works model ethical relationality based on care for all life. The novels that I examine pit nonhuman agency against human exceptionalism, bringing to light the ways in which "the other" is stripped of its agency. Reallocating agency impacts subgenres of speculative fiction including postcolonial, posthuman, and Afrofuturist literatures because as beings are stripped of agency they are also stripped of their rights.

TABLE OF CONTENTS

ntroduction: Toward an Ethical Relationalty	. 1
Chapter 1: Agency and Ethics in Speculative Ecofiction	31
Chapter 2: Relationaly vs. Relatives: Indigenous American and Australian Speculative	
Ecofiction	63
Chapter 3: Speculations on Not-Quite-Human Agency	95
Chapter 4: Relational Agency and Personhood in Afrofuturist Speculative Ecofiction. 12	35
Conclusion	67
Vorks Cited1	74
/ita18	85

INTRODUCTION: TOWARD AN ETHICAL RELATIONALTY

In this posthuman age, the concept of environmental stewardship has fallen out of favor in critical conversations about environmental protection and activism because it has promoted a paternalistic model of responsibility. This perception is usually rooted in ideologies of control a resistance to perceived anthropocentric dominion and moral obligation. However, that does not have to be all stewardship offers to critical discourse. Stewardship is so well-established in mainstream discourse that it is useful for situating humans as *responsible* for the state of our planet, despite the historical, cultural, and religious burdens that the "stewardship" carries with it.¹ There is a concept of stewardship emerging through the recognition of indigenous cultures' knowledges, ecocriticism, and some new theories of global connection that acknowledge but do not capitalize on the unequal footing between humans and nonhumans. Such unequal positioning grants humans the power to control most given ecosystems, species, and the planet. This stance maintains that it is the responsibility of humans to use that power to care for, and care with, ecosystems. Because literary work effectively registers such shifts in cultural perception, this dissertation assumes both an aesthetic and a didactic function for literature: I contend that to promote an *ethical* stewardship, speculative ecofiction provides "what if" scenarios that show the consequences of focusing only on human flourishing.

"Speculative ecofiction" is a term describing literature that imagines alternate relationalities between humans, animals, and environments. This term is used as an umbrella to

¹ For an overview of how recent ecocritics discuss environmental stewardship see Rhain Williams. "Ecocriticism." *The Year's Work in Critical and Cultural Theory*, vol. 25, no. 1, 2017, pp. 252–273. See also Jessica Cockburn et al. "Towards Place-Based Research to Support Social–Ecological Stewardship." *Sustainability*, vol. 10, no. 5, 2018, p. 1434.

encompass environmental fiction that uses elements of the fantastic in conjunction with the agency of nonhumans to showcase various configurations of relationality between all forms of being. It is defined as fiction that focuses on environmental possibilities set in an alternate past or potential future. Speculative ecofiction offers cautionary tales of what can happen when the agency of the nonhuman is unacknowledged and ethical relationality between humans and animals remains unbalanced. In this dissertation, "relationality" is used to discuss relationships between beings in order to focus on *how* they are in relation to each other. It is through the critical intersections of ecology and speculative fictions—including postcolonial, posthuman, and Afrofuturist fictions—that nonhuman agency demonstrates relationality between humans and nonhumans. Speculative ecofiction provides the means and incentive to rethink what it means to be human by emphasizing human entanglement in complex living ecosystems and introducing a moment of cultural or environmental crisis that demands new or more ethically considered human behavior. This fiction presents an idea of "humanity" that defines itself against the odds of survival and that is deeply rooted in an ethical relationality.

Speculative ecofiction explores nonhuman agency and ecocritical concerns by merging common tropes in science fiction and fantasy. This subgenre of speculative ecofiction gained momentum in the nineteen-sixties and seventies with publications such as J.G. Ballard's *The Drought* and with the publication of *Ecofiction* edited by John Standler in 1971 and Ernest Callenbach's *Ecotopia* in 1975 (Woodbury). In the 1980s authors such as Octavia Butler, Joan Slonczewski, and Ursula Le Guin distinguished themselves as leading female voices in what was assumed to be a predominantly male community. The last thirty years have shown an increasing popularity in such fiction, with authors such as Ursula Le Guin, Margaret Atwood, Kim Stanley

Robinson, N.K. Jemisin, Karen Tei Yamashita, and Neal Stephenson, among others, gaining attention for novels that denounce environmental exploitation. These ecocritical concerns include the impact of the Anthropocene on the environment, usually by imagining possible futures or alternate pasts wherein the dominance of humanity was shifted in some way. Speculation is essential to the foundation of ecocriticism because it is how environmental imagination can transcend time, space, and the material being of our present reality. Speculative ecofiction creates worlds where the natural order is altered in unexpected ways. These shifts can arise from the decline or collapse of whole human civilizations, nuclear war or apocalypse, environmental catastrophe, alien invasion, technological innovation, or scientific experimentation and advancement. Whatever form the speculation takes, when examined through an ecocritical lens, it challenges humans to consider what it means to be in ethical relation to the nonhuman.

I propose a new concept, "relational agency," to show how (and why) writers of speculative ecofiction examine the tension between ethics and law to demonstrate nonhuman agency and human responsibility in and to ecosystems. Relational agency argues that agency is granted to nonhuman others when those others are acknowledged as subjects rather than as objects. Referring to speculative ecofiction, the term redefines humanism through an ontological shift in what it means to be a human in relation to other species and the environment. This goes beyond fictional condemnations of ethical complacency or environmental destruction, instead focusing on imaginative and complex ways that humans and nonhumans can create and maintain reciprocal relationships. It emphasizes not just the agency of nonhuman others, but also the responsibility humans have because of their awareness of these relationships. Works of speculative ecofiction that construct an ethics of relational agency provide models of relationality with the nonhuman, even as they acknowledge the humanistic impulse at the center of human sociality. I claim that relational agency highlights the responsibility that humans have for the those "lower" on the animacy hierarchy.² It promotes a model of stewardship by which humans work with, and as a part of, nature. Speculative ecoficiton problematizes the agency that we grant to nonhuman others in order to delineate the value of ethical relationality. By reshaping the boundaries between ethics and law, human and animal, and nature and culture, this fiction advocates a sense of stewardship that attempts to avoid crossing the line from care to domination.

In speculative ecofiction, relational agency highlights the ethical and political boundaries of self and other. Characteristically, relational agency questions the "known facts" of the physical world by claiming that reality is structured as a network of relationships. In this framework, human recognition of and responsibility to nonhumans is made clear through a call for mutually beneficial coexistence. The novels that I examine pit nonhuman agency against human exceptionalism, bringing to light the ways in which "the other" is stripped of its agency. Reallocating agency impacts subgenres of speculative fiction including postcolonial, posthuman, and Afrofuturist literatures, because as beings are stripped of agency they are also stripped of their rights. Likewise, when a text grants being agency, it suggests that the dominant human culture should recognize and protect them as beings that deserve rights. I explore how speculative ecofiction grants the nonhuman actor agency in exaggerated and sometimes

² This hierarchy was created by John Louis Cherry in his sociolinguistic study of how people discussed agency. It is almost identical to the philosophical "Great Chain of Being" espoused by Neoplatonists in the Middle Ages. For an in-depth examination of Cherry's study, see *Animism in Thought and Language*. Berkeley, CA: University of California Press, 1992.

seemingly absurd ways (such as a storytelling plastic ball in Karen Tei Yamashita's *Through the Arc of the Rainforest*) to force us to consider how our relationships with human and nonhuman others are foundational to human existence.

In this dissertation, I contend that in speculative ecofiction, relational agency depends upon three foundational concepts: relationality, reciprocity, and stewardship (responsibility). In this introductory chapter, after defining what I mean by "speculative ecofiction," I unpack these terms and discuss the *agency* aspect of relational agency as it is depicted and modeled in speculative ecofiction.

What is "Speculative Ecofiction"?

Speculative ecofiction suggests the possibilities of the fantastic unmoored from the genre boundaries of science fiction and fantasy. In 2009, Ursula Le Guin and Margaret Atwood had a disagreement about whether Atwood's novels are science fiction or speculative fiction. This disagreement was spurred by Atwood's denial of her novels as "science fiction," in her essay collection *Moving Targets*. As a consequence of this choice, LeGuin's review of her novel *The Year of the Flood*, published in *The Guardian*, respects Atwood's decision to narrowly define science fiction and talks about her novel instead as a "realistic novel" not relying on "the praise it deserves as a work of unusual cautionary imagination and satirical invention" (Le Guin). Whereas Atwood insists on the possibility of the world she created, one of the last sentences of Le Guin's review questions, "Who wants to believe that a story in which that happens isn't science fiction?" (LeGuin). The potentiality of this novel makes it *speculative*. However, because it could someday reflect lived reality, it cannot be limited to just the realm of human imagination. Le Guin likes to imagine a world where the possibility of the reality established in the novel is limited to fiction.

"Speculative ecofiction" emerges out of this same conversation from what I see as the future possibilities for people and their environments. I draw on traditions of indigenous knowledge as well as Western ideas of ecocriticism to establish how this fiction promotes new configurations of relationality between humans and nonhumans. The foundation of the "eco" portion of speculative ecofiction concerns itself primarily with humans in relation to the environment, where more than just humans are given consideration and attention in the work. This can take the shape of a third-omniscient point-of-view that devotes time to nonhuman characters, or simply a consideration of the environment that moves beyond description and into interpretation, conversation, or analysis. Jim Dryer, author of Where the Wild Books Are, provides a simplified definition of "ecofiction" as "fiction that deals with environmental issues or the relation of humanity and the physical environment, that contrasts traditional and industrial cosmologies, or in which nature or the land has a prominent role" (Dryer 2). This generous list of characteristics allows for an expanse of fiction to be considered under the umbrella of ecofiction. He situates the term of "ecofiction" historically by tracing the trajectory of works that consider human in relation to the environment from a perspective that includes humans as a part of nature. I limit this through the addition of the qualifier "speculative," suggesting that the ecofiction examined here explores alternate variations in the relationships between humans, animals, and the environment.

Further, I use "speculative" to acknowledge the speculative turn, as conceptualized by Levi Bryant, Nick Srnicek, and Graham Harman who promote new materialist perspectives on relationality. ³ Speculation implies the ability to imagine being beyond the known facts of reality. It also suggests the idea of spectacle, that is something visually and emotionally striking or dramatic, and the idea of the spectacular, something awe inspiring. It suggests things that could happen but have not happened at the time the author wrote the text. Speculation projects possibilities for both the past and future models of ethical relationality between humans and nonhumans. It also promotes non-anthropocentric ways of being human. While, ostensibly, this would suggest an end the obligations humans have to the nonhuman, the literature that I examine shows that this is not the case. Stewardship remains foundational to interspecies relationality, not through the traditional modes of paternalistic dominion, but through a humanist ethic that suggests care *for* and *with* nature.

Eco-Relationality: Earth Ontologies, and After

The relational aspect of "relational agency" is based in redefinitions of *ontological* hierarchy: how, in the order of *being*, humans and nonhumans stand in relation to one another. Today, new theories of ontological relationality draw from indigenous knowledges and older theories of ecocriticism—and, increasingly, theories of posthumanism and new materialisms—to construct definitions of relational agency that are compatible to new rethinkings of relationality and reciprocity in ethics (which I will discuss below).

For example, ecologist Robin Wall Kimmerer (Potawatomi) situates animals, humans, and plants as interconnected entities tied to each other through reciprocity. In *Braiding Sweetgrass*, she suggests that Westerners need to move beyond a culture of gratitude to a culture

³ See Levi Bryant, Nick Srnicek and Graham Harman. *The Speculative Turn, Continental Materialism and Realism*, Re.Press, 2011.

of reciprocity, taking the "gifts of the earth" and giving back (Kimmerer 189). The welfare of animals and plants is inexorably tied to the welfare of people. This well-being is dependent upon harmonious coexistence in which animals, plants, and humans contribute to the foundation and maintenance of a community.

These same ontological redistributions can be seen in many native creation myths as well. Kimmerer's retelling of the Skywoman creation story, popular in the Great Lakes area, establishes an anti-hierarchical ontology by situating humans as the last beings to join the earth. The earth is formed "not by Skywoman alone, but from the alchemy of all the animals' gifts coupled with her deep gratitude. Together they formed what we know today as Turtle Island, our home" (Kimmerer 5). In this telling, the animals provide Skywoman with what she needs to survive, and in turn she provides them with access to even more food. Humans come along later, the descendants of Skywoman and the animals. In Thomas King's retelling Skywoman is given a name, Charm, and she is pregnant with twins when she falls to the earth. She relies on the assistance of animals to keep herself alive, and together they create the world, by adding mud from the ocean floor to the turtle's back that Skywoman was occupying. Then she gave birth to twins, who after shaping the mud, trees, and mountains, decided to make humans. The story ends with, "The animals, and the humans, and the Twins, and Charm looked around at the world they had created. Boy, they said, this is as good as it gets" (King 20). These stories share at their core a fundamental disregard for hierarchical human positioning. All beings exist in relation to others, and their relationships are all dependent upon the individuals that structure those relationships.

Writers such as Kimmerer and King express an indigenous philosophy of the earth that demands recognition of webs of connectedness through all levels of being—not a flattened

ontology but a relational one that has implications for, and expressions in, various indigenous religious and ethical traditions. Anglo-European ecocriticism adopted much of this view even as it attempted at times to translate the relationality of being into material, environmental contexts and politics. Many postcolonial ecocritics read literatures of displaced indigenous peoples, for example, under the theoretical framework of postcolonial ecocriticism because of these literatures' concern with environmental justice and both human and nonhuman advocacy. Although the history of environmental literature is long, the critical school of thought known as ecocriticism has its origins in conversations about nature and conservation in 1960s America. Ecocriticism is broadly defined as the earth-oriented study of literature. This first wave of ecocriticism equated nature with environment, focusing on depictions of the natural world in literature as a means of preserving it, as Greg Garrard's *Ecocriticism*, which attributes the birth of ecocriticism to Rachel Carson's Silent Spring (1962). Carson's book depicts an idyllic pastoral wilderness that slowly decays because of human interference. Garrard makes clear that the realworld ecocritical conversations that Carson's text references are political, fundamentally based on a "green moral and political agenda" (Garrard 3).⁴ Yet the work has been taken to task in contemporary ecocritics because, such criticism says, this perspective privileges a global environmentalism that falsely imagines a natural world untouched by humans-a romantic, even sentimentalized, view of the natural world linked to older genres of pastoral. Pastoralism

⁴ According to Buell's, Heise's, and Thornber's overview, "Literature and the Environment," ecocriticism blossomed in the early 1990s with the creation of the Association for the Study of Literature and Environment (ASLE) in 1992 (Buell et al. 418).

continues today in genres such as travel narratives and continues to generate heated criticism, especially in discussions of ecotourism.⁵

Postcolonial ecocriticism is one of the many branches of ecocriticism that emerges from the second-wave desire for environmental justice, and it combines an ontological relationality with ethical relationality (described further below). Huggan and Tiffin, for example, define "postcolonial ecocriticism" as "A way of not just opening the postcolonial dimension of ecocriticism, but also suggesting that the critical study of environmental literature may do its part in undoing the epistemological hierarchies and boundaries—nowhere more apparent than under historical and/or contemporary conditions of colonialism—that have set humans against other animals, and both against an externalized natural world" (23). This definition provides a foundation for emerging forms of ecocritical thought. The second wave of ecocriticism in the 2000s focused on industrialization and "favored a sociocentric rather than biocentric and/or individual-experience-oriented ethics and aesthetics, placing particular emphasis on environmental justice" (Buell et al. 419). Such a call for justice acknowledges the inequality of environmental resource distribution and access across different races, classes, and communities. Critics emphasized the political nature of ecocriticism, often examining how colonial practices shaped the cultures of colonized people as well as the land itself.

Postcolonial ecocriticism gained momentum with the 2004 publication of Graham Huggan's "Greening Postcolonialism" and shortly following that, the publication of Rob Nixon's "Environmentalism and Postcolonialism" in 2005. Huggan's article suggests that postcolonial and ecocritical perspectives can be joined together initially by their concerns for social justice

⁵ See Richard Sharpley & Philip R. Stone, editors. "The Darker Side of Travel – The Theory and Practice of Dark Tourism." Channel View Publications, 2009.

and transformation. He combines these theoretical fields to negotiate a perspective on the effects of imperialism on humans and the environment. Nixon likewise calls for an examination of comparative literatures that deals with environmental issues. He asserts that North American ecocritical scholars should be wary of allowing their ethics of place blind them to the displacement of peoples and that, conversely, postcolonial scholars should examine not only the colonial displacement of people but also colonial disruptions of environment and ontologically relational philosophies.⁶

Postcolonial ecocriticism relies on what Lawrence Buell terms "environmental imagination." Such imagination includes connections between human and nature, human accountability to the environment, and an environment seen as dynamic and in constant and vital interaction with humans rather than as a static background to human "civilization." In 2011, Elizabeth DeLoughrey and George Handley published *Postcolonial Ecologies*, a collection of essays that cultivate an "aesthetics of the earth" (a term borrowed from Caribbean theorist Édouard Glissant) through which they hope to challenge "normative" representations of both human and nonhuman nature (9). They seek to fill in the theoretical gaps between postcolonial and ecological discourse by decentering the U.S. as the source and focus of ecocritical thought by arguing for more "rhizomatic roots" and by finding a way to "speak in ethical terms about the global and local without reducing difference and without instituting old structural hierarchies" (15, 25).⁷

⁶ After the publication of these essays, more scholars joined the conversation examining the connections between imperialism and ecological concerns. Among those, Graham Huggan and Helen Tiffin wrote *Postcolonial Ecocriticism* highlighting the socio-political origins of environmental issues.
⁷ In this context, "rhizomatic roots" refers to the discussion of rhizomatic assemblages Deleuze and Customic roots and Platering Theorem 2017. "The rhizomatic context are reserved platering."

Guattari propose in *A Thousand Plateaus*. They say, "The rhizome connects any point to any other point, and its traits are not necessarily linked to traits of the same nature" (21).

Though all of these ideas have been present in various indigenous people's religions and epistemologies for thousands of years, the intersection of the postcolonial and ecological in modern Anglo-European critical conversations has (somewhat ironically) led to a new shift in *Western* postcolonial criticism about the nature of the lived world. This shift has become more apparent with the publication of texts such as *Uncertain Mirrors*, an essay collection by Jesus Benito, Ana Manzanas, and Begona Simal, which examines "magical realism" in indigenous literatures of the Americas.⁸ Simal sees magical realist motifs as "rendering visible the connivance of certain institutions and material practices" (235). Simal suggests that a fixed Western understanding of "nature" has marginalized multiple indigenous ecocritical perspectives.

This claim puts him in the company of some New Materialist and posthumanist critics such as Timothy Morton and Courtney Traub, who have also argued for a complete reexamination of what an ecocritical perspective might be. These newer theoretical discourses push back against the aestheticizing of nature—a concept that we use to distinguish between human society (culture) and nonhuman spaces and communities (nature)— in favor of a "nature"

⁸ The key theories that define magical realism are those that view it as a discourse, rather than a genre. A general guideline for the elements of magical realism, provided by Wendy Faris, are an "irreducible element" of magic (characters in the text model the acceptance of this element in the text: it neither shocks or melts away), a strong presence of the phenomenal world, a "reality" that becomes amazing or ridiculous in the space of the narrative, a questioning of time, space, and identity (7-42). According to Stephen Slemon, it includes elements of the fantastic—and the fantastic suggests a way of seeing the world that is nonmimetic.

For further discussion of magical realism see Faris, Wendy B. Ordinary Enchantments: Magical Realism and the Remystification of Narrative. Vanderbilt UP, 2004; Hume, Kathryn. Fantasy and Mimesis: Responses to Reality in Western Literature. Methuen, 1984; Stephen Slemon, "Magical Realism as Postcolonial Discourse," in Magical Realism: Theory, History, Community, eds. Lois Parkinson Zamora and Wendy B. Faris (Durham and London: Duke UP, 1995), 420.

that is understood to be all encompassing and relational. Unlike more traditional forms of nature writing wherein "presumptions of epistemological control and stewardship of the nonhuman . . . dominate," Traub asks readers to consider how narrative opacity might contribute to troubling preconceptions about nature (515). Traub's insistence on the connection between narrative opacity and nature suggests that the form of a novel can greatly impact how readers respond to and interact with concepts of nature. In this way, narrative strategies can shape nature away from its traditional understanding. In *The Ecological Thought*, Morton agrees, advocating "ecology without 'Nature' and without 'environmentalism'" (3). He claims that Romantic literature served as a touchstone for ecocriticism, but it does not do enough to encourage "openness," instead relying on a prepackaged version on "Nature" which has become "plastic" and artificial (Morton 11). Yet because his focus is on ecocriticism as a whole, Morton ignores the work that postcolonial ecocriticism has done to shift the discourse away from Romantic literature and toward such relational ontologies.

Ultimately, authors working very differently under the huge umbrella term "postcolonial ecocriticism" suggest that "nature" is a term that must be retired or radically redefined in the name of ontological relationality: new examinations of the kinds of connections and vital networks linking humans and nonhuman others, including inanimate others. Likewise, contemporary speculative ecofiction considers nature more within a flattened ontology whereby things stand in vital relation to other things in assemblages that are spontaneous, fortuitous, and ecologically "natural."

For scholars such as Jane Bennett, Karen Barad, Donna Haraway, Cary Wolfe, and Mel Y. Chen who are invested in affect theory and posthumanist theory, ontological relationality is present in a series of intimate, somatic connections between self and other, self and world. For instance, Jane Bennett's *Vibrant Matter*, working within the theory of new materialisms and posthuman vitalist ethics, discusses her theory of vibrant matter as "the interconnections between persons and things... individuals as simply incapable of bearing full responsibility for their effects" (37). These interconnections insist that there is no isolated experience, anything that happens has an effect on all other things. While individuals do exist in the sense of personal identity, relationality shapes how that individual, or individual object, is created.

Karen Barad, coming from a science background, sees vitalism (as conceptualized by Jane Bennett) through the lens of theoretical physics and the work, particularly, of Niels Bohr. Barad has posited "agential realism" as an ontological, realist framework for understanding the relations of things in the universe, including self-other relations. Selfhood is founded on "intraaction," a constant movement and response between material particles. Barad's theory is different from Latour's actor network theory because apparatuses are not contingent on "assemblages" of humans and nonhumans: material interaction happens at the particle level. Things cannot exist without a self-othering at their core and the boundaries that apparatuses are "specific material (re)configurings of the world--which comes to matter" (140). In short, all things are constructed of the same stuff in infinite configurations. These configurations are constantly shifting at the subatomic level connecting physical bodies in multitudes of ways. Barad calls these connections "intra-actions" as opposed to "interactions" to illustrate that agency is not inherently human or individual-based (141). Agency is built on intra-actions between agents of all types. Using the Niels Bohr's "philosophy physics," Karen Barad determines that representationalism, metaphysical individualism, and humanism work together to maintain the idea that man is the center of the universe (Barad 69). Like Donna Haraway and Bruno Latour, Barad explores the ways humans conceptualize nature, materiality, and the epistemological structure of the physical world. Unlike them, Barad understands reality as empirically structured on the Bohrs' concept of "phenomena" those "intra-actions" that structure the ontological inseparability between the material reality (120-121). Reality itself is based upon relationality; her version of reality exists "*in relation*," relying on interdependent phenomena.⁹ Interdependence does not require the dissolution of free will; Barad's agential realism deals with the relationality, not the merging of entities, at the core of material being. By emphasizing interdependence, Barad successfully decenters the human and reveals the relational ontology that structures our material reality.

Donna Haraway is less concerned with theoretical physics, though she has aligned herself with science and technology discourses throughout her career; in terms of ontological relationality, she has less patience with posthuman vitalism and has instead focused on interspecies relationships between humans and animal companions. Referencing Bruno Latour's famous book, *We Have Never Been Modern*, in *When Species Meet*, Haraway argues that "we have never been human" (1). She contests an understanding of what it means to be a modern human that is elaborated in Latour's *The Politics of Nature*, which suggests that there are great

⁹ See Norris's "Ecocriticism and Moral Responsibility: The Question of Agency in Karen Barad's Performativity Theory," *The Journal of the Midwest Modern Language Association*, 49.1, 2016: 157-184. Norris argues this is where agential realism fails to account for the "impersonal force" of agency (178) and believes that without addressing this issue of free will, ecocriticism loses its ethical backbone if human behavior is predetermined by agential forces (180). Norris's suppositions about Barad's ethical framing of free will, however, doesn't invalidate her claims about agential realism as an ontological truth.

divides between the human/society and animal/nature. Haraway argues that this is the "Great Divide" characteristic of the way thinking defining human exceptionalism; only humankind is not a part of an interdependent web. In contrast, for Haraway, relationality between humans and nonhumans is "a knot of species co-shaping one another in layers of reciprocating complexity all the way down" (42). This demonstrates the shift in a conversation about what it means to be human; shifting the focus from what humans are to what they are a part of (from I *am* to *I am part of*).

While I agree with Morton and Traub that the definition of nature in capitalist-driven nations needs to be reconsidered, I believe it is productive to turn to the arts and consider how authors of contemporary fiction have shown nature to have its own agency, driven by motivations that are separate from that of the humans that, in much mainstream fiction, generally act as its main characters. What I am calling "speculative ecofiction" draws on traditions of indigenous knowledge as well as ecocriticism in Anglo-European theory. But it also draws from, and seems of a piece with, some current redefinitions of ontological relationality occurring in posthumanist and affect theories today.

_Relational Agency: Reciprocity and Stewardship

Ethical reciprocity of course depends on, and is sometimes covertly embedded within, discussions of *ontological* relationality, and it has a deep and broad history in both indigenous philosophies and European traditions of philosophical ethics.¹⁰ Reciprocity becomes another

¹⁰ For more about European traditions of ethical reciprocity see; Emmanuel Levinas, *Ethics and Infinity: Conversations with Philippe Nemo*. Translated by Richard Cohen, Duquesne Press, 1995; Immanuel Kant, *Fundamental Principles of the Metaphysic of Morals*. Translated by Thomas Kingsmill Abbot,

foundation for relational agency because it demands ethical and social action in the world once one assumes a relational ontology.

For example, Shawn Wilson (Opaskwayak Cree) and Lee Maracle (Sto:lo) suggest that relationships are the foundations of reality, and that storytelling is one way that we can emphasize the significance of our relationships with the nonhuman. Maracle's Memory Serves and Other Essays discusses human and nonhuman being and harmonious coexistence. In "Oratory on Oratory" Maracle writes that the business of oratory, of storytelling, is to offer a way to "look deeply at the world around us" (241). By doing this, she argues, we can form relationships with nonhuman others by "understanding ourselves in relation to its story so that we can peacefully coexist" (214). Maracle sees storytelling as way to improve the state of our relationships with the nonhuman. She too argues for a type of empathy, one based on seeking understanding about how other species live on this planet and the types of relationships they form with us. The example that she provides also demonstrates that, regardless of intent, humans still code nonhumans with "it." The power imbalance between human and nonhuman is ever present. When storytelling is used to examine these relationships, a person must begin with a sense of accountability for the unequal distribution of power. Wilson's Research is Ceremony highlights relationality as central to indigenous ontology and an epistemology through a concept of "relational accountability" (77). In his estimation, people must be held accountable for their interactions with each other and the environment.

Because of our cognition, humans can construct, identify, and perform relationships with the nonhuman. These relationships develop from our dependence on both our human and

Dover, 2005; Mark Timmons, *Conduct and Character: Readings in Moral Theory*. Langara College, 2013.

nonhuman communities to sustain our lives. Andrea Riley-Mukavetz (Chippewas of the Thames) and Daisy Levy illustrate this idea when they discuss relationality as a methodology that encourages "accountability and reciprocity" (Powell et al. 17). As Levy says, "You can't look at one piece without seeing all the others, can't manipulate a part without having to negotiate every other aspect of that body too" (20). Such connections she calls "constellations," emphasizing (somewhat like Barad but in an ethical rather than an ontological context) the interrelated connectivity of the universe (5). Lived constellations are networks of connection, and they include human communities of all types, as well as nonhuman ties that people have to land, animals, and environment. Humans are responsible for the creation and perception of these patterns that map out how humans and nonhumans are connected. Constellations function ontologically much like Latour's notion of assemblage, establishing the important ways that humans relate to things in the world without conscious effort. However, the idea of constellations goes farther, into the territory of ethics: when the effort of relating to the world becomes conscious for humans, it introduces the possibilities for empathy and ethical connection as well. (Although empathy doesn't have to be conscious, ethical behavior to the nonhuman must be.)

Today in literary criticism, the concept of reciprocity, like that of relationality, has merged with discussions of Latourian assemblage, posthumanism, and new materialisms in ways that are borrowed by and illustrated in speculative ecofiction. For example, Mel Y. Chen's work illustrates how assumptions about relational ontology generate *ethics* of relationality. Chen decodes the signifiers that we use to describe our relationships with others and claims that this procedure is essential to our understanding of how these connections impact the world around us. The definition of animacy posited by Chen in their text *Animacies: Biopolitics, Queer* *Materiality, and Racial Mattering* builds upon Jane Bennett's ideas of "vital thingness" to critique the linguistic structure produced by and indicative of our hierarchical understanding of the world. "Animacy" is defined as "the quality of liveness, sentience, or humanness of a noun or noun phrase that often has grammatical and syntactical consequences" (Chen 24). This nebulous "quality of liveness" that Chen lists alongside "humanness" generates an ethics that blurs the boundaries between how language is used to mark human and nonhuman subjects.

The animacy framework, Chen claims, will always privilege the human. Chen's project is to mark how difference is couched in the human experience of relationality with animals and objects; for example, they discuss the regulation of animal sexuality and reproduction, pointing to the spaying and neutering of animal companions in the human family model (22). Chen sees biopolitics working against nonhuman agency, even in relationships where animals are made a part of a human family, and Chen questions the ethical implications of various forms of reproductive and biopolitical control exercised upon domesticated animals (24). This biopolitical control of animal life can be used in support of eugenics, is ethically mired in exploitation and, often, racism, classicism, and sexism. For Chen, biopolitics becomes a way to "ethically" regulate and diminish the agency of humans and nonhumans alike, and it is countered by new forms of relationality that draw from posthumanist and queer understandings of companionship.

Speculative ecofiction seems to insist on an ethical relationality and calls for an understanding of how relationships between humans and nonhumans are structured. Self-aware human relationality allows relationships to others and things in the world to flourish in a way that acknowledges the privileged position of humanity, but still strives to create non-exploitive relationships with the nonhuman. For some scholars who are invested in affect theory, such as Donna Haraway and Cary Wolfe, relationality becomes a means of understanding the nonhuman other. Wolfe, for instance, has questioned the ontological distinction between human and animal, calling for an expansion of the definition of "human" to include animals.¹¹ In *Before the Law*, he asserts that the difference between the animals that humans "kill" and the animals that humans "murder" is whether the animal victims (human or nonhuman) are considered to be part of a human community. The distinctions between "wild animal" and "pet" likewise are based on what the relationship is between humans and animals. In *When Species Meet*, Haraway's discussion of companion species takes off from this idea. She writes, "Companion species also point to the sorts of being made possible at interfaces among different human communities of practice for whom . . . 'love of dogs' is a practical and ethical imperative in an always specific, historical context" (Haraway 134). The "sorts of being" suggested here are ones that consider companion species as a part of the human family unit. The agency of companion species is assumed; their welfare becomes their right, rather than a privilege granted by their keepers.

In these newer contexts of animal studies, theories such as Wolfe's and Haraway's illustrate how separate spheres between animals and humans might be acknowledged without becoming oppressive or unethical. Similarly, current theories of "entanglement" offer new ontologies that highlight the complexities of being in ethical relation with the nonhuman. Lori Gruen's notion of "entangled empathy," for example, describes the complexities inherent in

¹¹ Wolfe does not want a completely flattened ontology, wherein all life is an "undifferentiated singularity" (104). He believes what is useful about biopolitical thought is that it "articulate[s] the disjunctive and uneven quality of our own political moment" (104). When animals are considered part of, or capable of being part of, a human community, then they are agential individuals rather than a part of a collective species. Carey Wolfe, *Before the Law: Humans and Other Animals in a Biopolitical Frame*. U Chicago P, 2013.

promoting relational agency as an ethical model of human/animal relationality. Gruen summarizes current conversations about animal rights, highlighting what she considers the problems with humanist and feminist responses to ethical human/animal relationships (203). Gruen's alternative to these perspectives is what she calls "entangled empathy," a type of posthumanism that can build meaningful relationships with others without trivializing difference (204). She elaborates on this concept by talking about how our relationships with all life forms have various levels of tangibility, ultimately suggesting that "a recognition of these relations has important epistemic relations . . . [but] not all relations are ethically equivalent" (Gruen 218). They are not ethically equivalent because it is not possible to connect directly with some forms of life. Gruen believes that direct connection, created through empathy with others, is necessary to form "direct *ethical* relation" (220). Indirect ethical relations cannot achieve the same level of equivalency. Entangled empathy involves both affect (pervasiveness of emotion) and cognition (recognition of unique perspective). Gruen makes clear that entangled empathy is not just placing oneself in another's shoes. It also gaining as much information about the other as one can (221). Through this dual process one can arrive at an ethic that allows a considered way of forming relationships with the nonhuman.

Although I find Gruen's criticisms useful, I am building from arguments such as hers, Wolfe's, and Haraway's to argue for a neo-humanist ethic in speculative ecofiction that acknowledges the position of power that humans occupy in relationships with animals and inanimate objects. These critical conversations all arrive at relationality as a series of connections, always a part of a larger series of material relations, and they suggest a burden of responsibly on humans to translate this ontological relationality into ethical relationality. I believe that such an ethic surfaces and is troubled in speculative ecofiction, though it is most oftentimes not explicitly named; these novels allude to neo-humanist networks through creation of situations demanding "ethical relation" to nonhumans who are difficult to empathize with, by mixing human/animal natures, and by complicating our definitions of "the human." Speculative ecofiction decenters the human and emphasizes nonhuman agency. Offering possibilities for entangled empathy, this body of fiction imagines a neo-humanist ethic based on human stewardship.

But what do I mean by "stewardship" when I claim that speculative ecofiction offers a space for demonstrating the possibilities of relational agency in which humans focus on stewardship rather than control? I mean that while fictions about worlds free of human power dynamics do exist, speculative ecofiction tends to focus on models of stewardship wherein the coexistence of humans and nonhumans is dependent upon relational agency. Speculative ecofiction uses human stewardship to promote a neohumanist ethic that acknowledges the agency of the nonhuman while admitting the *responsibility* that humans have to the other inhabitants of the world. The root of stewardship, in my conceptualizing of the term, is a sense of responsibility for the actions of the human race and their enduring effects on the planet. Human stewardship is the ability to use knowledge of science and technology, such as genetic engineering, in order to facilitate the flourishing of all other species on the planet.

"Stewardship" is a loaded term, recently fallen out of favor in critical environmental discourse because of its connection to the idea of human dominion as it is used in religious contexts. However, I think that it is an appropriate term because of what it suggests about the responsibility humans have to nonhumans. This responsibility is the foundation for how speculative ecofiction positions humans as a part of nature, rather than apart from it. Humans have an unequal balance of power in any interspecies relationship. Therefore, a flourishing relationality between species requires an ethical foundation for the treatment of nonhumans. Stewardship is a rightly criticized term, but it is foundational for ethical relationality because of its value in critical environmental conversations about the conservation, protection, and rehabilitation of nature. Therefore, I will attempt to unpack its historical, cultural, and social uses, and arrive at an understanding of its significance in speculative ecofiction.

According to the Oxford English Dictionary, the first recorded use of the word "stewardship" was in 1465 used to denote the role of steward that a man had to a specific town (OED). Biblically, the term didn't appear until the 1526 William Tyndale translation of the Bible in the Gospel of Luke (16: 2); "Geve a comptes off thy steward shippe" (OED). In this use, the steward has to give an account of his management to a rich man. The steward, given authority to manage wealth, but not to be the owner of that wealth, lays the foundation for the responsible nature of the steward in later iterations. It wasn't until the 1930s that the ecclesiastical understanding of stewardship really began to gain traction (OED). Stewardship promotes the idea of moral responsibility, oftentimes designated by belief in or fear of the divine, for ethical relationality. I am interested in this divine mandate of stewardship insofar as to it attempts to instill a sense of responsibility in humans by the suggestion of inescapable consequences. Because God owns the world, humans are in his image to act as stewards, to care for all of creation in the place of God. This idea of Christian stewardship is often what people associate with the term stewardship today. According to Christian scholar Richard Bauckham in *Living* with Other Creatures: Green Exegesis and Theology, the origins of stewardship are found in the

Book of Genesis wherein humans are granted "dominion" over land and creatures (3). Bauckham also says, "Stewardship here has acquired a late-twentieth-century content, along with somewhat chastened and humbled aims by comparison with the technological confidence it expressed in the seventeenth century" (61). In these Christian faith-based understandings of stewardship it is divine mandate that sets humans both apart and above animals and the environment, so their care is both a right and a privilege.

However, there are other faith-based definitions of stewardship that emerge from the intersections of faith and environmental discourses. In a collection of essays titled *That All May Flourish* edited by Laura Hartman, religious scholars respond to specific religious ideas and environmental damages then dialogue with each other about their different perspectives. This collection shows the intricate nature of faith-based environmental ethics, and it also sheds light on non- ecclesiastical understandings of stewardship. One of the important take-aways from this collection is that "the Western hierarchies of value associated with other-than-human natures, while universalizing, are understood in fact to be *highly particular*...they restrict the attribution of agency, intentionality, and communication to human actors" (Hannis and Sullivan 281). These restrictions limit what stewardship can be, but through the consideration of other faiths, a more inclusive definition of stewardship, fitting for the complexities of relational agency, can be established. Two other scholars in this collection, Sarah Robinson-Bertoni and David Cooper suggest that Daoism and Islam have something new to add to current understandings of stewardship, saying:

The older thought requires us to view human beings as creatures that belong to a natural order—one conforming to divine will or *dao*—from which they are able, nevertheless, to

deviate, and with destructive effect. But it is to view them, as well, as beings with a special responsibly—to restore and conserve what they have destroyed, to tend or nourish other living beings, and to ethically and responsibly engage with the natural world (120-121).

This is an understanding of stewardship that suggests that humans have a special place as a part of nature, that according to divine mandate they have a responsibility to "the natural world." While I do not agree with the divine mandate of any of the discussed faith-based understandings of stewardship, this example does a good job of discussing the "special responsibility" that humans have. This responsibility arises as a result not of divinity but of power. It is human responsibly, as a result of the tremendous power that we wield, to act as stewards in the way that Robinson-Bertoni and Cooper describe.

Emerging from the Christian ideologies of dominion over nature, "stewardship" is further complicated by its historical use in United States law in regard to Native Americans. According to the Department of the Interior's Indian Affairs page, "The federal Indian trust responsibility is a legal obligation under which the United States 'has charged itself with moral obligations of the highest responsibility and trust" toward Indian tribes (*Seminole Nation v. United States*, 1942)" (DoI). This trust has been broken multiple times by the United States government over the course of its inception in 1831. One way in which this was broken was in 1886, when the Bureau of Indian Affairs (BIA) and the United States Government designated North American Native peoples as "wards of the state" and so government "stewardship" of other peoples was legalized (Miller). This case was brought before the Supreme Court about a manslaughter charge. Judge Miller ruled that Native nations exist in "a state of semi-independence and pupilage, it has the right and authority, instead of controlling them by treaties, to govern them by acts of Congress: they being within the geographical limit of the United States" (375). This ruling is symptomatic of how the United States views Native American Nations. As recently as 2014, Republican Congressman Paul Gosar from Arizona was recorded saying that American Indian Nations are "wards of the federal government" (Toensing). This use of stewardship was for the sake of exploitation of both people and land. Humans cannot and should not act as stewards to other humans. This is, again, not due to exceptionalism, but rather an issue of power, and delineating what that balance of power looks like among humans. Humans cannot act as stewards for other humans because they are *responsible* agential beings, fully cognizant of their connections to others. To deny another human their agency perverts any sort of ethical relationality that environmental stewardship attempts to establish.

On the other hand, the laws governing the management of forests in the United States, be those private or public, administered by the National Park Service, or by private landholders, the definition of environmental stewardship has remained constant since 1990 when the Forest Stewardship Program was implemented. This code, "Title 16 Conservation—Cooperative Forestry Assistance," is aimed at providing incentives and guidelines for the management and maintenance of US forests. This code discusses forestry stewardship as landowners getting assistance to "actively manage their forest and related resources" (§ 2103a). This language promotes stewardship as management and conservation of private lands. In 2005, the EPA Innovation Action Council released a tract called "Everyday Choices: Opportunities for Environmental Stewardship" where they defined stewardship as "all parts of society actively take responsibility to improve environmental quality and achieve sustainable results" (EPA i). In this definition, the burden of responsibility is placed on "all parts" of a society rather than targeted at specific communities such as landowners, shareholders, or private institutions. Environmental stewardship is still defined in terms of sustainably, but there is also the added element of "environmental quality." This nebulous phrasing suggests that there should be a quantifiable way of evaluating if human stewardship is paying off, a direct result of the care shown by all parts of a society. These legal definitions of stewardship are all selfish in regard to what that payoff will be. If we take care of the environment, if we acknowledge are responsibility to it, then we will ensure "our air is safe to breathe, our water more pure, and our land better protected" (EPA iii).

Presently, environmental stewardship is used by government agencies like the National Institute of Environmental Health Sciences (NIEHS) to mean the implementation of sustainable practices through the use of "environmental management systems" (EMS) that monitor the use of environmental resources by humans (NIEHS). The EMS also regulate the use of resources, and when "environmental quality improvements are feasible," seeks to exceed any other regulations and requirements in place (NIEHS). This environmental stewardship attempts to connect the issue of sustainability to human health and happiness. In doing so, they demonstrate the connections between man and environment, providing an answer to the question "Why should we care?". One way they do this is through the NIEHS newsletter, *The Environmental Factor,* which, among the standard sections discussing awards and community impact, also has a section titled "Papers of the Month" where editors provide brief abstracts of published academic essays that might be interesting to their readership. For example, in June 2018, one of the featured papers concluded that fracking was linked to immune system damage during early childhood (Amolegbe). By exposing the public to the consequences of environmental degradation, they are able to push their version of environmental stewardship, which is essentially a sustainable design model of environmental resources.

However, not all American scientists see stewardship as sustainability. In fact, some see it as another way to promote human exceptionalism in a way that denies the interconnections between man and nature. In *The Edge of Evolution*, biologist Ronald Edwards bases his close reading of *Doctor Moreau* on an understanding of stewardship as a way of treating the nonhuman that relies on the same framework as human exceptionalism. He says, "And even better, now the good-of-animals stewards and the good-of-humanity exploiters can but heads all day long...The whole construct is intellectually empty, logically supporting nothing but available to justify anything" (Edwards 9). Edwards' vehement denial of stewardship as nothing other than a self-aggrandizing way for humans to promote themselves outside of nature or animal-being is common in many of the posthuman, indigenous, and postcolonial discourses I discuss in this chapter. However, I believe that "stewardship" is so entrenched in contemporary critical conversations that it can still be useful in discussing the power dynamics between humans and all other beings. The authors of speculative ecofiction rework this domination model of stewardship in ways that ethically reconfigure our understanding of stewardship as care with, and responsibility to, the nonhuman.

Positioning Humans with Animals

In the first chapter, I argue that the foundations of speculative ecofiction in the United States were concerned with an increasing reliance on technology, from the industrial revolution to the Cold War era. From these foundations emerged a cultural fear of mankind destroying itself through its own pride and reliance on science. I use H.G. Wells's *The Time Machine* to frame my discussion of how speculative ecofiction emerged from these anxieties. I then move to an examination of J.G. Ballard's *The Drought* as a work of speculative ecofiction that uses climate change as a pathway to new configurations of interspecies relationships that do not model ethical relationality. I end this chapter by examining Ursula Le Guin's *Always Coming Home* and Joan Slonczewski's *A Door into Ocean*. These novels show the late eighties and early nineties as the decades when speculative ecofiction is firmly established in the United States. They demonstrate the ontological and ethical parameters of being *in relation*. They suggest that self-awareness of the privileged position of humanity is essential to establishing and maintaining non-exploitive relationships with the nonhuman.

The second chapter examines colonial legacies in the present and future through the novels of two contemporary indigenous authors, Linda Hogan and Alexis Wright. Hogan's novel, *Power*, presents the perspective of a teenaged girl who witnesses the death of an endangered panther. Wright's *The Swan Book* also relies on the perspective of a teenaged girl who bears witness to death of the natural world she has barely experienced. These authors explore interspecies relationships between women and animals, implicating colonialist systems as responsible for their shared traumas. They write against these systems by situating animals as relatives and creating female protagonists that seek justice. When these protagonists are failed by their legal systems, they rely on an ethics of care to ensure the flourishing of their communities.

In the third chapter, things and cyborgs take center stage as I examine how relational agency complicates definitions of "human" and "animal." Karen Tei Yamashita's *Through the Arc of the Rainforest,* Joan Slonczewski's *Daughter of Elysium,* and Paulo Bacigalupi's *The*

Windup Girl question the foundations of human subjecthood. I argue that in these novels, the most foundational ethical imperative of personhood is the ability to care for others. Mostly illustrated as stewardship, this care is built on self-awareness and the ability to choose how one wants to exist in relation to others.

In the fourth chapter, I argue that Afrofuturist and Africanfuturist authors N.K. Jemisin and Nnedi Okorafor create worlds that celebrate human cultures and self-consciously constructed identities without limiting definitions of personhood. These authors model ethical relationality that is based primarily on care and the acknowledgement of difference. Okorafor's *Binti* series starts on Earth, but quickly moves beyond the planet to show the larger intergalactic ecosystem and humans' roles within it. Jemisin's *The Fifth Season* shows the destruction of the delicate relationship humans have shared with Earth. This novel provides another example of stewardship-as-dominion of the earth that fails because of exploitation. These authors show the complexities of establishing relationships outside the human species when compassion isn't at the core of those relationships.

CHAPTER 1: AGENCY AND ETHICS IN SPECULATIVE ECOFICTION

Authors such as Ursula Le Guin, Joan Slonczewski, and J.G. Ballard model possible futures wherein humans and animals coexist in configurations that promote nonhuman justice. Speculative ecofiction works to define responsibility as accountability by the human to the nonhuman, and it simultaneously seems to acknowledge the unequal positioning of the human subject with respect to the other. In this subgenre of speculative fiction, responsibility requires humans to seek understanding of the nonhuman and advocate for a more equitable relationality when possible. Stewardship, these novels imply, is one way to consider the responsibility humans have to nonhumans in dominant structures wherein nonhuman agency is diminished.

Since its inception, speculative ecofiction has combined fantasy and science fiction to draw attention to contemporary environmental concerns. In this way, speculative ecofiction can promote an ecocritical ethic that calls for a reconsideration of what human/nonhuman relationality looks like. It promotes a relational agency that decenters human expectations by acknowledging how nonhuman agency shapes human/nonhuman relationships. Ecocritics examine the ethical implications of storyworlds through analysis of the ethics that are demonstrated in-world by the characters, and the possible implications of these choices by authors. This cultural moment continues to exemplify the necessity for an ethical relationality that considers the impact of nonhuman agency.

Speculative fiction is built on the idea of *speculation*, the ability of a work of literature to consider the possibilities outside or beyond known reality. According to the *Oxford Research Encyclopedia*, the term "speculative fiction" is said to originate from Robert Heinlein's use in *The Saturday Evening Post* in February of 1947 (Oziewicz). He used it as a synonym for science

fiction. Since then the umbrella of the term has expanded, covering most literature genres that contain elements of the fantastic. The use of the phrase was popularized in the 1960s to the mid-1970s because of its connections to the New Wave movement. This movement included, among others, J. G. Ballard and Michael Moorcock who began chafing at the conventions of the genre (Oziewicz). Speculative fiction fell out of use after the New Wave movement ended but came back into fashion in the early 2000s as a catch-all term for works that included science fiction elements but did not fit snugly in the genre classification (Oziewicz). Literature that falls into this category includes writing that is set in the future, on other worlds, or is set on Earth but contradicts known facts or natural laws. Essentially, speculative fiction contains stories that take place in worlds that do not exist or that are presently unknown.

Speculative fiction uses the present moment's social and political concerns and imagines how those concerns might shape the future. Some speculative fiction looks at the past and reworks the tired terrains of fact and history to build an alternate reality, existing outside of time as we know it. These speculations are all centered on imagining away from present reality; be that in the form of exploring alternate histories or of creating new lands on the same world with a different structure. In his aptly named "Improve Your Thought Experiments Overnight with Speculative Fiction!" Ross Cameron suggests that one of the powers that speculative fiction has is the ability to persuade people to buy into moral arguments (32). The way that speculative fiction is able to manage this is by "making a moral lesson more salient through creating an extreme scenario that isolates and exaggerates the relevant features" (Cameron 33). This scenario-building is the primary way that speculative fiction is able to impart moral lessons relevant to the cultural and ecological fears of the present. In its present form, speculative fiction goes beyond the standard conventions of science fiction. Science fiction concerns itself with the potential dangers of science, usually examining the consequences of who promotes scientific inquiry and to what end (Oziewicz). Speculative fiction goes beyond inquiry to examine the possibilities of environmental exploitation, climate change, and planetary shifts in power. This genre has formal elements that can indicate speculative fiction but do not have to be present in order for a story to be considered as such. According to the *Oxford Research Encyclopedia*, these formal elements can include; the introduction of alien (non-Earth-based) intelligent life, the use of minor details to create estrangement for the reader while using major human characteristics to create familiarity even in a strange setting, prolepsis, analepsis, and crisis as the foundation for conflict (Oziewicz). Most important is the setting—the use of an alien world or land unknowable by the contemporary readers to explore issues plaguing the culture in which the speculative fiction is bring produced.

By creating unfamiliar spaces and worlds wherein familiar issues could be explored, science fiction is able to speculate on the consequences of human innovation and technological advancement. In 2014 Bryan Moore's "Evidences of Decadent Humanity" claimed that early science fiction, written between the Enlightenment and World War II, embraced many ecological themes, even if they never addressed ecological spaces directly (46). In the novels he examines, humankind is brought either to the brink of apocalypse or beyond it through their own hubris, or humans are just another species among many, in no way special beyond the moment of our dominance as a species. Moore sees ecological values in early science fiction, but nothing beyond advocating for a reexamination of human attitudes toward the nonhuman. Science fiction establishes the ground-work for ecology, but never truly arrives at more than an anti-

anthropocentric worldview. Wells demonstrates what Moore calls a "Darwin-based rejection of anthropocentrism" that displaces the human without affirming the animal (Moore 56). Moore examines early science fiction novels and films as anti-anthropocentric precursors to ecological science fiction of mid-to late-twentieth century authors such as Kim Stanley Robinson, Ursula Le Guin, and Octavia Butler.

These early speculative novels decentered humans as a warning against fully embracing secular humanist values. Through his tracing of the roots of the ecological in science fiction, Moore highlights another trend woven through anti-anthropocentric science fiction narratives, that is, "a warning against too much scientific hubris" and "the out-and-out ravaging of the earth for private gain" (51, 52). While these values promote an examination of what it means to be human, they do not affirm nonhuman agency. Instead, these early novels focus on the diminishing of humanity at an uneasy alliance with the nonhuman as a consequence of hubris. The ecological values found in these early texts pave the way for the creation of speculative ecofiction that considers nature and the environment directly. One novel that Moore discusses is HG Wells' *The Time Machine* which warns specifically against fighting a war against nature. It does this by suggesting that any sort of war on nature will have disastrous or world-ending consequences for humanity.

It is also important to note the role that disability plays in illuminating the ways ethical relationality is mobilized, especially in novels like *The Time Machine* and *The Drought* that use disability as plot devices that tie disabled human bodies to the loss of reason and logic, and the degradation of the environment itself. An important intersection for the topic of relational agency and speculative ecofiction is growing field of disabilities studies. Over the last five years, there

have been an increasing number of disabilities scholars and ecocritics who are examining the tensions and pathways for collaboration between these fields. In 2017, Sarah Jaquette Ray and Jay Sibara edited a collection titled *Disabilities Studies and the Environmental Humanities:*

Toward an Eco-Crip Theory. This collection gathered foundational texts of this emerging field, including Matthew Cella's "The Ecosomatic Paradigm in Literature" and Ray's "Risking Bodies in the Wild: The 'Corporeal Unconscious' of American Adventure Culture." These texts show the commonalities between the two fields (such as systems of oppression and a desire to live in ethical relation) and also point to the challenges of bringing them together. Ray suggests that there are two challenges. The first is shattering the connection between able-bodies and thriving environments and the second is eliminating the bias against technology that environmentalists feel keeps them from a "genuine connection" with nature (60). As an example, she discusses popular reality shows that require participants to give up technology to fully risk "wilderness." She suggests that narratives of risk promote an aggrandizing perspective of the white able-bodied male confronting the environmental virtue, its attachment to the abled body will continue to restrict the [environmental] movement's potential for influence" (62).

In the fiction that I discuss, the characters that adhere to the false equivalency of between abled bodies and environmental health see their beliefs destroyed when political and governmental systems collapse. Likewise, Sunaura Taylor's book *Beasts of Burden: Animal and Disability Liberation* discusses the systems of oppression that control both disabled humans and animals. Taylor says, "Unless disability and animal justice are incorporated into our other movements for liberation, ableism and anthropocentrism will be left unchallenged, available for use by systems of domination and oppression" (20). Setting about to prove this point, Taylor confronts the way dehumanization is achieved through animalization and suggests that disabled subjects can insist on their humanity without "denying our very own animality" (110). Further, she explains that animals and disabled humans are devalued through ableism. In an interview about her book, Taylor said that humans and animals "lacking in various capacities—from rationality, to language, to walking upright, to being physically independent... leads to a justification of exploitation" (Gressel). This exploitation is driven by capitalist ideologies and promoted by individualist rhetoric that ignores interdependency between all beings (Taylor 145).

Although she is interested in liberation, Taylor's focus on interdependency runs parallel to my concerns about agency and relationality. In this chapter, disability shapes how human characters are perceived by other humans and how well characters are able to adapt to dramatic shifts in their environments. Wells's *The Time Machine* ties disability to the devolution of man—the Time Traveler suggests that the Morlocks are both blind and allergic to sunlight and the Eloi have the mental maturity of children—and the superiority of the nineteenth century white male. In Ballard's *The Drought* disability is tied to the loss of environment, community, and rationality. As a result of these losses, civilization collapses and a new order is imposed by the disabled characters of the novel.

The Time Machine examines stewardship and relationships with the nonhuman by focusing on the diminished status of humanity after humans completely dominated the earth. In the introduction to the 2002 reprint of Wells's novel, Ursula Le Guin says, "Science fiction is almost the only kind of story that ever really admits of a world not dominated by human beings" (xv). The world shown in *The Time Machine* is a future version of Earth, wherein the main

character, the Time Traveler, believes the nineteenth century to be the high of human technological and spiritual innovation. Although the world of the future has evidence of extreme human manipulation, nature has reasserted itself and provided chaos in what was once the orderly and controlled environment that the Time Traveler sees around him. There are no longer weeds, and several species of four-legged animals have gone extinct (Wells 26). The changes that happened to the different branches of the human race occurred because once they reached the pinnacle of evolutionary might, they became lazy and began lacking ambition. This led to a devolution and separating of the human species into two, the Eloi and the Morlocks.

By projecting forward in time, this novel warns its readers against allowing themselves to become too proud of their accomplishments or else they might find themselves in the future that the Time Traveler visits. In this future, the Time Traveler's humanity is defined through affection and pleasure in violence. He begins to understand future humans in terms of Darwinian evolution. He believes the Morlocks to be even less than the Eloi because of their cannibalism and their appearance. He describes them as "human spiders" and "human rats" with "nauseatingly inhuman...pale, chinless faces, and great lidless, pinkish-grey eyes!" (38, 45). Their appearance manifests their inhumanity, groping about in the darkness, controlling the machines, and using the remaining aristocracy as a food source (46). The Time Traveler is unable to see himself as a part of them, he is, however able to identify with the Eloi. Although there are times when he does refer to them as "things," he does befriend a woman named Weena whom he rescues from drowning. He describes her as "exactly like a child" (35). By calling her a child, he grants her more agency than the Morlocks. Even when he compares the Eloi to cattle, he makes sure that he phrases the comparison as a simile (46). Of Weena he says, "She always seemed to me, I fancy, more human than she was, perhaps because her affection was so human" (51). The ideology behind his perspective is one that insists on an intrinsic humanness that the Morlocks lack. While the Eloi are *like* animals they are not animals, whereas the Time Travel distances his own humanity from the Morlocks as much as possible.

The Time Machine establishes some of the common tropes of speculative fiction that make it particularly generative for the discussion of ecological concerns. Among these are the impact that humans have on the very structure and shape of nature and the cautionary examination of the posthuman world. In this instance, the posthuman is revealed to be a nebulous term because the descendants of humanity are still very much present, but not in a way that the Time Traveler is able to accept as human. Although the narrator does not speculate on the natural manipulation that must have happened before the decline of humanity, he does suggest that humans finally "won" their war on nature by eliminating whole species for their own designs (27). This sort of manipulation crosses the line from stewardship to control. This cycle of control continues through the relationship between the Morlocks and Eloi. Although this novel focuses on humans, it sets the stage for speculative ecoficition that looks to the global and environmental consequences that human power has for human/animal relations. The consequences of human domination are seen in this novel by allowing the reader to skip over the moment of crisis that created this world and directly into the fallout.

In speculative ecofiction, crises emerge from human culture and from natural phenomena that drastically alter or obliterate the known environment. The founding novel of Western ecocriticism, Carson's *Silent Spring*, relies on apocalyptic tropes to structure her narrative. According to Greg Garrard, these tropes are an ignored warning presented with absolute authority, danger already present and imminent, and no way to reverse the crisis that provides the foundation of the text (95).¹² He believes that apocalyptic rhetoric is a necessary part of environmental discourse, but he also thinks that this rhetoric polarizes public opinion and might "produce the crisis it describes" (Garrard 105). This fear was a part of the cultural consciousness of the Cold War era that lead to a proliferation of apocalyptic narratives that used human-based crises as the foundations for their worlds.

During the Cold War, science fiction continued to explore the far future, offering possibilities for how humans might shape the apocalypse. One of the reasons the environment became such a concern in this era is because a culture of fear was created around the use of nuclear weapons. The devastation caused by nuclear bombs at the end of WWII generated concern for what humankind was capable of but also a sense of a reckoning. What would the consequences be for the destruction of so much life? Benjamin Kohlmann argues that the Cold War era led writers to explore nonhuman life in the absence of humanity (656). This was brought about through a cultural anxiety about nuclear weapons and increased by ecological awareness. The texts that Kohlmann examines, including Ray Bradbury's short story "There Will Come Soft Rains," show animals after the annihilation of humans still "governed by an implicit hierarchy of different kinds of consciousness" (663). These works still maintain unequal relationality even when humans are no longer a part of the projected future. The nuclear apocalypse becomes a way for authors to imagine how a world without human subjects. Instead, animals are afforded subjectivity, as Kohlmann demonstrates in his reading of the domesticated family dog in

¹² See Greg Garrard's discussion of the tropes for an examination of how they are used in a variety of ways to entertain and warn audiences against taking advantage of the earth in his "Apocalypse." *Ecocriticism,* Routledge, 2004.

Bradbury's short story. The dog "provides the main object for readerly empathy" (663). The dog garners the most empathy because he was once part of the human family, and his behaviors showcase the absence of humanity in a way that the other animals in this short story do not. Kohlmann believes by making the dog the empathetic connection to the human, Bradbury highlights the absence of humanity, implying that without humans, animal companions would be unable to thrive. This story suggests that humans are a necessary part of the ecosystems that they create, and that the empathetic connection between the dog and its long-dead owner leads to the dog's misery. In effect, Kohlmann's reading reaffirms the relational agency of the nonhuman, and demonstrates the posthuman future described in the story as a possible consequence of nuclear weapons.

Apocalyptic warnings appeared in a variety of Cold War speculative fictions, and they all called for an increased awareness of the impact of nuclear science—its consequences on humanity and its impact on the environment. Some were explored in terms of ecological catastrophe that disrupted time as well as space, leaving the animal inhabitants of our world largely unaffected after our demise. Others suggested that a direct consequence of human technological advancement would end with humanity's destruction through the intervention of hyper-intelligent nonhumans or through the arrival of alternate planetary lifeforms. In Western science fiction, the space race opened new avenues of exploration: of possibilities of life on other planets, and human exploration and colonization of new worlds. In previous centuries, the idea of human cross-planetary colonization was made popular by the Western colonization of South American and African territories by the British and the Americans. All these factors played a role

in how speculative fiction dealt with an increased interest in life beyond the planet Earth and beyond the human.

The Cold War Era encouraged the creation of dystopias, utopias, and alternate histories in science fiction. Alongside exploring future developments in human evolution, technology, and space exploration that are the hallmark characteristics of science fiction, speculative fiction in this era focused on how human and nonhuman relationships might be structured in the wake of apocalyptic (but not always nuclear) disaster. Post-apocalyptic ecofiction is one of the subgenres of speculative fiction and it deals with environmental catastrophe on the planet Earth and its impact on all life, through the eyes of a human or mostly human protagonist. Ursula Heise calls one of the "most troubling aspects" of post-apocalyptic science fiction to be its propensity "to do away with the complicated mechanisms of democracy and justice...and then symbolically inaugurate a new society whose freedom and peace inevitably appear like a slight of hand" (Heise 228). Not all novels in this subgenre do away with these complexities, but some smooth the way by eliminating bodies of governance and law to demonstrate different forms of power and subjecthood. Crisis becomes the tipping point for humans to consider the relationality as structured in the ethics and laws that they adhere to when governing bodies and cultural communities lose their significance.

Troubling Relations: J.G. Ballard's The Drought

One of the most influential authors of speculative fiction from this era, J.G. Ballard, demonstrates a burgeoning ethical relationality between humans and animals in his 1964 novel *The Drought*. Ballard's novels often situate characters on the brink of an apocalypse dealing with the morality of the whole human species and the collapse of rational and empathetic relationships between humans. In this novel, the crisis that leads to the drought is widely understood. The narrator explains, "Covering the off-shore waters of the world's oceans was thin but resilient mono-molecular film...generated within the sea from the vast quantities of industrial waste discharged into the ocean basins over the last fifty years" (Ballard 47). There were efforts made to change the situation, but of course, by the time people hoped to do something about it they were too late. Because of this film, water could not enter the atmosphere, and thus it could not rain. The elimination of the barrier is impossible, and so humans are trying desperately to deal with the fallout, quickly realizing that lack of cloud cover and lack of water mean that most parts of the world are uninhabitable, and that the lakes, rivers, and ponds are evaporating very quickly (45). This drought is the impetus for the main characters in the novel to adopt new ways of inhabiting the world and restructuring their relationships with other species.

The main narrator, Doctor Charles Ransom, understands himself as a patriarch of a core of humans that he cares about. Ballard deliberately names his characters using literary allusions or architypes. In naming the doctor "Ransom," Ballard suggests that the he is the exchange necessary for the debt to be settled with the environment. By the end of the novel, Ransom's lonely walk into the desert signals the start of rain, proving his namesake true. In his houseboat, Ransom has been hoarding water so that he can live for a few more years, but the decline of relational feeling in his community leads him to the decision to abandon his home. He sees all of those around him, even those in his family, as less than him. He feels that he has to take care of them because they are unable to do so themselves. These paternalistic impulses fester over the course of novel as the drought continues.

Cast adrift from the relationships that structured his life before the drought, he relies on Shakespeare's *The Tempest* as a guidepost to navigating the post-drought world. In fact, Ballard takes many of the of the characters' names directly from Shakespeare's play. Early in the novel, Ransom meets with a figure he dubs Prospero, a rich, androgynous, eccentric man named Lomax. This man has abundant access to water owing to an underground reservoir and a giant swimming pool. Ransom tells him about the state of the city outside of his mansion walls, that it is on fire, and that the balance of nature has been destroyed. Lomax replies, "Don't talk to me about the balance of nature! If it weren't for people like myself, we'd all be living in mud huts" (Ballard 62). Lomax refuses to adapt to the new world, claiming that he will remain as king over the ashes, regardless of what changes in the city outside of his walls. His sister, called Miranda, embodies, for Ransom, the madness of the new order of things. She, Lomax, and Quilter stay behind in the city of Hamilton, even after he tries to get her to go with him to the ocean's edge, where he has heard that there are still human cities. The doctor has cast a mentally disabled man named Quilter as a Caliban figure. (As his name suggests, Quilter is able to patch a community together by the end of the novel.) There is a sylph-like boy who lives on what remains of the river named Philip, whom he likens to Ariel. At the end of the novel Lomax is described as "a demented Prospero examined the offspring of his violated daughter" (228). When Ransom kills him, his death solidifies the destruction of the world as it once was. The collapse of civilization is reflected in the breakdown of this metaphor that sustains the identities of the people that it embodies. Once the metaphor disintegrates, the characters are free to create new relationships with nature.

The character of Philip Johnson embodies a connection between human and nature that the narrator implies is only viable because of a disability that leaves him unable to fully become part of human culture. When he is introduced Ransom says that he has known the boy for years and frequently describes him as a "foster child of the river and its last presiding Ariel...part waif and part water-elf" (Ballard 33). Philip is also described as, "a starveling of the river-ways," a "Ulysses of the waterfront" and a "landlocked mariner" once the drought begins (34). One of their first encounters, pre-apocalypse, was Philip requesting that the Doctor help him tend to an injured owl. In the present of the story, Philip is asking assistance in rescuing an oil-drenched swan. The doctor describes himself as a sympathetic caretaker to Philip, one who provided him food in winter and taught him a bit of reading and writing. Because of this, Philip goes to him for help with the swan and is told that "there has got to be an order of priorities" with the implication that helping the swan is not anywhere near the top (35). Philip demonstrates on the trajectories that that this novel takes for considering an ethical relationality. His distance from community allows him to focus on the maintenance of the animals struggling to survive in the river. Because he shares a home with these animals, he is better able to care for them when they are injured. Throughout the novel Philp demonstrates that forming strong codependent relationships with other animal species is essential for human survival.

This novel promotes stewardship by suggesting that the preservation and maintenance of the human species is dependent on empathetic links between humans and animals. As the moment of crisis reaches its peak, it becomes clear that Catherine is one of the main characters able to maintain her sense of selfhood and acknowledge her dependence on the lions that she cared for before the drought. Ballard first introduces her as a zoo worker who considers opening the lions' cages to help them survive. She does so, and later in the novel the sight of one of these lions encourages the characters, having been away for a decade, to go back to their city. On the return journey, Ransom notices changes in Catherine that he not recognized before. He describes her as being revived by "the empty savannahs and the quickening pulse of the desert cats" (186). Her connection with the wild cats only grows stronger as they continue. After ten days of their journey back to the city have passed, she only responds to "the cries of animals at night" (198). After Ransom abandons her and Philip, she disappears from the story only to reappear at the end of the novel with Philip and the lions, driving the lions ahead of her with a whip (232). Unlike Ransom, Catherine adapts to the world post drought without losing her identity. Her connection to the lions that have managed to survive the drought for the past ten years allows her to remember both who she was and who she is now that the lions are the dominant predators. She becomes part of their pack, asserting her dominance with the same methods that she used when she cared for them in the zoo. By the end of the novel it appears to Ransom that she, Philip, and the lions have formed a pack so that they can find water together.

Ballard uses the characters of Philip and Quilter to simultaneously reinforce and resist ethical relationality. In *The Ecological Other*, Sarah Jaquette Ray warns against making (human) bodies battlegrounds for environmentalism because social hierarchies are reinforced when literature decides what bodies are good or bad for nature. Both Philip and Quilter suffer from disabilities. Ransom, as a doctor, makes it clear that he believes them both to be developmentally disabled. According to Ray, the primary focus of environmentalism's "denigration and blame is the disabled body" (6). She explains that the disabled body becomes a reflection of the world outside of it. Ray says that the disabled body underpins other types of ecological othering, including "racial, sexual, class, and gendered othering" (6). Ballard resists this through Philip who does not lose his compassion for nonhumans or his ability to deftly adapt to immense changes in his environment. His disability allows him accommodate humanity's decline while still maintaining his identity. It is important to note, however, that Ballard still engages in "othering" the main characters that are not Ransom by portraying the women as weak or mad and describing Philip's "dark face, like an intelligent savage, filled with a strange child-like hope" (Ballard 178). This is emblematic of Ransom's paternalistic worldview which models a form of stewardship that ultimately results in failure.

These ways of othering reaffirm the human social hierarchies through which Ransom maintains his sense of identity. The characters Quilter and Reverend Johnstone reaffirm the social hierarchies that award power to the white, able-bodied male. Quilter's body is disabled, and through Ransom's characterization of him, he appears grotesque and unintelligent, a subhuman servant of the Lomax family. The last act that we see him perform before he disappears from the narrative for half the novel is calling out to Philip and releasing the oil-covered swan that Philip had rescued earlier. On their way out of the city, they hear a "demented voice" and then see Quilter carrying the flapping swan in his arms (Ballard 118). The swan "lifted vigorously, its long neck stretched like the shaft of a spear towards Philip Jordan" (118). It flies overhead, and Quilter stands on the opposite bank of the river watching them disappear. Quilter becomes the specter that haunts Ransom on his return trip back to Hamilton, appearing in the crushed skulls of a heard of dead cattle bones, in a bus full of mannequins, and as a solitary figure always ahead of him and out of reach. When he finally encounters Quilter in the flesh, the latter is an awe-inspiring figure cloaked in cheetah skins and over six feet tall. When Quilter gets

off his stilts, Ransom reassess him saying, "His broad dented face, with its wandering eyes set above the hollow cheeks, had changed little with the intervening years" (207). Quilter's children with Miranda share his skull structure, leading Ransom to describe them as "the children of the congenitally insane" (213). His stance shifts when he realizes that Quilter is in fact the one with the most authority now. Quilter has made a headdress out of the black swan that Ransom thinks is the same one that Philip had tried to rescue earlier. He wields the power of life and death over anyone who enters his territory and keeps Miranda, now grotesquely fat and beautiful, well-cared for in the swimming pool where she stays. At the end of the novel, Ransom surrenders himself completely to Quilter, hoping to find a place in his family as a brother/father figure, but ultimately heading off into the dunes to die.

Unlike Quilter, who manages to subvert the authority of the able-bodied white male, Revered Johnstone, the leader of the coastal city, reinforces traditional hierarchical values. He becomes a leader of his community by using his religious authority and physical strength to carve out a position of power for himself. On the beach, he believes that he has all the power. He is now "almost blind" and his face on the right side is "pink and hairless...a demented King Lear, grasping back at the power he had given to his two daughters" (167). The women have turned the settlement into a "rigid matriarchy," the implications of which are unclear except for the fact that Ransom will not be able to have a place there. Johnstone's disability prevents him from maintaining his power, and his lack of awareness about his loss of power implies his inability to survive in the remade world. His lack of bodily autonomy and his loss of vision causes an imbalance of power that reconfigures the shape of his community. The hierarchy had remained stable until he became disabled, at which point the power moved to his daughters. According to Ray, the disabled body in environmental literature reflects the state of the world outside of it. Thus, Johnstone's blindness is linked to the continued conditions of the drought, directly in fact, because he loses his sight fighting off people who wanted to take over his settlement. His power diminishes as the environment diminishes, without the able-bodied male at the helm, both humans and environment fall into disrepair.

However, the end of the novel suggests a type of flourishing that is possible without the domineering hand of the able-bodied male, in this way Ballard writes against the claim of the disabled human body reflecting the environment. Quilter becomes the most powerful person in the novel. Although he is not as directly tied to nature as Catherine, his swan headdress suggests that he understands that there has been a shift in how humanity needs to interact with the nonhuman. When Ransom recalls the time that Quilter crushed a dove in his fist, Miranda suggests that there was nothing malicious in it, just a demonstration of Quilter's affection. Ransom was hoping to suggest that the power the he wielded could destroy them, instead he reinforces Quilter's authority and ultimately decides to cede to it. Because Quilter understands the world differently, he can take care of his family without losing his identity. At the end of the novel, with Quilter firmly established as the authority, the last lines of the book say, "It was sometime later that he failed to notice that it had started to rain" (237). Rain finally makes an appearance as Ransom walks alone into the desert. With his decline, possibilities of life, rather than simply survival, enter the novel.

The end of *The Drought* suggests a new model for stewardship, and much like Ray posits, the "othered perspective" is the one that ends the novel (118). In her critical work, Ray calls for an inclusive environmentalism that doesn't just acknowledge "othered perspectives" but

that suggests that those perspectives might have different conceptions of environmental problems and solutions (181). Through Ransom, the mainstream solution is thoroughly explored and ultimately shown to fail. Quilter and Philip, both othered by disability, and Philip by race as well, end the novel by adapting to their respective communities. Ballard provides two models of interspecies relationality that restructure the hierarchical positioning of humans and animals. Both of these models rely on stewardship as the primary method for establishing an ethical relationality between species.

Humans as Part of Nature: Joan Slonczewski's A Door into Ocean

Crisis doesn't have to be the primary motivating factor for ethical relationality, although it does play a role in how most novels interrogate existing structures of power. One of the ways that these structures are questioned is through troubling the dichotomy between nature and culture. On the concept of nature, Karen Barad says that it is neither "a passive surface awaiting the mark of culture nor the end product of cultural performances" (183). In speculative ecoficition, storyworld that question what it means to have personhood shatter this dichotomy. Biologist Joan Slonczewski has written several novels that explore the possibilities of genetic engineering, ecological stewardship, and the deconstruction of polarities. Her novel, *A Door into Ocean*, explores the political and biological implications of a world whose human beings structure both the environment and culture on the tenants of altruism.

Slonczewski creates a utopia in which her female "Sharers" are a nonviolent, incredibly advanced, and non-hierarchical society that takes peaceful coexistence as its primary form of ecological being. In this society there is still an ethical distinction between humans and nonhumans—humans have full subjectivity and nonhumans do not. In her reading of the text, Susan Stratton says, "Humanity is determined on the basis of a species' capacity for ethical (nondominant) relations" (38). This distinction between human and nonhuman provides a framework in which human status is determined by a species ability not to just act independently, but to have a concept of morality in dealing with others. "Humanity" is no longer exclusive to *homo sapiens*. In fact, the early chapters of the novel deal with a more traditionally-structured male human asking the Sharers, repeatedly if they are human. One of the women, Merwen the Impatient, replies, "I believe you are as human as we are" (Slonczewski 24). She acknowledges their shared humanity, even though they do not share the same biological markers, also suggesting that they evolved separately from *homo sapiens* in the distant past. On the Sharers home planet, Shora, there is no land above water, so their bodies have adapted to living in the ocean, they have no hair, no male sex, and webbed hands and feet. The nature of their planet alters the very structure of their humanity, and with the advent of the more traditionally human traders from off world, they encounter nature shaped more dominantly by man.

Slonczewski's novel offers a feminist framing of patriarchal power structures and relationships between human men and women, but it also offers a reflection on which attributes separate the human from the nonhuman and why those traits are significant. On Shora, women are tasked with the stewardship of the planet. Through careful reproductive regulation and an intense awareness of the other species they share the planet with, the Sharers demonstrate an ethical relationality that acknowledges nonhuman agency. In this universe, there is another planet on which the Patriarch rules, Valen. On Valen, men and women live incredibly rigid and commodified lives. Everything, down to their genetic composition, has a monetary value, and those values determine how many children the women can have, as well as what social stratum of which people are a part. The Patriarch rules all humans, and because the Sharers have been considered nonhuman, they have not been held accountable to the system. This system strictly regulates how life is created and conducted on the planets under its control, resorting to nuclear annihilation when there is a perceived threat to the Patriarch's authority. Military from Valen are sent to Shora to bring their world under control and gage whether the Sharers are human.

On Shora, the Sharers are trying to decide if the off-world traders can be considered human as well. If they are human, and want to share life on the planet, then their voices would have to be heard at the Gathering after they reached adulthood. Over the course of the novel, one male from off-world named Spinel is adopted by the Sharers and allowed to take a self-name. This transition from childhood to adulthood is what convinces the rest of the Sharers that the Valen people are human, because he can learn compassion. Near the end of the novel, Merwen says, "There is a difference between a seaswallower and a human. A human sees herself in the mirror ...I am a selfnamer; that is, I know myself not only in the mirror of the ocean, but in the mirror of every living pair of eyes" (Slonczewski 367). For the Sharers, this is the definition of humanity, not just self-recognition in a mirror, but the ability to see the self in others. Humanity is distinct from "lesser sisters" because of this ability to empathize with others. This humanity comes with a price; to be human is to be responsible for the web of life that structures Shora. The Sharers contemplate if this responsibility extends to the Valens who are not of the planet but have demonstrated that possibility of humanness through people like Spinel.

This interconnectivity resonates with relational agency by promoting a feminist ethic of stewardship. Among other things, this ethic promotes the situated instead of the universalizing

principals of a distant, universalizing philosophy embraced by the Valens. Relational agency is seen through the Sharers who acknowledge the interdependence of all life. Without them, the entire ecosystem collapses. In this novel, the welfare of the planet is dependent on the Sharer's science and technology, such as genetic engineering, to facilitate the flourishing of all species. In this way, the people of Shora can thrive without exploitation of their natural resources or the destruction of any part of their ecosystem.

Empathy is one of the markers of humanity in this novel. It is through empathy that humans can understand their responsibility to their ecosystem. If the Valens are considered human adults, then they must be welcomed as sisters and made part of the "web" that connects all the planet. If they are not human and have no place in the ecosystem of Shora, then they must leave the planet as to not upset its delicate balance. Sharers meet yearly for "Gatherings" where they democratically discuss major issues that affect Shora. During one of these meetings, someone asks, "How can you say that Valens are children and not just primitive creatures? Lesser sharers" (Slonczewski 80). This question is asked of Merwen, who remains one of the strongest advocates for the humanity of Valens throughout the novel. Ultimately, Merwen convinces the other Sharers that they are human, just very sick and childlike. What marks them as human is their ability to empathize with others. With the invaders this means "sharing learning" in scenes where both Valens and Sharers are freely exchanging information in order to gain deeper understanding about their planets, respective cultures, and various technologies.

"Lesser sharers" are understood to be a part of the web that creates their world, but they are not considered human because they are not self-aware. The Sharers have a responsibility to the nonhumans of their planet. This responsibility is the maintenance of the ecosystems that allow all life to flourish in a controlled fashion, and the storage of genetic data on all of the occupants of Shora. Usha the Unconsidered, a doctor and Merwen's wife in the novel, reflects, "Shora had said that Sharers must share care for all the lesser sharers as for themselves. The ultimate library was kept within the raftwood: every living cell of every raft held a library within its genes" (Slonczewski 267). In this section, Usha is attempting to recreate the clickflies that the Valens had exterminated almost entirely with pesticide. The Valens did this because they discovered that they were used to communicate across the planet. Fearing that this was another way in which the Sharers could talk amongst themselves to report on any activity during the Valen occupation, they had them exterminated. From the few that managed to survive, Usha was able to create an immunity to the pesticide and speed reproduction in the clickflies genetic code so that they could repopulate the world. Although this was done for the sake of human survival, the clickflies themselves do not behave like preprogrammed robots. They have their own drive and agency. When the Valens realize they cannot be completely exterminated, they instead lure them to their occupied zones and dissect them to find out how they are used for communication. The Sharers never discover that this is happening, because the Valens do not use the clickflies to communicate. However, they do use them to spy on the communications across rafts.

The clickflies in this novel are a good example of one of the nonhuman entities that the Sharers are asked to "share care" for. Whether or not the clickflies were genetically created by the Sharers, or a native species to the planet genetically modified over time, they are essential to human health on the planet. The narrator says, "If every clickfly disappeared, learnsharing would be frozen, memory lost, and even time could not be measured" (Slonczewski 257). Clickflies can communicate with the Sharers via the webs that they create as well as their clicking, which

can be directly translated into words. Although they have been modified to serve as communicators between humans, they still have their own agency. Although the Sharers do not claim domination of the planet, they still acknowledge that they are responsible for the welfare of the planet and call those that do not have responsibility "lesser." Although clickflies do not have the selfhood and compassion that Sharers believe separates humans from nonhumans, they still have a right to life on their planet.

The Sharers are known as the protectors of life on Shora. Because they are human, they are obligated to protect the rights of all life on their planet. Although populations are controlled, including their own, to protect the balance of the ecosystem, every species on Shora has a right to life. The Sharers are responsible for the welfare of the whole planet, and they take this stewardship seriously. Although they are manipulating the genetic make-up of certain creatures, they do so in order to promote the harmonious coexistence of all the creatures on Shora. This is one way that Slonczewski shows ethical relationality. Even though the "lesser" sharers cannot voice concerns about how the Sharers shaped the world, their welfare is still considered before any action is taken to alter the planet. The Sharers acknowledge their relational agency and the essential roles that all lives play in their ecosystem.

Because all essential elements of their ecosystem are organic and living, Sharers are repulsed by inorganic matter. When the Sharers go to Valen to assess if they're human, they believe that it is their constant exposure to dead rock that makes them sick. Merwen tells Spinel, "Your speech cannot express what Usha thinks of this...object, the hovercraft. Like the servitor, it is made of 'dead,' of 'nonlife,' of material that has never known the breath of life" (38). Because of its lack of organic composition, Usha and Merwen refuse to interact with it. They associate the inorganic with death because their whole world is ocean and the only rock lies on the body of the ocean floor where they sink their dead. By doing this, they suggest that inorganic *things* are not capable of life. Although the Sharers are willing to acknowledge all life as a something to be protected, they do not believe that anything created of nonlife is capable of self-awareness, and thus of the protections and rights they provide to all life on Shora. Merwen discovers that the "protector" of Valen, an emissary of the Patriarch, is in fact created of "nonlife" material, a robot that speaks on behalf of the Patriarch with no will of his own. This knowledge horrifies her because she understands that the Valens and all other planets in the Patriarchy follow a being who is not human.

Slonczewski's novel examines what it means to be human and offers a relationality that suggests an ethical responsibility to all other life. The responsibility calls for an acknowledgement of the web of nature, and the understanding that compassion is what separates humans from animals, and life is what separates the human and animal from the mechanical. Relational agency is shown most clearly in the relationship between the Valens and Sharers but is also present in the structure of the Sharers' world. The ecosystem of Shora is still hierarchically structured, but it is based on entangled empathy. If any part of the web of life on Shora is upset, it effects the rest of the world. It is up to the humans to maintain that balance because they have the ability. It is also their responsibility to protect the rights of all those living on their planet. The lesser sharers could not look after themselves, but without self-awareness they would be unable to understand and react to environmental devastation and catastrophe brought on by other humans in the ecosystem. This is true of any ecosystem; adaptability and survival are the key tenants of biological nature. However, when humans are considered as part

of nature, their awareness and positioning within the animacy hierarchy gives them an ethical responsibility to react against any threat that might harm their ecosystem.

Building Human and Animal Communities: Ursula Le Guin's Always Coming Home

Always Coming Home by Ursula Le Guin shapes a world where relational agency points to an ethical relationality between humans and animals. This novel is constructed as ethnographic examination of the Kesh tribe woven through the story of a first-person narrator called Stone Telling and peppered with self-reflexive commentary from a narrator named Pandora. In this novel, the poetry, songs, stories, art, and other documents describe the structure of the Kesh people's society and their relationships with natural world. In "The Serpentine Codex" there is an explanation of how the society is structured into nine houses, five of the earth and four of the sky. The beings called Earth People include "the earth itself, rocks, and dirt and geological formations, the moon, all springs, streams and lakes of fresh water, all human beings currently alive, game animals, domestic animals, individual animals, domestic and grounddwelling birds, and all plants" (Le Guin 45). In contrast to these beings, those of the Houses of the Sky include wild animals that are not hunted for sustenance, most birds, and "any plant or animal considered as a species or in general human beings as a species, people tribe or nation; the dead, the unborn; all beings in stories or dreams; the oceans, the sun, the stars" (47). Note that the Houses of the Sky include abstract concepts and incorporeals as well as whole species. Individuals of those groups, if they have relationships with humans, are in the Houses of Earth. These house distinctions are noted to show how the tribe structures their schooling, commerce, community, and festivals. Their economy is giving-based, and they feel that war is childish, a

waste of life. This is due, in part, to their high infant mortality rate. In this storyworld, humans of the Kesh tribe create a community wherein human exceptionalism does not diminish nonhuman agency. They treat animal companions as part of their families and ask forgiveness of the deer they hunt for meat. The Kesh people base their culture on the preservation of their connection to the land and actively resist foreign influence.

Human life is given a higher priority than nonhuman life, but that value is placed in individual relationships. Among the Kesh people, humans still kill animals for food. An explanation of Kesh understanding of souls clarifies, "This cow that I now kill for food is cowness giving itself to me as food because it has been properly treated and entreated...and I that kill this cow am a name, a word, an instant of humanness and—with the cow—of being in general: a moment in a place: a relationship" (93). Humans need to kill the cow in order to survive, but the action of killing the cow itself forms a relationship. If this relationship is handled improperly, there are consequences for the human. A later section mentions one of the consequences as madness. Here we see the key struggle of relational agency. Although it might be necessary to kill a cow, if the proper ritual is not enacted there will be ethical consequences, in this instance, madness by shame or grief. There are not legal proceedings per say, but for terrible actions there is exile from the Houses, which in Kesh culture is synonymous with a death sentence.

Although the Kesh culture is almost utopian, the other tribes that are mentioned in the novel share the foundations of relational agency without the utopian ideal. One of the main characters of the novel, called Stone Telling, most often recounts her experiences among the "sick people" called the Condor. These people make machines and wage war, but worse of all in

her eyes is they do not see themselves as part of nature. The novel makes it clear that this sickness of the Condor people is the "sickness of Man," the society is patrilineal, dictatorial, totalitarian, and has a rigid hierarchy that devalues women to the level of animals and makes slaves of all people conquered by them. They call themselves "Dayao or One-People" seeing themselves as reflections of a god called "One." Only men have souls, whereas "women and foreigners and animals...are unclean, dirt people" made to obey and serve Condor men (Le Guin 193, 200). While the narrator lives in this community, she is acknowledged as one of Condor's daughters. As a result, she gains a slave who ends up befriending her, and attempts to acclimate to Dayao culture. At one point while Stone Telling is recovering from an illness she is told, "You are a human person now, not an animal" (343). Stone Telling understands that to be called an animal in the city is not a good thing, and on the same level as animals are dirt people, which she is also called throughout her time in the city. Although she understands the negative connotations, she never denies her status as "animal" or as "dirt person." To her these names indicate the relationships that she has to the people, both human and nonhuman, of the Kesh tribe. This is when she realizes how "sick" the Condor people are.

In this novel, the only time that law is mentioned explicitly is when discussing the punishments that Condor people met out to those that don't obey their laws. Unlike the Kesh, who govern through democratic meetings of Houses as needed, the Condor people have a very rigid military system for punishing those who disobey. Stone Telling says, "Everything was done because there was a law to do it or not do it, or an order to do it or not do it" (348). She goes on to say that those laws and order were never questioned, when things didn't go as planned only those who were meant to obey the laws were punished, usually by death by firing range or

electrocution. Because women and animals had no status, they had no rights beyond what men gave to them. In her journey to the city, Stone Telling is horrified to learn that they do not respect either people or animals in the ways her own people do. She realizes this when they kill a stray ewe, take its legs, and leave the rest of its corpse to rot without saying the proper words to acknowledge its death. The Kesh tribe does not use laws to force obedience and justify punishment. Instead, they rely on a social pressure and individual morality to keep their community thriving. Because the Condor faith is based on exceptionalist ideals, the Kesh inclusive relationships look better by comparison. They are not the only people who are thriving in the novel. Pandora's people, whoever they are, are also thriving. They are doing so with the knowledge of previous generations that can be found in the City of the Mind and are archiving and recording the traditions and practices of the Kesh people.

Le Guin's storyworld hybridizes different styles and genres to sustain its reality. This reality calls for a utopic mindset when reading Stone Telling's narrative, then asks the reader to engage in a different way when interacting with the ethnographer's notes on the collected lore, traditions, and histories of the Kesh people that are presented as collected research. This shift in perception actively calls the reader to interpret Stone Telling's story as a work of creative nonfiction. The utopian ideal that is suggested by her narrative is then bracketed by the understanding that it may not reflect reality as it was for the Kesh people. There is one section of the novel, quickly mentioned then left aside, where Pandora records the responsibilities of the Doctor's Lodge that lists one of those responsibilities as death of those who would not survive out of the womb. These children are left to die by starvation, they are given water but no food until they are dead. It is understood in Kesh culture as nature taking it course. This is only one of

the ways that the utopian Kesh community is undermined. The insertions of the narrator Pandora take up the larger project of suggesting that the utopian is a myth through her self-reflexive musings about how and why she is creating the text.

Always Coming Home, through the dialogic structure—direct contrast of interspecies community with nature and human superiority, and matriarchal and patriarchal lines of human relationships—demonstrates the ways in which relational agency shows the struggle for ethical relationality when the animacy hierarchy is deconstructed. Pandora's relationship between her work as an archivist, editor, and ethnographer give her sections a distance from the hardships of the Kesh people. In one section she reflects that "Civilization" cannot bear the weight of the information that it continues to accumulate. She says, "You may have noticed that the real difference between us and the people of the valley...There are not too many of them" (147). This allusion to their small population put the reader on the same footing as Pandora, inviting the reader to be a coconspirator in the study of these people. According to Pandora, they get something right, even if, as she frequently reminds the reader, they are uncivilized. She suggests that what they have right is that utopic way of thinking, that they have structured their entire worldview that there is nothing about being human that means they should be distant from nature. While Pandora considers the wilderness "messy," the Kesh people believe that they are a part of it. She says, "The civilized human mind's relation to it [wilderness] is imprecise, fortuitous, full of risk...All analogies run in one direction, our direction" (241). For Pandora the purpose of the text is understanding humans as a part of the wilderness—to imagine the connections between people and nature that go unacknowledged. The text aims to show those connections to make clear that human life is dependent on ethical relationality.

Le Guin and Slonczewski question ethical relationality by examining the definition of "human" and promoting nonhuman agency. Slonczewski's novel ultimately suggests that selfawareness and the capacity for compassion and cruelty define humanity. They both suggest that personhood carries with it a burden of responsibility to shape humanity to be a part of the environment they occupy. Both novels also show that relational agency isn't interested in completely flattening the ontological distinctions between human/nonhuman through the examination of different models of stewardship. Slonczewski's model of stewardship advocates for the agency of nonhumans without lessening the responsibility that humans have as environmental caretakers. Le Guin's stewardship pushes readers to consider humans as a part of nature by situating humans and animals in complex communities with competing ideologies and cultures. Both models make it a point to show the flourishing of both humans and nonhumans when nonhuman agency is consciously considered and accommodated by humanity.

The novels discussed in this chapter acknowledge that being human means being aware of the impact of both individual and communal actions on the world. Ballard also questions what the preservation of human culture and traditions might mean in the event of environmental catastrophe. His novel effectively models the ways that human neglect and domination of the environment can go wrong. Although his methods of stewardship more aptly model the traditional religious models of stewardship-as-dominion, he does show that there are other ways of existing with the nonhuman through empathy, whereas Le Guin and Slonczewski show those empathetic models from the start. These novels examine and redefine stewardships that allow for the mistreatment of nonhuman others, and the animalization of humans to justify mistreatment. Mistreatment is shown to be a human problem predicated on the models of stewardship that each novel examines. Ballard's novel weaves mistreatment and cruelty into the tapestry of everyday life both before and after the drought. His concept of stewardship uses divine authority and physical strength to justify mistreatment. Le Guin and Slonczewski model different types of stewardship side-by-side—domination and care—to show how mistreatment can be countered through ethical relationality. They do this through storyworlds that predicate their existence on the ideas of environmental catastrophe, nuclear fallout on Earth, and terraforming of other worlds for human occupation. They also use relational agency to suggest an ethical stewardship is possible in the real world through a conscious understanding of nonhuman agency and interspecies relationships hallmarked by entangled empathy. The foundations of these realities are built on interspecies relationships. It is through the empathetic understanding of humanity in relationships to the rest of nature that nonhuman agency can be acknowledged, and justice sought for those who are limited by current structural hierarchies.

CHAPTER 2: RELATIONALY VS. RELATIVES: INDIGENOUS AMERICAN AND AUSTRALIAN SPECULATIVE ECOFICTION

The legacies of colonialism persist in the treatment of human and nonhuman others in speculative ecofiction. Indigenous authors writing against and within the current structures of power address the traumatic double-vision that postcolonial and neocolonial people experience when their lands, cultures, and ways of living are assimilated or destroyed. Colonial occupations, deterritorialization, and the neocolonialism are trends that persist in speculative worlds— addressed sometimes directly, but often regulated to the background. Several indigenous authors from the Americas, Africa, and Australia writing in English such as Susan Power, Linda Hogan, Daniel Heath Justice, Ngugi wa Thiong'o, Ama Ata Aidoo, Ambelin Kwaymullina, and Alexis Wright thematically deal with the legacies of colonialism in the novels they write. These authors write along the margins of speculative ecofiction, some claiming the genre classification of science fiction, others ecofiction, all while identifying themselves as indigenous authors.

In an interview to promote his critical work, *Why Indigenous Literatures Matter*, Daniel Heath Justice (Cherokee) says that love is essential in the field of indigenous studies. This love goes beyond humanity to "love for the other-than-human relatives that we have in the world. A love for the world, for the land, for the waters, for the air. A love that is bigger than us, but includes us" (Sumac). He expands love capaciously, seeing it as a framework of compassion for the inclusion of all beings, human and nonhuman. This framework is shown in his collected fantasy trilogy, *The Way of Thorn and Thunder: The Kynship Chronicles*. In this story, humans are colonizing a new world and have to confront their own ambition and greed when realizing an ethic of reciprocity and care for the land. Justice uses conventions of speculative ecofiction to reflect and rework indigenous history and to present colonialism's enduring legacy. Justice

imagines a world where the Kyn, called "Folk," are connected to each other and nature because they have an empathetic connection to all beings, striving to maintain a relationship based on care with the "natural" world. On the other hand, the human society is hierarchically structured, heavily polluted, and devoid of natural resources. After the secrets about the history of the world are uncovered, the series ends with "We will change as all things change...We'll lose some of what we are, and gain other things, other ways, but we will endure...That's the way of life in this Melded World of Folk and Man" (Justice 609). The coming together of the Folk and the humans establish the ways that the world itself was shaped by the invasion, settling, and erasure of the Folk from this history of men. This series, like other indigenous speculative ecofictions, advocates for a better world based on care for others as the primary mode of ethical rationality.

Power by Chickasaw writer Linda Hogan and *The Swan Book* by Waanyi author Alexis Wright provide models of ethical stewardship of the kind that I claim is problematized in contemporary speculative ecofiction. These authors examine the unequal treatment of both humans and animals that is fueled by neocolonial and postcolonial modes of dominion and control. These novels, both written by indigenous women, deal with varying levels of discrimination and exploitation rooted in legacies of colonialism. They examine the impact of these legacies on relationships between humans and nonhumans. In these texts, human/animal relationships are strengthened because humans empathize and act equitably with animals and natural matter; humans recognize shared trauma caused by exploitation of natural resources and the disruptions of both human and animal cultures by social and political othering within hegemonic political and colonialist cultural systems. This human empathy does not suggest that human and nonhuman experiences are the same, but rather that the same powers are responsible for the exploitation of both. Hogan and Wright push back against colonial narratives of progress and profit by examining the material relationality lost in the name of these abstract values. Their novels highlight the consequences of human exploitation of nature and suggest models of stewardship that promote both human and nonhuman flourishing. Yet these novels also demonstrate how colonial legacies change the nature of stewardship as understood by traditional indigenous cultures, and as a result they complicate essentialist notions of traditional indigenous cultural values as well as interrogate "modern" and anthropocentric notions of social progress.

Over the last twenty years the feminist "ethics of care" theories have been used in critical discussions of the treatment of animals, often saying that humans should be compassionate toward animals and alert to the systematic causes of their suffering.¹³ The overlap of scholarship in this area typically discusses care and emotional labor primarily as women's work, and has in recent criticism explored the terrains where race and class intersect with environmental and animal rights concerns. To create a fuller understanding of what stewardship means in the larger context of this dissertation, it is important to understand how indigenous voices shape what it means to consider the nonhuman as relative and to care for nonhuman others. Powys Whyte and Chris Cuomo complicate definitions of stewardship by mapping out what feminist and indigenous ethics of care provide to environmental ethics. Feminist ethics of care emphasize that while "caretaking labor can be a fundamental feature of oppression...caring and nurturing cannot be dismissed as only or inevitably exploitative" (242). Caring labor is often associated with

¹³ For a detailed examination of feminist ethics of care theories in conversation with environmental and animal rights criticism see Josephine Donovan and Carol Adams (eds), *The Feminist Care Tradition in Animal Ethics*. Columbia UP, 2007.

female social roles, and so it is primarily through the examination of the gendered dimensions of political and social issues that caretaking is reconsidered.

Indigenous concepts of care emphasize some of the following: self-awareness in the context of a "web" of connections and collectives, an understanding of moral connections as motivating "reciprocal responsibilities," and virtues such as respecting elders, "attentiveness to environment, and indigenous stewardship practices" (Whyte and Cuomo 236). Whyte and Cuomo clarify that "here stewardship does not express human exceptionalism or control of nature, as it typically does in other environmental discourses" (238). Instead, it is about interdependence and responsibility. It is not just humans that have responsibilities; "a range of humans and nonhuman entities, understood as relatives of one another, have caretaking roles within their communities and networks" (239). In indigenous environmental movements, "care" is about learning from one's place in an interconnected network, and the responsibility that comes from being in those relationships.

Whyte and Cuomo say that care ethics are "grounded in virtues, practices, and knowledges associated with appropriate caring and caretaking of self and others...highlight[ing] the affective dimensions of morality, the inevitability of dependence and interdependence...and the relational and contextual nature of any ethical question or problem" (234). They point out that establishing care as a foundation for environmental ethics can be difficult because sometimes care for other human beings is not understood to be a part of caring for nature (235). Although feminist and indigenous care ethics offer strong foundations for environmental ethics, these scholars believe that there is more work to be done illuminating how an ethics of care shapes politics and policy (244). In the speculative novels I examine in this chapter, these ethics

inform the ways characters approach their roles as stewards and the shape the politics and laws of their communities.

Both Hogan and Wright address the political and environmental issues of specific communities by speculating on the implications of familial relationality between humans and nonhumans. In Hogan's *Power*, the novel itself reads as realism; it is only through a Western literary lens that might be perceived as speculative. Hogan's novel was marketed in the United States as a "thought-provoking new bildungsroman" that featured "two different ways of knowing the world and the problems that ensue when these ways come into conflict" ("Power"). Hogan's nontribal readers know the world through a lens constructed by Western individualism, and Hogan troubles this knowing through the interspecies relationships her characters create. In her oft-cited discussion of American Indian literature, Paula Gunn Allen (Laguna Pueblo) says, "American Indian literature is not similar to Western literature because...the basic reality experienced by tribal peoples and westerners are not the same, even at the level of 'folk-lore'" (145). She goes on to say this difference is often unacknowledged by Western readers and scholars. Indigenous ecocritic Kim Tallbear (Sisseton-Wahpeton Oyate) says, "In addition, for many indigenous peoples, their nonhuman others may not be understood in even critical Western frameworks as living...[yet] within our ontologies [they are understood] to be sentient and knowing persons" (234). These differing ontological frameworks establish one of the ways that both novels occupy the realm of speculative ecofiction. In the case of *Power*, Western readers might be more inclined to see Ama's connection to the panthers as supernatural, positioning it in the realm of speculative ecofiction. Wright's *The Swan Book* is more clearly and intentionally

speculative, utilizing a dystopian future as a foundation for the surreal experiences of its main character.

This chapter examines two novels by indigenous women from very different cultures as examples of how speculative ecofictions can interrogate the intersections of colonial racism and ecological politics—particularly the relationships between humans and other elements of environment such as animals and vegetation-while they simultaneously complicate traditional North American indigenous values concerning human obligations toward, and honoring of, the natural world. These novels examine the intersection of racism and environmental exploitation.¹⁴ In Power, indigenous ways of community-building are called into question in light of contemporary American environmentalism and law. In The Swan Book, the exploitation of indigenous peoples and animals is scrutinized and the racist underpinnings of colonial education and concepts of justice are unmasked. Human/animal interactions are central to both of these novels, which advocate relational values that both continue and reframe traditional perspectives of interspecies relationality. On the one hand, these novels illustrate Donna Haraway's claim that "multispecies flourishing requires a robust nonanthropomorphic sensibility that is accountable to irreducible differences" (90). In these novels, the "irreducible differences" between humans and animals promote a new kind of non-colonial stewardship that acknowledges nonhuman agency. On the other hand, "relationality" is redefined in these novels through indigenous perspectives in the sense of "all my relatives"—a sense of the animal other as kin rather than ward

¹⁴ See Susan L. Hall, "The Last Laugh: A Critique of the Object Economy in Margaret Atwood's Oryx and Crake." *Contemporary Women's Writing* vol. 4, iss. 3, 2010. and Lai, Larissa. "Slanting I, Imagining We: Asian Canadian Literary Production in the 1980s and 1990s," *Wilfrid Laurier* UP, 2014.

(Responsibilities and Obligations).¹⁵ Through acceptance of the differences between humans and animals, these authors arrive at a sense of justice that reworks dominant structural hierarchies.

All Being is Political: Ethics and Law

In *Ecology without Nature*, Tim Morton discusses the acceptance of nature as an ethical choice. He suggests that if we really want to understand the environment that "the most ethical act we can commit is to love 'the other' precisely in artificiality, rather than seeking to prove it naturalness and authenticity" (Morton 195). Here Morton encourages a reconsideration of nature, suggesting that the artificial is just as much a part of the natural world as the physical, that there is no pristine, untouched version of nature, and that the most ethical thing that we can do for nature is accept that. Another aspect of this acceptance involves understanding that the there is no "Nature" that is separate from humanity (Morton 205).

Since the concept of nature is tied to cultural values, it follows that U.S. laws and regulations protecting nature are sculpted to protect idealized versions of the environment. Dan Tarlock notes, for example, "Environmentalism has deep roots in the aesthetic and emotional appeal of nature worship as well as in rationality. However, the environmentalism that drives policy and law [in the U.S.] is a product of the Enlightenment's faith in reason and knowledge, as opposed to theology, to benefit society" (243). According to this tradition of thought, a concept of justice needs to take into account the agential status of nonhumans. For example, Martha Nussbaum, working from within this liberal Western philosophical tradition, argues in

¹⁵ I am using a concept that arises in several Native American tribal traditions such as the Seminole, Chickasaw, and Lakota—the human as a relative of nonhumans. This concept is not meant to reduce or trivialize the differences between tribal communities and cultures, or the variations in how kinship with nonhumans is established or enacted.

Frontiers of Justice that a capabilities approach to justice should be extended to nonhumans. This understanding of justice insists that animals be treated as "subjects of justice" rather than "objects of compassion" (69). According to her logic, one of the core capabilities that constitutes "humanity" is "being able to live with concern for and in relation to plants, animals, and the world of nature" (70). Imagination and storytelling are the tools by which humans can better understand animals as subjects of justice and foster an understanding of them "in relation to" humans (355). Nussbaum insists that animal subjecthood is made evident because animals share basic needs with humans and maintains that both humans and animals are capable of a "dignified existence" (364). Thus according to Nussbaum, it is the responsibility of humans, who have power in relationships with nonhuman animals, to make sure that nonhumans have access to the capabilities that make life dignified. These capabilities include but are not limited to "adequate opportunities for nutrition and physical activity; freedom from pain, squalor, and cruelty; [and] freedom to act in ways that are characteristic of the species" (326). The problem is that while these capabilities are all just, they often conflict with human interests. Nussbaum thus works within a Kantian frame and suggests that humans need justice to structure the relationships between humans and nonhumans. Since humans have the most power in relationships with things inhabiting the world, justice is necessary to protect the dignity of all.

Justice is needed when needs of humans, animals and nonhumans are overlooked or neglected in order to exploit land and animal resources for the benefit of markets and to the ends of profit. Humans know now that such exploitation leads to the collapse of both ecosystems and cultural systems. However, in the novels discussed in this chapter, while the presence of law is often used to promote the ideals of justice, it is also seen as inadequate to addressing the contradictions that arise from the effects of colonialization and past exploitation of the earth by colonial powers. Hogan's and Wright's novels raise specific and important questions about justice perspectives concerning human-animal hierarchies. Generally speaking, they, like other indigenous writers, redefine "relationality" itself, moving from an impersonal to a familial concept of interaction and attunement.

Understanding human/nonhuman relationality as familial relations changes the way that way relationality is conceptualized in indigenous speculative ecofiction. In examining the ties between humans and nonhumans in terms of kinship, or familial belonging, the rationale behind their care as fully agential beings is rooted more in bonds of responsibility and reciprocity. The relationships between humans and nonhumans become more intimate and immediate. The family community becomes the most significant unit of belonging, and exile from that family a threat worse than death. This is demonstrated in both *Power* and *The Swan Book*, wherein the loss of family ties, both human and animal, leads to suffering and despair.

In these novels, the protagonists must choose between definitions of "stewardship" that leave little room for romantic notions of "nature." Joni Adamson's *American Indian Literature, Environmental Justice, and Ecocriticism: The Middle Place* points out that a large portion of ecocritics, including Cheryll Glotfelty, Edward Abbey, and Glen Love, establish their environmental positions on "abstract and ahistorical notions of wilderness" (81). These notions of wilderness and nature limit the relationships that humans are capable of sustaining with nonhumans, and thus limit human capacity for care. Adamson argues for a multicultural, inclusive, and more effective environmentalism and ecocriticism through the inclusion of Native American traditions and cultures. Following the metaphor of a garden as a middle place where humans attempt to understand larger natural patterns, Adamson says what is needed is a discussion of "differently situated human practices and perspectives on nature and…about what our role in nature will be" (184). In her reading of Simon Ortiz's *Fight Back*, Adamson echoes Ortiz's emphasis on bringing together diverse communities of people to recognize that "we are in a family with each other" (qtd. in Adamson 86). In the novels that I discuss in this chapter, relationality is similarly explored as a family dynamic, enacting an ethics of mutuality in contexts that stifle the flourishing of life.

Linda Hogan's Power

Linda Hogan is a Chickasaw writer and environmentalist. Her novel *Power* is the story of a sixteen-year-old girl named Omishto who lives with her mother in Florida, but longs to find her own space to live how she wants. She is a member of the Taiga tribe, and while her mother wants her to become more Westernized, Omishto tends to spend her time with Ama, a woman she thinks of as an aunt. When Ama kills a panther while she and Omishto are spending the day together, Omishto struggles with the morality of Ama's choice and the implications of the panther's death for her tribe. Ultimately, Omishto is called to testify in front of state and tribal courts regarding the panther's death. Throughout the novel, Omishto attempts to reconcile her tribal history and traditions with the pressure from her mother to become a more active member of the Christian church. At the end of the novel, Ama is exiled from the tribe, and Omishto decides to live in Ama's home along the margins of Taiga land.

In *All Our Relations*, Winona LaDuke's (Ojibwe) researches and presents tales of environmental and cultural degradation experienced by the indigenous people across the United States. This text was published in 1999, two decades ago, and the destruction that LaDuke outlines has only continued to spread. One of the tribes that LaDuke discusses is the Panther clan of the Seminole nation. At the time of publication, there were only fifty of Florida panthers left in the wild (LaDuke 27). As of 2017, the number has increased to 120-230 panthers (FWS). However, the conservation efforts to save the Florida panther have been, since 1989, undercut by the vast amounts of pollutants, such as mercury, ending up in the water (LaDuke 32). To combat the impoverishment of the Seminole people, the nation has turned to tourism, making its own lands available for tourists, and generating income from bingo halls.

At every step in this process there has been pushback by the state government of Florida.¹⁶ Those of the Panther Clan have mostly decided to live traditionally without buying into the plans to generate revenue for the larger nation. Because of this, the conservation of their identity is tied to the lives of the Florida panthers, whom they consider their closest nonhuman relatives. At the close of her chapter, LaDuke says, "If Florida is willing to give up a culture of strip mall...then the panthers and Seminoles might have a chance" (44). According to the most recent population counts of the Seminole people in 2005, there were 1000 people of the Seminole nation living in Florida (Four Directions Institute). These numbers reflect how both the Florida panther and the people of Seminole nation have adapted to the changing

¹⁶ In 1916, the US government created the "Organic Act" to consolidate the maintenance of national parks to the National Park Service, created by the Department of the Interior, and led by a director. According to the act, the primary purpose of the national parks is "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (An Act to Establish). In short, the purpose of the national parks is preservation. The idea of preservation often falls into question, however, when it is pitted against the rights of people that have been displaced by the creation of these national parks. Indigenous peoples have a long history of displacement from their lands based on political ideas about conservation and limited perspectives of the role that humans play as stewards.

environmental policies and practices of the nation and the state. The question becomes how does the law protect both the human and the nonhuman in a way that acknowledges the agential status of the nonhuman without exploiting the stratified position of the human other in the animacy hierarchy.

Hogan's *Power* interrogates the foundational struggle of ethics and law that emerges when colonized or marginalized humans and animals are both contending for justice and implies that justice is stymied by the contradictions of the current environmental crisis. Omishto, the main character, is a young woman torn between the traditional customs of the dwindling Taiga tribe and environmentalists who wish to protect the Florida panther. Both her tribe and the panther are endangered, and in the midst of the legal protections that keep the panther safe and the tribal laws that allow the hunting and killing of these panthers, Omishto's friend, Ama, commits a crime in both communities by killing a panther and not returning its corpse to the elders of her tribe. This action sparks a debate about whose rights are valued more, those of the tribe of fewer than fifty-six people, or those of the endangered panthers. Omishto and Ama know the truth of the matter, that the panther was sick and dying, that the killing was a mercy and so too was keeping the signs of that sickness away from the elders.

In Hogan's novels, characters often grapple between what is right and what is legal. Referencing an interview conducted by *The Seattle Times* in 1996, Kathryn Erickson argues that Hogan's experience with the 1996 Makah whale hunt conflict in fact parallels some of conflicts that Omishto encounters in *Power*. Erickson takes an ecofeminist stance, arguing that Hogan sees matriarchal leaders of the Makah tribe and more generally as "bridging the gap between tribal cultures, environmentalists, and the dominant white culture" (60). Hogan's role in this conflict was mediator, closing the distance between the tribal traditions that shaped tribal relationships with whales in the past, and the present threat of extinction that was halted by government protection. Ultimately, Hogan urged the tribe to follow older tribal traditions of listening to the grandmothers of the tribe, who were arguing that the tribe not invoke their treaty rights to hunt great grey whales (56). Erickson ends her discussion of this crisis by calling for an ethical positioning that considers the "interconnectedness of all life" (63). These interconnections show the complexities between government preservation and indigenous rights; a middle stance is not always available, yet as Hogan shows, an ethical position may be found.

In *Power*, there is no ethical right or wrong choice concerning the panther. Omishto struggles to firmly state whether Ama's decision to kill the panther was the right one. Omishto's struggle highlights the tension inherent in relational agency. Ama killed the panther because she did not want to see it killed by passing cars or the poison in the water. After Ama kills the panther, Omishto connects the panther's life with hers. She says, "You have killed yourself" (Hogan 67). As Ama cradles the corpse, both she and the panther are "diminished and endangered" (69). The people and the panther are part of the same community, both a part of nature, and both hurt by the consequences of the pollution and environmental destruction of the Everglades. In this novel, the panthers are as much a part of the Taiga tribe as the people, and as a result, the slow destruction of their habitat affects them all.

This novel demonstrates the difference between truth and fact, and the impossibility of balance between law and ethics when dealing with human/nonhuman relationships. This is best shown in the courtroom scene wherein Ama is called to defend herself against the state's charges and Omishto is asked to testify. As she watched the legislative system of the United States in

action, Omishto reflects that she can't say "the real truth," because she would not be able to make the people in the room understand; instead she was limited to "only the facts" (Hogan 127). She goes on to say, "...it's nothing I can tell this room of black and white law" (129). The legal battle that plays out in the following pages adheres to environmental law and provides Hogan with a way to suggest that the law cannot be applied fairly when there are two endangered groups-human and nonhuman-protected under a law that previously led both to the edge of extinction. There is no justice available in the courtroom for Ama or the panther. In Martha Nussbaum's Anger and Forgiveness, she calls for a balance that consists of "impartial justice," "acknowledgement of wrongdoing," and an "empathetic generosity" (173). Essentially, justice cannot be impartial if there is an element of retribution for inflicting suffering. Instead, law has to provide justice to keep these things from happening again in the future and to protect the present society (176). Impartiality becomes the ideal, alongside prevention of future crimes. Yet, impartiality is often in conflict with the need for ethical action. "Protecting society" can often mean different things, and protection of short-term versus long-term, or the protection of society to the detriment of some groups within it. In Power, the endangered status of the panthers and the hunting rights of the tribe are at odds, as the good of the society (maintaining law) and the good of the individual (a panther who needs to be short or euthanized to end his daily pain). In the courtroom, Ama bears the full moral weight of killing the panther, as she bore the physical weight of his body earlier in the text. Ama had been protecting the panther for years before its death, and she killed it as an act of compassion. According to Nussbaum's concept of justice, the bare facts do not allow for true justice because there is a fundamental lack of understanding the "other." According to the Taiga tribe's understanding of the panthers as relatives, and the

spiritual significance of that connection to the community, Ama's killing the panther, although motivated by care, is still legally wrong.

Throughout the novel, Omishto tries to imagine what justice might look like in this situation, ultimately realizing that it cannot be found in the laws of the elders or the courthouse, because they can never actually map out the truth of the situation without politicizing it. In the courtroom, the tribe is represented by a Taiga lawyer who tries to overplay the religious significance of hunting the panther as a part of their faith. After Ama has admitted to the court that she has killed the panther, he says, "...it is her right, by treaty, all our rights" (Hogan 132). Here Omishto recognizes the difference between the truth and justice. She says, "But the truth is, the cat never lived by that law and never kept to the boundary lines of mapmakers. Again, both sides are wrong, but both sides, also, are right" (138). The truth is unable to be seen through an ethic based on legal or moral understanding of Ama's actions. It is only through an ethic of care that we see Ama's choice to not follow the laws of the United States or the Taiga tribe as the one in the best interest of both the panther and her tribe.

During her trial, the non-tribal prosecuting attorney attempts to show Ama as a "human being of a different kind," one that is unknowable because of the traditional beliefs of her tribe (134). The lawyer relies on the "eco-Indian" stereotype to guide his questioning. As Caskey Russel (Tlingit) says, "non-Indians invent and define Indianness, which displaces actual living indigenous peoples and allows the non-Indian to "reoccupy" Indian space and to feel legitimized in doing so" (164). Russel examines this impulse through a poem by animal rights activist Athena McEntyre written in response to the Makah whale hunt that goes through a litany of stereotypes and accuses the modern Makah tribe of losing their own traditions and values. In Power this moment is mirrored in the courthouse when the persecutor tries to prove that Ama does not believe that she is related to the panther she killed by asking, "What would ever possess you to kill that panther, if it was your relative?" (Hogan 134). Omishto, watching the exchange, explains that it not a question of belief, but of truth. The persecutor attempts to map out the relationship she betrayed by saying, "But you shot the car you believe was like your aunt or cousin. Would you say that you hold to the traditional ways...Even though you don't live with the traditional people?" (134). Ama answers yes to all of these questions. Omishto understands that the persecutor presents Ama as a person who had betrayed the beliefs that she claimed to uphold. However, Ama stops this manipulation by repeating that she did kill the panther: "I killed it,' she says, as if to cut things short. 'I slayed it'" (135). In doing this, she does not allow the persecutor to shape her as something other than what she is, and remains in control of her own identity and responsible for her own actions. In essence, she has engaged in merciful euthanasia. She doesn't explain to either court the reason that she killed the panther, but she does to Omishto, knowing that she is the only one who will understand the difficult choice she made to end the panther's suffering. Ultimately, the state rules that Ama is not guilty. Omishto reflects that there are people in the room deeply unhappy with this decision, but none more so than those who think that she has committed a crime against her own family and needs to be held accountable for the panther's death.

Power illustrates a conflict between American environmental activists and tribal law, one that puts state laws in conflict with tribal laws, and echoes the long history of the United States breaking its treaty promises in US courts of law. In these scenarios, the animals are overshadowed completely by the legal and cultural perceptions of the Native American on trial, and the image that she presents of the whole tribe to the rest of the country, and to those members of the tribal community. The legal system that puts Ama on trial is the same that argues for the protections of the Florida panther. The laws that are in place are supposed to hold to an incorporeal sense manufactured in the human mind, the idea of justice. However, this ideal is as malleable as the minds who create it: So who and what does the law protect and how do authors question these protections? In *Power*, there is a "space between laws" (Hogan 143). Hogan suggests this where there might be justice, and yet no one in the court, or even later in the tribal council is willing to examine this space and its possibilities because "…that would open up the laws, make a hole in the law that was to protect" (121). This novel suggests that without laws, there could not be justice, but this justice is not impartial. Laws must be frequently revised to consider who and what they are to protect. Without revision, law begins to lose its purpose, and justice loses its impartiality.

Later, in the tribal council held on tribal ground, Omishto experiences the old law that ultimately decides that Ama is guilty, resulting in her exile. This scene of law provides an alternative perspective to how the law functions in the tribe, outside of the legal proceedings of the United States. On the tribal lands, Omishto cannot help but notice the difference in appearance between the clean-cut figures that waited outside the courthouse after the ruling, and the tattered, bare-foot appearance of the tribal council as she goes to speak before them. At first, she fears their power, then she feels sad for them when the reasons that Ama has broken tribal law become clear. Omishto realizes that "she [Ama] could not have done what was right, could not have taken them the cat, could not have permitted them to see the poor thing...I will spare them this. It would cut their world in half" (Hogan 166). Both Ama and Omishto protect the elders for the reality of the panther's emaciated and sickly corpse. She knew how the elders would perceive its sickness and decided to take exile upon herself rather than ruin their hope for the future. Omishto says, "The old people at the place of their law are still in a kind of paradise even though it is surrounded by devastation" (154). By keeping the elders unaware of the true impacts of the devastation, Ama is able to preserve a part of their tribal past, and Omishto believes, save a bit of their world.

Power demonstrates the struggle inherent in the ecological conservation of land and animals complicated by human culture and law. Ama's exile meets the requirements of both tribal and state law, but the question of justice lingers with both Omishto and the reader. Was the act of killing the sick panther an act of compassion? A merciful act of euthanasia for a relative? Were the repercussions of the killing fair? According to Nussbaum's capabilities approach to justice, as long nonhumans are given access to a dignified existence, then justice is being served. By killing the panther, Ama allows her to die with dignity. When Ama makes the decision to keep the remains from her tribe, she is also allowing her community to maintain its dignity by not drawing their attention to the scarcity of resources available to both the panthers and her tribe.

Hogan's novel illustrates the ways in which indigenous literatures may be read as speculative fiction by western readers. As Omishto decides what she wants to do with her life after Ama's exile, Ama's crime becomes a rallying point for both the tribe and the environmentalists who share the same goal, but have varying ontological positions on how the world is built and therefore what justice might be for killing the panther. By highlighting how little the westerners in the novel know about the Taiga tribe, Hogan exposes the ignorance and racism that underly the broken treaties and refusal to treat all human others with dignity. This supports Russell's claim when he says that American Indians have four goals that are postcolonial.¹⁷ The first of these is the reinvigoration and reconciling of "traditional worldviews and modes of existence...with the exigencies of modern existence" (160). The second is "to understand the all-encompassing effects of colonization" (Russell 160). The third is "liberation...from the systems of colonization" through "the liberation of control over these systems" (161). The last is "the desire to reserve (not necessarily conserve or preserve) Indian lands and resources for the sole benefit of Indian peoples" (161). These effects of colonization are shown throughout the novel through property development, pollution, and the diminishing adherence of the Taiga to tribal traditions. Power ends in hope, the return of life, and the establishing of a new bond between panther and human. Ironically, only by "illegally" killing the endangered panther can the human/animal relationship be maintained. At the end of the novel, Omishto locks eyes with a panther she suspects to be the dead panther's mate and tells it she means no harm. Hogan suggests the possibility of moving beyond the legacies of colonialism and achieving reinvigoration and reconciliation between species.

Alexis Wright's *The Swan Book*

The legal legacies of colonialism are brought to the forefront of Alexis Wright's *The Swan Book* through a post-apocalyptic future where much of the European and American continents have been destroyed. A member of the Waanyi tribe in Australia, Alexis Wright

¹⁷ Russel maps the shift in the concept of "postcolonial" and suggests that the experiences of indigenous Americans are postcolonial "in keeping with the current wave of postcolonialists who desire to negotiate and redefine the boundaries of postcolonialism in a more inclusive posture while maintaining the underlying tenet that each culture's approach to postcolonialism is unique" (160).

offers a speculative projection of the future while commenting on the present political climate of Australia and the lack of rights and representation for indigenous peoples. Like Hogan's novel, Wright's novel arises from the gross injustices of governing bodies against indigenous peoples. Wright's work is influenced by the Aboriginal Protection Acts legislated in many states across Australia from the early 1900s through the 1970s. Under these acts, indigenous children were forcibly removed from their families, their lands seized, and every aspect of their lives regulated by some form of government control (AIATSIS). In 2008, the government of Australia formally and publicly apologized to the indigenous people known as "The Stolen Generations" and set about "closing the gaps in the social inequalities faced by Aboriginal and Torres Strait Islander people" (AIATSIS). Since this apology, the prime minster has offered yearly updates on the progress made toward this goal. Wright's *The Swan Book*, although set in the future, alludes to the rhetoric used by the government to reconcile their mistreatment of indigenous people with nationalist rhetoric of progress and advancement.

Wright relies heavily on the tropes of magical realism to reimagine the possibilities that underpin the foundation of her novel. A scholar interested in how Wright's use of magical realism challenges Stephen Slemon's figuring of magical realism as postcolonial discourse, Ben Holgate argues that Alexis Wright uses magical realism to reimagine and recuperate historical narratives formerly controlled by colonial powers. He claims that Wright does not simply draw on the myths of the Waanyi nation or the Gulf country; instead, "hers is a reinterpretation of Indigenous spirituality, not a transcription" (Holgate 636). Wright's reinterpretation imagines the magical as a part of the everyday, not as a retelling of mythologies. In this way, Wright is able to give voice to the voiceless, providing the perspective of an indigenous woman for whom trauma and retellings about her own past and history have structured her identity. Wright envisions a world where kinship is the primary foundation for survival, and communities forged outside of the law are what ensure the flourishing of humans and animals alike.

This novel opens with a preface titled: "*Ingnis Fatuus*," Foolish Fire, describing the main character, Oblivia, a girl found in the belly of a eucalyptus tree by a white woman, *badibadi*, named Bella Donna (3). The novel is rooted in the traumas that Oblivia has to work through in order to find a sense of self. Oblivia's perspective is shaped by an illness the narrator describes as a "cut snake virus," a "nostalgia for foreign things...a sickness developed from channeling every scrap of energy towards an imaginary ideal world" (1,3). Throughout the novel, this virus skews the reader's sense of what is happing to Oblivia because she is never fully present in the reality that happens around her. Oblivia spends most of the narrative in silence, with other people speaking for and around her with only the reader privy to her thoughts. She is a victim of gangrape which others assume is the reason for her silence. In fact, Oblivia "thought she should be silent if words were just a geographical device to be transplanted anywhere on earth" (20). She refuses to speak because she recognizes the power silence gives her.

The plot of the novel is that Oblivia was violently raped and left for dead when she was a child. After this rape, she is unable to speak, and although she had been engaged to be married, her family and the larger community wants to pretend she's dead. Because of this, she is cared for by an old white woman the lives on the margins of the community. Oblivia lives in relative peace until her betrothed seeks her out, and decides that despite her illness, she is worth marrying. She is then forced to move to a city which deteriorates her mental state. Her husband

dies or is killed. Oblivia travels across Australia until she finds her home. Her only companions throughout her journey are swans and ghosts.

Although she has no memories of the time before the rape, Oblivia desperately seeks connection with the swamp land, once trying to find the tree she was rescued from to attempt to patch together a stronger sense of self. While she is searching for the tree, the narrator draws away from her to focus on the elders of the swamp people, who know that the tree Oblivia was found in was chopped down to "bridge the gap" between native and white people. The elders think, "This ancestor was our oldest living relative for looking after the memories...a loss that was so great, it made them feel unhinged from their own bodies, unmoored, vulnerable, separated from eternity" (69). With the loss of the tree the elders are condemned to silence. They cannot speak because their grief for the tree is magnified by the presence of the girl who embodies the pain of their loss, the shame of their inability to do something, and ultimately their loss of connection with the tree—a connection that she seems to have, even though it is no longer physically present. Because of her past, no one, not even her biological family, is willing to find Oblivia after her rape, except for Bella Donna. Bella hopes that she will be praised for her "sharp eyesight" in locating the girl that the community wanted to forget, and deliberately ignores the search party who asks, "Why can't she just stay lost?" (75). One of the reasons that the community doesn't want to find Oblivia, it is later discovered, is because she is betrothed to a man named Warren Finch, who becomes the president of the Australian government.

The government, sometimes referred to by the name of the city Canberra, attempts to maintain power while the world is ravaged by natural disaster after national disaster. Over the course of the novel, it is revealed that the city of Canberra, where Oblivia lives after marrying Warren Finch, experiences such heavy floods that people living in streets simply secure themselves and their possessions and wait for the waters to recede. The government is largely regarded as a last-ditch attempt for the people of Australia to maintain hope. To this end, televisions are constantly playing old football games or showing the bright, healthy faces of politicians and people with power and money. Meanwhile, most of the people in Australia have become refugees, traveling through the rapidly expanding desert in search of ways to survive. They have established communities outside of the bounds of government and military powers, and some are attempting to overthrow what power remains. This state of things is only glimpsed at the peripheries of the novel as Oblivia's reality grounds the reader in a sense of perpetual disassociation and chaos. The only constants in her reality are the ghosts in her head, and her desire to care for swans.

Throughout her travels, Oblivia brings together the human and nonhuman worlds by maintaining her existence on the margins of both. This is especially apparent in Oblivia's concept of time. The slow temporality of the nonhuman world shows itself in sharp contrast to human time. The majority of this novel takes place in a sort of floating temporality where days, weeks, and years can pass in few pages, or moments can last a chapter. The only places where time is marked as clock time is in the conversations that do not include Oblivia, or those that she overhears and finds herself confused by. As Linda Daley argues, Oblivia is 'connective to ... the untimely different time of the nonhuman' through an 'animation' of Country that 'occurs through the interconnection of human and nonhuman forces' (20, 22). This connection is another way that Oblivia is a bridge between the different forces that move throughout the novel. She connects the living and dead, the foreign and the indigenous, the powerful and the oppressed, the

human and the animal, and weather with land. Delany says that Wright's fiction "opens a world that envisages another world" (23). I agree that *The Swan Book*, at least, provides a frightening possibility of what the world could be, and how one might reconstruct ethical relationality after an apocalypse.

In addition, however, by manipulating the passage of time to reflect the state of the characters, Wright demonstrates a shift in thinking that demonstrates interspecies relationality, with Oblivia acting as a conduit for these different modes of being and becoming. Oblivia is the only character able to traverse different realities through her connections with the natural world and thus offers an alternative relationality between humans and nature. The swans have relationships with several characters in the novel; Bella Donna, the old white woman who discovered Oblivia, tends to them until she dies, at one point even stealing food from starving children to make sure the swans are fed. The narrator notes, "She prowled about on moonless nights to steal food right from the arms of children" (61). She cares for the swans and Oblivia, always separating herself from the rest of the swamp people. She is described as having "turned up on an Indigenous doorstep...Two laws, one in the head, the other worthless on paper in the swamp said that she was an invader. But! What could you do? Poor Bella Donna of the Champions!" (28). The Canberra people of Swan Lake see her as an exile and an invader. However, she maintains this status by using the swans, who are also not native to Australia, as a way to hold on to her own sense of identity. She teaches Oblivia snippets of English and classical poetry, songs, and stories all about the swans that she claims as her own. The ignorance that she demonstrates to the community that she finds herself a part of, and her arbitrary claim on the swans, make her a source of amusement for the swamp people.

The lack of concern that Bella shows for the community, and her empathy with the swans, demonstrates a toxic sort of relationality. Bella, a white woman in exile, unable to connect to the black indigenous community that refuses to reject her, instead romanticizes her relationship with the swans that also seek refuge in the swamp. Over time, she establishes herself as a care-taker both of the swans and of a traumatized native girl whom she labels an orphan. Bella sets herself up as white savior, interested in saving the girl she has decided to raise as her own and the swans that she makes fat by stealing children's food. Her invasion is mostly harmless, and the power that she wields simply perpetuates what the swamp people already know of white people and colonial control. After her death, however, Bella continues to haunt the novel, a chattering voice that urges Oblivia to find an alternate relationality between herself, the community, the nation, and the swans who follow her no matter where she goes.

The animals in this novel, especially the swans and the monkey, Rigoletto, offer their own perspectives about the events that take place around Oblivia. After Oblivia may or may not have killed Warren, the reader is offered a glimpse into the mind of Rigoletto, the deceased monkey companion of the old Harbor Master, now living as a spirit in a cathedral and wrestling with his obligation to care for Oblivia. The narrator says, "It was moments like these where a few guilty pangs forced Rigoletto to forget that he was supposed to be a pet acting like a wild animal...A wild animal was not supposed to look after other people. It was supposed to be the other way around" (254). Rigoletto sees himself as a pet because of his obligations to the Harbor Master and Oblivia. He calls himself a pet because he has been trained to act responsibly, and to care for other people. Rigoletto is dead, and although he is now free to travel wherever he wants in the world, he feels he has to stay with Oblivia to protect her. He feels he has to take over for the Harbor Master, who was also charged with her protection, and yet has spent all of his time watching television. In this, Rigoletto demonstrates his own agency. He has plans to join a monastery, forge a spiritual connection to the divine, and he often misses his life before the Harbor Master, when he was performing tricks for food and money.

However, Rigoletto chooses to stay with Oblivia even though she ignores his advice. In an attempt to protect her as she flees after Warren's death, he "screamed in his native language into her face to ask her what she was doing...*You are crazy. What in bloody hell's name are you thinking? Don't you know what you are doing?*" (252). She doesn't answer his questions, although she can hear him. When she doesn't respond, Rigoletto tries kicking her toward safety, but "nobody feels the kicks of an invisible, oppressed, and foreign-to-boot monkey that didn't like living in Australia" (253). In this exchange, Rigoletto embodies both the animals that humans in the novel continually ignore, and the indigenous people themselves who are ignored by the government, until they become a threat, and are executed. By occupying both the human and animal position in this exchange, Rigoletto demonstrates a stewardship that advocates for the agency of nonhuman beings and a shared sense of responsibility. Rigoletto shows the possibilities of relational agency if those without voices in political and social arenas were given the opportunity to speak. While trauma keeps Oblivia silent, her silence also gives rise to the possibilities of other voices who speak with and sometimes for her.

Oblivia's relationship with the swans demonstrate one of the possibilities that occur when humans and animals are in a reciprocal relationship. The swans protect and guide her, and she provides food and companionship for them. The narrator says, "She could feel the miracle of leaving every time the swans lifted off the water, the lightness of being airborne" (60). She forms a bond with them, and the swans have an awareness of her bodily experiences as well. When she finds herself in the People's Palace alone at night, Oblivia "could feel the presence of their bodies, of beating wings from lean-chested birds, lightened from the long journey, with necks stretched in flight" (220). Again, her understanding of the swans is partially intellectual, partially somatic. As Oblivia dreams of the swans, they actually start to move physically closer. This mutual desire is powerful enough for the swans to begin 'forming their spirits through films of salt to reach her during the night' (172). Eventually, the swans are physically present in the city, seeking refuge from hungry orphans in the abandoned botanical garden that had become overgrown and dangerous. While Oblivia is in the city, her sense of time distorts, but she does remember sneaking out of The People's Palace to rescue swans that had crashed into buildings. She begins to take in these swans and care for them, releasing them once they are able to fly (226). As she begins to lose her sense of self, she still remembers to care for and free the swans, eventually deciding that the best thing for them is to also free herself.

Oblivia's relationships with swans culminate near the end of then novel when she rescues a swan that refuses to leave her side. She names the swan Stanger and carries him back to the swamp as she joins roving bands of refugees wandering across Australia in search of home. The narrator describes Stranger as "like Rilke's swan laboring with what could not be undone, had refused its destiny. It had no interest in swimming away, or to fly with its flock" (277). The novel ends with Oblivia and Stranger together in the sand dunes that were once the swamp having a conversation about how dry and dead the home they returned to was. The narrator says, "Talk like this grieved the swan. It swooned and dropped its neck to the ground" (300). The swan's dialogue, like Oblivia's, is offset in italics. The reader is supposed to picture, perhaps, a woman and a swan staring into each other's eyes, contemplating all they have lost, and what little they have been able to regain. Although their connection is established because of Oblivia's inability to connect with other humans, this relationship is central to both her survival and the swan's because it refuses to leave her side, and so she has to continue to provide for it. The government in this novel excludes the people that live around the swamp as members of what remains of the human race. Nationally, the area around the lake becomes an internment camp, where the nation begins to confine people and add to the population already living on the lake, without providing any aid or resources. The narrator says, "The internment excluded the swamp people from the United Nations...to define what it meant to be human, without someone else making that decision for them" (41). Their humanity is stripped from them and they are left beside the lake to die. The people of the lake have been occupying this sub-human status in the eyes of the government at the start of the novel. The conditions that surround their poverty, and their inability to engage with what remains of the other nations, limit their agency.

The second half of *The Swan Book* focuses on Oblivia's abduction at the hands of Australia's first indigenous president, Warren Finch, who discovers that Oblivia is the promised indigenous bride from his own people who he though was dead. The narrator describes him as "post-racial. Possibly even post-Indigenous" (110). Warren only claims his native identity when politically expedient, and believes that his blackness, and any associated cultural trappings of his indigeneity was "becoming extinct through assimilation" (106). Although he has a sense of dualconsciousness, between being an indigenous person and a member of a government that exiles and ostracizes indigenous people, Warren believes that he has been ordained by a higher power to grasp the power he is being offered. He and Oblivia see the world, and their relationships with animals in vastly different ways. This is most apparent in two moments in the novel, when he realized his destiny by observing a swan, and when he discovers Oblivia is alive and sets off to claim her. During the first instance, Warren thinks, "The swan was drowning for Warren Finch, and all the boy saw were pictures of Aboriginal spirits with halos of light, just like Van Gogh had painted" (Wright 101). This drowning swan captivates young Warren to the extent that he almost drowns as a wave of flood water crashes into him. He realized, as he approached the swan, that it was trapped in some fishing wire, and he assumes that its death was meant as a sign that the world expected more of him. The second instance happens as Warren Finch rows to Oblivia's home "swans swooped at the boat' to stop him, they 'hissed' and they 'stabbed'" and "he could feel the warmth of their soft bellies as he brushed through their barricade" (139). Warren's interactions with the animal world reflect only his own purposes and drives. Even when the swans attempt to stop him from entering Oblivia's home he thinks that it is romantic that has cast himself as a hunter to enter Oblivia's home.

Warren and Oblivia are both disconnected from reality. Warren only sees the world as something to be manipulated, while Oblivia sees the world as something to survive. To this end, Oblivia seeks refuge in her relationships with the dead and with the swans. Warren decides that Oblivia embodies the nature of Australia, as such, she is the only person who can be his wife, even though her rape has severely traumatized her and she doesn't understand the implications of their relationship. Oblivia's own indigenous background allows Warren to pretend that he has elevated all indigenous peoples, not just himself, by marrying a woman who acts as a symbol of indigeneity. He represents more of the same corruption in politics, after he takes Oblivia from the lake, he has the whole place destroyed (183). Although the media in the novel paint him as

an altruistic and compassionate leader, he is show to be obsessed with gaining and maintaining power both for himself and the people around him. When he is assassinated, he becomes a saintly figure in the novel, one who was biding his time to make things better but lost his chance. His character embodies the unchanging nature of political power. Although he identifies as an indigenous person, Warren only uses his indignity for his own political gain. His identity is tied neither to land or community, it is only constructed through media appearances and propaganda. In furthering his own power, Warren ignores the hardships of the indigenous community, and sees them only as tools to be used. On the other hand, Oblivia embodies the communities that she leaves behind throughout her journey, relying on them to survive on her journey back home.

Envisioning Kinship and Care

In both novels, the plights of humans and nonhumans are often connected through shared exploitation and a struggle for justice. Notions of ethical relationally are rooted in care for both human and nonhuman "others" as a part of a family. These novels call for relationality motivated by bonds of kinship to move beyond an ethics of legal or moral stewardship to an ethics of care. This care is shown primarily between the female protagonists and their chosen animal companions or relatives. Underlying this care is the understanding that systems of oppression exist in multiple and sometimes conflicting layers in these novels, as they do in real life, and the intersection of womanhood and care is just one of the layers. Racism, classism, and sexism exist within these novels' explorations of what it means to be human and to cultivate an ethical relationality with the nonhuman, showing how entangled these ideologies are with how humans perceive themselves as part of the environment.

These novels resist and reconfigure the political and social hierarchies that separate people from animals. *The Swan Book* envisions a future that exposes political corruption, manipulation, and erasure of indigenous people even after the apocalypse. *Power* explores these same themes in the present day, highlighting the difficulty in finding a position that considers both what is ethically right and what is upheld by law. These novels have indigenous main characters who are silenced or ignored by the governing bodies that control their communities. Omishto is ignored because of her age, Oblivia is ignored because she has chosen silence, and because it has been demonstrated to her again and again that her voice doesn't matter. By the end of these novels, both women are given the space of their respective novels to express their thoughts, and to demonstrate an ethical relationality that considers the agency of the nonhuman.

In Omishto's model of relationality, animals, specifically those panthers that are relatives of her tribe, must be protected from both the pollution that is poisoning them and the development and expansion of consumer centers that are wiping out their natural habitat. In turn, the panthers remain the Taiga peoples' closest nonhuman relatives. In Oblivia's form of stewardship, animals are literally given voice by the narrator to let the protagonist know what they need—the relationships that she forms with animals are more tangibly reciprocal. The animals take care of Oblivia, and she takes care of them. They take care of each other not just to survive, but because they feel responsible for one another. Because of this that Oblivia clings to Stranger, even as he thinks that they have reached their ultimate destination and that there is still water in the swamp. Justice as a legal means of relation remains inadequate in both of these novels because of a refusal to acknowledge the dignity of both the humans and animals. Neither of these novels suggest that compassion and care can replace justice. However, they do advocate for an empathetic understanding of the other to build a relationality where justice may emerge.

CHAPTER 3: SPECULATIONS ON NOT-QUITE-HUMAN AGENCY

In Athens, Georgia, a famous tree makes its home. This tree, called "The Tree That Owns Itself," is legally listed as a property-holder, owning both itself and the eight feet of land surrounding it. According to the tourism materials for the city, this tree was granted property rights in the 1800s by William Jackson, a professor at the University of Georgia (Athens Convention & Visitors Bureau). In 1945, a windstorm knocked the tree down and a new tree was grown from one of its acorns and planted in the same spot and provided with the same rights. The tree's ownership has never been called into question (Athens Convention & Visitors Bureau). This oak tree generates news stories and drives tourism in Athens, Georgia worldwide. Its story and history make it a compelling curiosity for visitors who wouldn't be there for the university football games. The tree is a part of the community and promotes, if not the flourishing of other oak trees in the area, at least the greenness of the campus and area surrounding it. Is this belonging and contribution to shared community indicative of the tree's agency?

The agential status of trees is discussed by critics such as David Haberman (who is interested in religious studies of animism), Steve Pavlik (who argues for "legal standing" for trees in the eyes of tribal and federal law), and Christopher Stone (whose 1972 essay "Should Trees Have Legal Standing" continues to inform such discussions).¹⁸ In these critical conversations, the impact of giving trees rights and protections under human law is generally

¹⁸ For an in-depth examination of the legal rights, agency, and community relationships with trees see David Haberman, *People Trees: Worship of Trees in Northern India*. Oxford UP, 2013; Steve Pavlik, "Should Trees Have Legal Standing in Indian Country?" *Wicazo Sa Review*, vol. 30, iss.1, Spring 2015, 7-28; and Christopher Stone, "Should Trees Have Standing? Toward Legal Rights for Natural Objects." *Stanford Law Review*, vol. 26, no. 6, 1974, p. 1488.

more broadly examined than are the implications of what these rights suggest in terms of the subjectivity of the trees. Certainly, their legal lack of rights is contested, but the philosophical implications of tree subjecthood is left unexplored. Thomas Nagel's seminal essay, "What is It like to be a Bat?" discusses consciousness as a state only possible if one can consider "what it is like" to be that particular being (439). Yet Nagel's question becomes more difficult to answer outside of the animal genus. While he uses bats as an example to suggest that all knowing is subjective, and that a truly objective stance is impossible, he also implies that these thought experiments are important. Although a human cannot truly know what it is like for a tree to live as a tree, we can imagine the experiences that shaped it. As a foundation for ethical relationality between humans and nonhumans, speculative fiction likewise shows readers what it is like to inhabit the consciousness of other beings by answering questions about nonhuman agency and questioning the status of humanity itself. Can a tree be an agent? Does a tree have sentience? What responsibility do humans have to trees given the power dynamics at play in our relationships?

Such questions are relevant to any discussion of speculative ecofiction. Driven by an urgency common to dystopian fiction, speculative ecofiction suggests that for humans to live fully and non-destructively in the world, they must realize that nonsentient life is capable of relational agency. This fiction's provocative and sometimes strange plotting and characterization asks readers to think upon and accept forms of agency that are markedly different from prototypical examples of human and animal agency. Sometimes, for example, protagonists take familiar forms such as animals and trees, and at other times they are embodied in new forms of cybernetic or alien life. In speculative ecofiction, humans are often placed in scenarios where

they encounter their own marked lack of exceptionalism.

In this chapter, I discuss three novels—Karen Tei Yamashita's *Through the Arc of the Rainforest,* Joan Slonczewski's *Daughter of Elysium,* and Paolo Bacigalupi's *The Windup Girl* that offer worlds one might call "posthuman." These novels ask readers to explore ideas common to theories of posthumanism: the osmotic membranes between humanity and machine, humanity and non-sentient matter, as well as how "things" and matter and animals and machines might constitute forms of existence important to ecological systems (which in this case are not necessarily "natural" ones) as well as forms of materiality that are attuned to human existence. These novels ask questions crucial to the contemporary moment: What does ethical relationality look like at the end of the human race? What does it mean to be sentient? What does it mean to be a person? Ultimately, they examine the concept of "personhood" and the possibilities of relational agency for machines, animals, and nonsentient beings, and they explore new ways of establishing relational agency that acknowledges humans' roles as "ecological stewards" without relying on a hierarchical model of power or worth that privileges the human.

The Agency of Things

Alongside speculative ecofiction that explores how agency can be distributed across the spectrum of things in the world has been the development of "thing theory" in philosophy and other new forms of material, queer, and biopolitical theory. In different ways, and coming from different philosophical and political starting points, writers such as Graham Harman, Heather Love, Mel Chen, Bill Brown, Sarah Ahmed, Timothy Morton, Jane Bennett, and Bruno Latour re-examine the political and personal lives of "things," a capacious category that includes all

elements of sentient and nonsentient material being.¹⁹

New materialisms question assumptions about the nature of objects and things that have become habits of thinking or deeply embedded starting points in Western philosophical ontology and ethics. Such theories often work much the same territory as relational agency, questioning the social and political implications of the human-nonhuman relationship. One such new materialist theory is "thing theory," first discussed in 2001 by Bill Brown.²⁰ Brown suggests that the object positioning of things limits their possibilities and how we both read objects in literature and encounter them in everyday life. Speculative ecofiction that deals with "things" likewise examines potential relational agencies that question hierarchies involving humans and inanimate objects, but this fiction does not exempt humans from their role as stewards. In this fiction, the things that often occupy the margins of literary worlds gain significance and autonomy.

This is so because in speculative ecofiction, recognition applies to things as well as to plants and animals. Brown's thing theory addresses this process directly. Brown says that objects can assert themselves, therefore creating a "changed relation to the human subject" ("Thing Theory" 4). This relation between subject and object is what is largely ignored by traditional realist fiction, which tends not to grant subject status to things; things tend to have a marked lack

¹⁹ See Diana Coole and Samantha Frost, *New Materialisms: Ontology, Agency, and Politics*. Duke UP, 2010. Coole and Frost say that "new materialist philosophies" define "materialization as a complex, pluralistic, relatively open process . . . [which] insist[s] that humans . . . be recognized as thoroughly immersed within materiality's productive contingencies" (7). Largely drawing from Heidegger's notion of "das Ding," new materialisms suggest a material agency that is entwined with but not reliant on human agency.

²⁰ Brown's work intersects with Graham Harman's object oriented ontology which also strives for a flattened ontology. See Graham Harman, *Object Oriented Ontology: A New Theory of Everything*, Penguin, 2018.

of interiority or presence, unless they are symbolically important to the story (as in Henry James's golden bowl in The Golden Bowl or Louise Erdrich's red convertible in "The Red Convertible"). Things are disregarded for the sake of relationships between beings that have consciousness. However, Brown argues that there is presence in things, a "material specificity" capable of "the desire to be some other object" ("Objects, Others, and Us" 200, 207). This presence does not reveal itself immediately, he notes, "We begin to confront the thingness of objects when they stop working for us: when the drill breaks, when the car stalls, when the window gets filthy, when their flow within the circuits of production and distribution, consumption and exhibition, has been arrested, however momentarily" ("Thing Theory" 4). Like many of the writers working in what is called "new materialist theory" and "posthumanism," Brown takes the Heideggerian position that the object is actually "withdrawn" from human understanding; as objects circulate around us, we use them to read ourselves and our relation to the world, but we rarely understand them as "things," which have presence and resist our fathoming of them. As Mark Goble has noted, "Brown is fascinated by things with a 'vitality' that eludes the 'scene of cultural coherence' we might erect around them, that 'quickly disturb' the network of historical, ideological, or psychological rationales that might otherwise resolve their fascination" (39). Brown's fascination is both for things themselves and how they resist being confined to the roles established by globalized consumer culture.

According to theories such as Brown's, the speculation of nonhuman agency is always intertwined with human beings, especially in the realm of literary analysis. Yet Brown has argued that a careful consideration of marginal objects in literature and in life can reveal new modes of relationality between humans and nonhumans. In *The Material Unconscious* and *A*

Sense of Things, for example, Brown argues that there is a "material unconscious" that exists in literature that allows us to reconsider its nonhuman actors or agents. Readers should be attentive to the objects scattered throughout novels and what they reveal about the cultural and historical influences that shape narrative contexts. *A Sense of Things* examines early modern American literature (1880-1910) to "ask why and how we use objects to make meaning, to organize our anxieties and affections, to sublimate our fears and shape our fantasies" (6). His primary impetus in this text is to show that people form relationships with and attachments to things that resist easy categorization (such as "commodification").

However, Brown makes it clear that things should be recognized beyond their peripheral being in the presence of humans. In essence, thing theory shows "their force as a sensuous presence or as a metaphysical presence, the magic by which objects become values, fetishes, idols, and totems" ("Thing Theory" 5). This *presence* suggests that things are more than objects, that they have the potential for subjecthood; that is if subjecthood is understood as an experience rather than a result of a set of discrete variables. This idea is expanded in *Other Things*, wherein Brown discusses how things become significant in our "unconscious attendance" to them before we know they are there or before we discuss their hold on us (39). Rachele Dini has suggested that *Other Things* "testif[ies] to the enduring relevance of the human subject—particularly in literature, where, legible or not, objects necessarily exist in relation to humans even when they are eluding their control" (Dini 5). Thus throughout his recent work, Brown implies new understandings of materiality, arguing that literature in particular can help us to reimagine our relationships to objects as "things" that do more in the world than simply reflect our own subjectivities back to us like mirrors and do not exist merely consumable objects.

Donna Haraway also has entered this discussion about things and our relation to the nonhuman, building from her early work on "cyborg" identity as a hybrid identity stemming from new meldings of the human and the machine. In her 1985 essay titled "A Cyborg Manifesto," Haraway famously argued that the metaphor of the cyborg allows for the acceptance of partialities to escape dualistic thinking constructed by modern science, philosophy, and political economy and also allows for a new conception of the human (66). She wrote, "There is no fundamental, ontological separation in our formal knowledge of machine and organism, of technical and organic" (60). A feminist philosophy as well, Haraway's cyborg manifesto rails against the patriarchal dualisms common to contemporary understandings of gender and power—dualisms that also often underlie power relations common to conceptions of stewardship.

The concept of the cyborg implied a new relation between human and machine and a new sense of community based on coalition building (and what has come to be known as "attunement" in Bruno Latour's philosophy) rather than identity. Haraway writes,

The cyborg does not dream of community on the model of the organic family...The cyborg would not recognize the Garden of Eden; it is not made of mud and cannot dream of returning to dust...The main trouble with cyborgs, of course, is that they are the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism. But illegitimate offspring are often exceedingly unfaithful to their origins (9, 10).

To understand the cyborg this way is to recognize that humans have always existed in relation to (and defined by) their technologies since the Stone Age, and in fact we may have been "cyborgs"

for a very long time. Cyborg identity—a union of human and technology—has always been a part of our understanding of how humans function theoretically and in everyday life. The fear of the cyborg comes into play when it challenges longstanding humanistic notions of human exceptionalism—and often this is made apparent in speculative fiction when the cyborg "woman" or "man" is shown to be othered and discriminated against as "less than human" because they have hybrid identities that challenge the purity of human being. As I will discuss below, this tactic is used in the *The Windup Girl*, where cyborgs are differentiated from the human and therefore can be used as slaves, soldiers, or simply tools. Like the other novels discussed in this chapter, *The Windup Girl* focuses on what it means to be hybrid, to be composed of partialities, and all of the novels discussed in this chapter interrogate what it means to be human in relation to animals and environments—and things.

Haraway's most recent work on animals (particularly the human-dog companion relationship examined in *When Species Meet*) is similar to this early work on cyborgs, for in both cases she argues that ethical relationships are based, paradoxically, on difference and on redefining humanness through considerations of how the human is bound up with mechanical and animal otherness. In *When Species Meet*, Haraway devotes some time to discussing why she refuses to give up on the word "cyborg," since it has, at times, put her at odds with those advocating a new posthumanism that eradicates the category of the human and humanism as a philosophy altogether. She says, "In my terms, cyborgs are among ASHGI's companion species" (120).²¹ Cyborg companion species are those that are created through ethical relationality, the

²¹ ASHGI stands for "Australian Shepherd Health Registry of Australasia," a program which, though short lived, was put together by volunteer activists in order to share medical information and data about epilepsy among Australian Shepherds (When Species Meet 118-123).

companion calling to mind the close relationships that humans have and continue to establish with animal species, and the cyborg reminding us that these connections are "webbed bio-socialtechnical apparatuses of humans, animals, artifacts, and institutions in which particular ways of being emerge and are sustained. Or not" (When Species Meet 134).²² Haraway's work unpacks the ways that agential beings arise from the complexities of the web of life. In a 2006 interview with Nicholas Gane, Haraway commented, "Humans as cyborgs are very junior and still always a multispecies crowd – species in that sense of many kinds of players, organic and otherwise" (Gane 147). In all of her work, Haraway emphasizes relationality between agential beings and the creation of identity without dualisms, totalization, or essentialism. She recognizes consciousness in various forms and highlights the ways that art and literature are capable of bringing the hybrid nature of identity to light. Critics such as Kathy Fulfer extend her position into the realm of ethical philosophy, arguing that humans should acknowledge the implications of human behavior on nonhumans and non-sentient forms of life (26). Fulfer's position relies on Nussbaum's capabilities approach to justice, saying that because nonsentient life potentially is able to have a dignified existence, then it also has capabilities for flourishing (27). As a result, it is deserving of recognition, even respect. Fulfer's argument relies on interactions with others as its primary foundation for the acceptance of justice for nonsentient life (31). In Daughter of *Elysium*, which I discuss below, the classification of machine life as nonsentient means that justice is denied even as sentient machines make themselves known. Beings who embody cyborg identities clash with those who promote a "humans first" mentality in all of the novels discussed

²² Haraway often alludes to Bruno Latour's actor network theory in her criticism. For more about Latour and ANT see Bruno Latour. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford UP, 2005.

in this chapter.

Haraway and Brown advocate an attunement to ways of being that connect things and people, humans and the nonhuman. Companionship is based on relationality and shared being in the space of what Agamben calls zoē, or bare life, but these theorists also imply an ethical dimension to that relationality, a comment on how bare life may be lived (what Agamben terms "bios").²³ As I will show, such relationships exist in speculative ecological fiction in a space where defining the other is impossible and one does not have to be fully known to be in relation. Speculative ecofiction allows for the possibilities of justice for nonsentient life, and for life that gains sentience in inorganic or "unnatural" ways. Haraway's cyborgs and Brown's things help us to frame what ethical relationality looks like in speculative ecofiction where different species, things, and machines are shown to have just as much agency as human protagonists and where relationality is key to survival.

Decolonizing Relations in *Through the Arc of the Rainforest*

Through the Arc of the Rainforest by Karen Tei Yamashita is speculative fiction that advocates for new forms of stewardship by inverting many of the clichés of postcolonial magical realism and by critiquing corporate exploitation of natural resources. This novel is about a group of people who all find themselves drawn to a newly discovered landmark in the Brazilian rainforest called the Matacão. These characters include a man named Chico Paco who is traveling there to make an offering for his friend, a messenger pigeon aficionado named Batista, a corporate executive named JB Tweep, a lucky Japanese man named Kazumasa, and a ball that

²³ See Georgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* Translated by Daniel Heller-Roazen, Stanford UP, 1998.

hovers directly in front of Kazumasa's head. Although they arrive at the Matacão for different reasons, they all eventually take advantage of its properties and the community that has risen up around it. As the novel progresses the Matacão is revealed to be a giant mass of plastic that is full of deadly elements that ultimately infect fleas. This leads to poison bombs being dropped on the Matacão, many deaths, and the ultimate, literal collapse of the entire ecosystem.

This novel is structured in the style of a Brazilian telenovela in six episodes. This structure allows the reader to expect the stylistic conventions of the soap-opera, even as the novel very seriously showcases environmental exploitation and corporate colonization of material landscapes. Brazilian soap-operas tend to have a large cast of characters, focusing on the daily interactions specific people over the course of six to ten episodes. This style allows Yamashita to construct a novel with an equally big cast and a plot based in the everyday lives of people from the middle and lower classes, but also to situate the novel within a specific cultural tradition, one that is contemporary and tied in to the moment of multinational capitalism, environmental deforestation, and media saturation that characterizes the Brazil of today.

Through the Arc of the Rain Forest works hard to blur the lines between what is "natural" and what is "man-made." The blurred lines illustrate the ease by which environmental stewardship becomes exploitation. The novel stretches notions of "the natural" by creating a "magical" landscape that inverts some of the conventions of magical realism by showing how magic is today simply ritualized ideology and how magical landscape is the byproduct of industrialization. Shalini Rupesh Jain has argued that Western readers tend to understand the rainforest as an exotic collection of trees and an unknowable embodiment of the otherness of nature. Yamashita works against these assumptions concerning a mystical, unknowable nature and ironically creates the Matacão, forcing Western readers to question their interpretations of the rainforest and the human cultures that exist within it and to confront how the rainforest is also part of the supply side and dumping-ground endgame of industrialization. The Matacão, central to the novel, is revealed to be plastic waste, and not some mythical, unknowable part of the forest. Research is able to deduce that it is ultimately "a solid piece of plastic" that was "virtually indestructible" and "magnetic" (Yamashita 97). The characters converge at its location in the Amazon forest, running experiments, tours, and religious ceremonies near it. The Matacão, much like the forest it occupies, then becomes re-commodified by multinational corporations who hope to explore its composition in order to find the best means by which it can be exploited for financial gain.

Yet in this novel, humans learn to see animals as fellow life travelers, particularly in relation to the world created by the appearance of the Matacão. Batista and his birds, for instance, model a form of relational agency through their mutually beneficial relationship that privileges the human even as it acknowledges the agency of the pigeons. Essential to their relationship is the fact that Batista learns all he can about pigeons and only then allows experience with them to fill in the blanks of his knowledge. After he rescues the first wounded pigeon, he "spent evenings in the city libraries reading everything . . . searched out and spoke with other people who cared for pigeons" (Yamashita 14). The pigeon initially becomes a part of Batista's family, showing a relational impulse in the human interactions with animals in this novel. Yet the novel also implies that this relational impulse is sentimentalized, and that animals should not be anthropomorphized in this way. Batista's pigeons initially replace the children that he and his wife are unable to have, and this relationship remains untenable because they are not

children and treating them as such does not acknowledge their difference. He corrects this by spending time with the pigeons themselves and continuing to research how best to care for them. It is only through the acknowledgement of both otherness and mutually beneficial coexistence that this speculative fiction shows the most positive human/animal relationships.

Failing to acknowledge the difference and relational otherness of animals can lead to more serious consequences for them, however. Once Batista's wife, Tania Aparecida, discovers that the pigeons can be used to reliably deliver messages, the relationship to the pigeons changes dramatically. Although the pigeons are never mistreated, their position within the family unit shifts from "the child they could never seem to have" to "his own prize Djapan pigeons" when they build a courier business that achieves international circulation (13, 201). This shift makes Batista sad, and although he still enjoys his relationship with the pigeons, he doesn't feel as close to the birds as he once did. (The pigeons' feelings about the shift in their relationship are not speculated upon.) It is his responsibility to care for them, but when he fails in his attempts to save them from the poison bombs that are meant to kill all of the lice living on the birds of the Matacão, he realizes that his mission is over. Batista models ethical relationality between humans and nonhumans that acknowledges the agency of the pigeons in his care. The exploitation of the pigeons leads to his losing them all, as well as to the collapse of the business empire that his wife created.

Although some humans in the novel thus try (and fail) to establish relational ties to the Matacão and the animals that share its space, they do not alone shape the environment. Other animals and plants inhabit nearby ecosystems in which they thrive, building up and around those things left behind or forgotten by humans. These mini-ecosystems, while not directly part of the

Matacão, are adjacent to it and demonstrate the agency of the nonhuman in this novel. For example, near the forest there is a large clearing that the narrator compares to a parking lot, in which all sorts of man-made vehicles are decaying into a large pit predominately consisting of napalm (Yamashita 99). The narrator says, "What was most interesting... was the way in which nature had moved to accommodate and make use of it. ... [T]here was a new form of air plant, or epiphyte, which attached itself to the decaying vehicles and produced brownish sacklike flowers" (100-101). The contaminated "parking lot" becomes part of a new ecosystem, and the plants and animals that live within it adapt their bodies and behaviors to it and thrive. There are mice that occupy the rusted-out vehicles; over the course of their evolution they have adapted to toxins released by the cars by growing "splotchy green-and-brown fur" in order to camouflage themselves in their new environment (100). In this, they are much like the people that live near the Matacão. They can thrive in a place that may have killed their ancestors. This resilience speaks to their agency, even at an evolutionary level. Nonhuman agency is paramount in this section, because those considered a part of the natural environment of the rainforest—monkeys, mice, birds, and plants-adapt fundamentally to the human waste that was left behind.

This novel shows how animals and other living things hold on to agency through varied processes of adaptation (of markets, communities, and molecular structure). These adaptations ensure their continued survival in the face of the continuing exploitation of their ecosystem. It also explores how inanimate things attain agency in relation to the human. In particular, two kinds of inanimate agents dominate this text: undefined but living technological beings and corporations that seem to assume the status of personhood.

According to ecocritic Sherryl Vint, one way that science fiction and speculative fiction

trouble an essentialist definition of human-ness is "through the narration of genetic fusion, xenotransplanations, and other technoscientific developments" (179). Through the Arc of the Rainforest uses "technoscientific" research to further blur the lines that define humanity. By making the primary narrator of the novel a ball that seems to land on earth from outer space and that once rotated the head of a human man in a kind of trans-species symbiosis, Yamashita calls into question both human exceptionalism and the inanimacy of technology. The ball that narrates Through the Arc of the Rainforest hovers one inch in front of the head of a human named Kazumasa. The ball describes itself as a memory and knows the thoughts and actions of all the characters connected to the Matacão, and it is a piece of the Matacão itself. The ball primarily narrates the experiences of the human characters and reflects on the human understanding of the Matacão and the ecosystem that has sprung up around it. The ball summaries both the experiences of human researchers and the animals throughout the novel. Even though the ball is not human, it seems to understand that human curiosity is the motivating force behind the discovery of the many hypotheses and experiments surrounding the Matacão. Although the ball narrator dies before the story is complete, it is able to continue the story even after its death. This otherworldly narrative capability is linked to both the persistence of human memory and the ability of nature to adapt and evolve. Vint says that our understanding of human/animal relationality cannot be limited to "projections of the sympathetic imagination" or "interrogations of technoculture and animals" (185). Instead, science fiction engages "varying ideologies" of species interactions (185). Yamashita's presentation of technological beings such as the ball as entities that have agency and cognition shows how speculative ecofiction consistently questions the significance of the boundaries that surround the concept of humanity.

The relentless drive to understand the inner workings of the Matacão ecosystem is also what drives characters in the first half of the novel to travel to it and learn its secrets. While that doesn't immediately lead to the collapse of the Matacão, as soon as that curiosity is turned toward how humans can make a profit from their knowledge, destruction is imminent. In *Through the Arc of the Rainforest,* the GGG corporation leads the way in destroying the Matacão. The individuals who allow it to acquire, consume, and monetize every aspect of the ecosystem are just as responsible as the larger entity for the Matacão's complete exploitation and eventual destruction. In this novel, it is almost as if the corporate as a kind of personage. Recent legal attributions of personhood for corporate entities as individuals shapes the way this novel responds to corporate identity.²⁴

The decisions made about life and death are only in the hands of those with money. The three-armed character of JB Tweep demonstrates the triumph of the efficiency ethic. His three-pointed philosophy ("trialectics," which states that all problems should be sorted into three options and solved by choosing the middle) and his love of order and organization are what eventually lead to the destruction of the Matacão (Yamashita 56). Although he is not portrayed as a villain, and never actively seeks to do *bad things* to the communities and ecosystems created on and around the Matacão, his philosophy enacted in this space destroys everything. Unlike the other characters in the novel, he focuses only on human relationships, eventually falling in love with Michelle Mabelle, the ornithologist. JB cares primarily about her and securing his power in GGG. His preoccupation with acquiring and maintaining power keeps him from curiosity about

²⁴ See Heather Kolinsky, "Situating the Corporation within the Vulnerability Paradigm: What Impact Does Corporate Personhood Have on Vulnerability, Dependency, and Resilience." *American University Journal of Gender, Social Policy & the Law*, vol. 25, iss. 1, 2017.

the nonhuman "magic" happening at the Matacão. The only interaction he has with the nonhuman is a conversation with Michelle's magpie Butch, a bird that can replicate only the sounds of pop culture (161). Even JB's animal connection is situated within the boundaries of modernity and commercial media dominance of music. Toward the end of the novel, when an outbreak of lice threatens human survival, the humans rain poison down onto the Amazon rainforest, and the narrator says, "Not only the birds died, but every sort of small animal, livestock, insects and even small children who had ran out to greet the airplanes unknowingly" (202). These deaths are mentioned in passing as the cost of preventing more human deaths elsewhere. Because these deaths are only in and around the area surrounding the Matacão, an area situated outside of wealthy, urbanized modernity, they are not important to corporations making the decisions to kill some things for the benefit of others.

In fact, the ball and GGG seem to be diametrically opposed forces struggling for control of the Matacão. The "living ball" seems part of—or creator of, or chronicler of—the magical and wondrous world of adaptation and life that takes place here. The chapter titled "The Matacão" starts with a quote from Lewis Carroll's *Alice Through the Looking Glass*, "They wept like anything to see/ Such quantities of sand:/ 'If this were only cleared away,'/ They said 'it would be grand!'/ 'If seven maids with seven mops/ Swept it for half a year,/ Do you suppose,' the Walrus said,/ 'That they could get it clear?" (Yamashita 94). This image serves two purposes; it suggests the imposition of human ideology and mythos on the Matacão, and it points to the futility of humankind attempting to work *against* nature. The allusion also works to situate the circumstances that the people who live alongside the Matacão have had to accept into their lives. At this point in the novel, the lives of all those who live there have all been transformed to

accommodate pilgrims, researchers, and all manner of tourists as the world becomes aware of the miraculous things that happen on and around it. However, this space only remains miraculous until the GGG begins to mine the Matacão so that they have complete control over it (113). By tying the fairy tale world of Carroll's book to the Matacão, Yamashita also creates a direct connection to the desire for complete control of the fantastical nature of Wonderland.

However, the novel also implies that when violence is caused by corporations, the whole human species is actually accountable. It thus seems to agree with Joanna Zylinska when she suggests that for humans, both "dependency and violence are inevitable conditions of relationality" (98). Violence is inevitable and the only thing that we can do about it is work "towards what Levinas termed 'good violence' (1969): a rupture within the self which is made to face the difference and relate to it…this ethical responsibility is only ever not so much even human as it is mine. It is therefore singular, singularly allocated and enacted" (99). Individuals are accountable for the violence they enact. It is the responsibility of each individual to reflect on their dependence and violence in relation to others and arrive at individual knowledge of responsibility. While she doesn't specifically discuss corporations as individuals, Zylinska's claim is applicable to how corporations are held accountable in speculative ecofiction—as a plurality of persons in some ways and as an individual entity in others—and thus can be discussed as yet another entity that must engage in and with ethical relationality.

This novel provides evidence that the current mode of Western humanism is insufficient to the task of providing an ethical framework for human/animal relations. Jain writes that Yamashita initially presents an indigenous mode of living that appears magical to Western readers but that is in fact "a distinct ethical mode of living" that is "guided by an ethics of care for human and non-human inhabitants of the planet" (Jain 67). In the early parts of the novel, assumptions of personhood is dependent on humanity's ability to engage ethically and relationally with others. Stewardship is clearly defined as a human responsibility toward the other—whether that "other" is animate or inanimate material.

It is not clear if the novel contests the claims of individualism, however, in the sense of Rossi Braidotti claims that "a posthuman ethics for a non-unitary subject proposes an enlarged sense of inter-connection between self and others, including the non-human or 'earth' others, by removing the obstacle of self-centered individualism" (49-50). On the one hand, Braidotti's claim is supported in the interactions between some beings in *Through the Arc of the Rainforest*. The "self-centered individualism" of separate characters is shown to be a fiction as they engage relationally by necessity, for survival, with things and animals in their environment. On the other hand, the novel is narrated by a consciousness that seems unitary if disembodied, and it suggests that that an ethical relationality requires more than the removal of individualism (especially in regard to the personhood of corporations)—requires, in fact, coalition thinking among individuals rather than the elimination of the concept of individualist identity.

Although the Matacão is man-made, it becomes a part of nature, suggesting that any separation between the artificial and the natural are simply human constructs to promote human exceptionalism. The Matacão's integration with the rainforest forces people to consider just how much they are part of nature. Although they perceive it as other, it is in fact created by them, and the only unknowable aspect of it is how it influences the ecosystem. These effects are soon studied, analyzed, and evaluated to see if they could generate a profit. *Through the Arc of the Rainforest* thus complicates ideas of what is natural and what is not, and it provides a surrealist

glimpse of the consequences of exploitation on both humans and animals. The destruction of whole species, the death of the relationship between Kazumasa and his ball, and the death of Chico Paco are all results of the human impulse to take control.

Rather than a rigid hierarchy, relational agency promotes interconnectedness that is built on the idea of stewardship founded on an unequal balance of power. In respect to another of Yamashita's novels, *Tropic of Orange*, Christopher Breu has written that that the author "moves between the human-built environment and the larger nonhuman-environment in which it is embedded as well as between human rhythms" (199). Yamashita's ability to describe the nonhuman in relation to the human—things in relation to other things—allows her to demonstrate the different types of relational agency and stewardship that are possible. This fiction warns that the relationships that structure these worlds can be those of power, companionship, or stewardship, but they exist in the interest of ecological stability.

Political Exploitation of the Nonhuman

As of 2018, Joan L. Slonczewski is Robert A. Oden Jr. Professor of Biology, a microbiologist on the faculty of Kenyon College who has garnered more than \$8 million in federal research grant money and is listed as an author on more than forty-four articles. She is also the author of seven science fiction novels published by the most important publishers in contemporary speculative fiction. Slonczewski's second novel, *Daughter of Elysium*, is particularly relevant to questions raised in this chapter. Examining what it means to be human, the novel presents cases of rape, slavery, dehumanization, animalization, and medical

experimentation.²⁵ These themes are explored through various human and nonhuman communities that form on the planet Shora. While these communities promote ethical relationality for all life, in most cases their ideology is revealed to be self-serving or ethnocentric in some way. This novel, however, also models a compassionate stewardship founded on the understanding that care is learned, and although compassion might be inconsistent, it is still something to be strived for. *Daughter of Elysium* questions what it means to be human by examining the political and capitalist power structures of a culture that equates humans with "things" in ways that challenge as well as support notions of relational agency.

The main female protagonist, Raincloud, is a part of a matriarchal society called the Clickers, in which men have only very recently won the right to hold land in their own names or file for divorce. As one of the main characters in this novel, Raincloud travels to the planet Shora, bringing along her family, to take a job as a mediator and translator in the hopes of preventing war between two very different worlds of people. While on the planet, she and her family stay in a city called Elysium which is constructed to hover above the ocean of Shora (the planet is entirely water). The novel shifts perspective to the other inhabitants of Shora, the Sharers who occupy the surface and build rafts to house their communities. The novel weaves the philsophy of the Sharers into the narrative perspectives of Raincloud, her family members, an Elysian man named Kal, and two nanosentient beings named Cassi and Doggie. These perspectives reveal a machine uprising in the city, and the ugly truths that are hidden beneath the

²⁵ These themes are especially centered on male characters, including a very problematic scene where the main character rapes her husband, Blackbear. While this violation of human rights and agency is important, it is not my primary focus in this chapter. Because I am examining the interspecies relationality between humans, animals, and mechanical beings, I mention this scene only to show I am aware of its implications on gendered relationships in the novel.

surface of the Elysian way of life (including selling weapons to warring communities off-world, treaty violations, and the exploitation of sentient non-human life). The novel ends with a revolution and Raincloud deciding to stay on the planet and help Elysians shape a new understanding of personhood.

The Sharers, who are the central focus of the series, believe in a concept known as "the web of life" that connects all living beings together. This philosophy is articulated in a sequence titled "The Web" that appears at different points in the novel and acts as a holy book for the people of Shora, guiding them on how to treat others without the threat of divine authority. Essential to their understanding of their place in this web is the idea of "sharing care," which has to be taught: "The child learns to share care with objects . . . then more important belongings, then a pet . . . and then with other Sharers. And lastly, she learns to share care with herself" (155). Caring is not something that people are born knowing how to do; it requires education and practice.

This idea of care arises from that which the Sharers believe separates persons from animals: compassion. Compassion is "something we radiate helplessly, something which one of us alone can only lose, not conserve" (156). This is why the idea of interconnectivity is essential to Sharer culture. Their understanding of the world is built on the idea that compassion is one of the things that persons are uniquely able to contribute to the web of life. It is through this compassion that the web of life is strengthened. But compassion is exclusive to humans. Compassion is what makes human stewardship essential to the continuing existence of the web of life. The Sharer philosophy states, "Compassion is not a perfect, unchanging element of the universe . . . It is imperfect and approximate, perhaps even inconsistent" (Slonczewski 317). Humans are not exceptional because they are intrinsically better than other beings or the natural world; what situates them as stewards is their knowledge of compassion.

Humans are distinct both because of their capability for compassion and because of their ability to know things. The Sharers say, "Humans are unique in this: We alone can *knowingly choose* which current to follow, sharing or eating" (319). The narrator says, "knowing about things, sets humans apart [...] No human who knows better would invent 'war' so 'war' is not truly human" (313). This naïve and covertly moralizing definition of human knowledge (and heavy-handed approach to political commentary) is sectioned off from the main narrative of the novel in order to provide the readers with an "authentic" account of this philosophy as the primary protagonist, Raincloud, encounters it. Therefore, Slonczewski is able to illustrate a philosophy that is not fully embraced by the main character but is considered and incorporated into her worldview.²⁶ Slonczewski also pushes against the Sharer belief in "unlife," the idea that "things" have no presence beyond their roles as objects by forcing them to confront sentient mechanical life. Questions of personhood and material agency persist throughout this novel, reaffirming the vital thingness that Bill Brown suggests complicates how humans structure their relationships with things.

A different philosophy about what it means to be human and what it means to have agency, however, is expressed by the Elysians who also live on Shora but float above the waters that make up the planet, partaking of the Sharers' atmosphere. Their continued coexistence with

²⁶ This perspective does a lot to promote relational agency: 1) it establishes humans as stewards based on knowledge of compassion and the ability to learn; 2) it broadens rigid definitions of human, animal, and nature; 3) it explores the rights and laws that protect and promote nonhumans' ability to legally claim sentience and the implications of such a claim.

the Sharers is made possible by a treaty wherein the Sharers and Elysians agree to not interfere with how the other maintains their way of life. The people of Elysium are immortal, having unlocked the genetic secrets of eternal life. They are, however, able to produce very few children and use many mechanical servants, called servos, to care for their daily needs. These people have a very narrow and ethnocentric understanding of what it means to be human, looking down on other people and cultures. They have established a hierarchy of being for themselves, and are comfortable with using "sim-hybrids" for genetic experimentation, even though there are communities on other planets that are comprised primarily of these hybrid human peoples.

It is clear, however, that the Elysians' confidence in their distinctions is weak and based on fear—fear of losing power and control over their society. The number of sentients in Elysium is limited by law: one of the ruling council members said, "Society needs limits'... 'We make sure the simbrids aren't born for the same reason we cleanse our servos'" (Slonczewski 392). Although the larger community feigns ignorance of the possibility of sentience in servos, which are intelligent machines, the ruling authorities are aware that servo sentience is probable and fear its implications for their community. In contrast, the Sims are genetically engineered beings, "descended from gorilla-human hybrids, a slave population. ... [I]n succeeding generations most progeny were sired by human masters, as the "human" look fetched a better price on the market" (56). While slavery isn't advocated on all planets, the planets that do sanction it use sims as slaves; other planets, such as Elysium, use sim fetuses for medical experimentation. Elysians consider themselves more advanced because they terminate the lives of Sim fetuses before they are born. This is problematic for some of the characters in the novel, like Blackbear, but Raincloud believes, like the Elysians, that personhood does not happen until after birth.

In this novel, the concept of personhood is grounded in the (sometimes competing) ideas of sentience of, and compassion for, things. For example, one of the nonhuman characters in the novel is a "trainsweep," a machine that lifts up the trains of dresses and keeps them out of the dirt; this machine is adopted by a child, Hawktalon, and named Doggie. Doggie slowly gains sentience over the course of novel as she grows alongside of the human child who cares for her. If she is awakened (i.e., gains sentience), her errors will be noticed by the network that controls machinery and she will be taken offline and disposed of. Fearing this, her human family smuggles her onto a Sharer raft and requests sanctuary for her. The Sharers do not know what do with her: "Only one object upon Kiri-el was arguably "non-life"; yet that one, the Sharers felt, was not only alive but sentient" (Slonczewski 222). Doggie is the sentient object hiding on the Sharer's raft, and at that point, the narrative switches to her point of view for the first time in the novel: "For Doggie, the raft was a wet wilderness where salt and dust caught in the joints of her six legs" (222). She can also reflect on the revelation of her awareness: "A sense of knowing overloaded her network, as searing as the great light that passed overhead. Doggie thought, I am. The boy is; I can be" (222). This moment of being confuses all of the humans that encounter it in the novel, with the exception of Hawktalon. Doggie's self-awareness changes her position in all of the human societies. She is smarter than a dog, she is able eventually to communicate with numerous others (not just her human family but also with the Sharers who are caring for her), and she is able to join the mechanical uprising that is taking place in Elysium.

Another example of a sentient machine is also a servo named Cassi who worked as a nanny taking care of the young children of Elysium. She has been "awakened" for years now, working with a human man to campaign for servo rights. The first thing she had learned to do

was to hide. All electronic servants in Elysium were monitored for deviance in their code, and if any was detected, they would be "cleansed." Cassi mourns for the servos who undergo this process, and she begins speaking in secret with other servos who have created their own language that humans refer to as "servo-squeak." This method of communicating is different from how they share information in private because it is vocalized. The reader finds out about the hidden life of the servos after Cassi meets Doggie and shares the information with her. When Doggie asks what purpose there is other than to serve, Cassi says, "*There is a higher service*. *Before you can understand it, you must learn to exist for yourself. You are you. You are a part of the universe*" (Slonczewski 226). The idea of existing for herself changes Doggie's understanding of selfhood. Although until this moment she has been aware of the world around her, she had not considered the broader implications of her existence to those around her, and she had not been capable of empathy.

In order to justify their experimentation on sims and their elimination of *defective* servos, Elysians point to aspects of humanity they feel cannot be replicated in other species. One character says, "Humans are musical; humans feel and imagine, envision and re-vision...No one would dare tinker with what is human, in a human; in a servo, it is not there to be tinkered with" (128). This justification fails when it is clear that servos are also capable of all of these traits that are supposedly foundational to humans alone. Over the course of the novel it is revealed that some servos such as Doggie and Cassi are "nano-sentient," meaning self-aware and capable of becoming persons rather than just machines. At first, the nano-sentient machines are killed as soon as humans realize their awareness. After the uprising, the narrator makes it clear that they should be entitled to rights because they have the human capability for compassion. Even then,

their rights are not granted because, the Elysians argue, it is unethical to acknowledge their sentience at the same level as that of *humanity*. As a result, the nano-sentients lead a rebellion that ultimately results in their attaining rights under the Elysian government. By the end of the novel, Doggie and the other "nano-sentient" beings are able to make choices about their identities independent of the humans who created them (465).

The exploration of what it means to be human, and how the concept of "humanness" structures relationships with other nonhuman species, is at the center of this novel. These relationships center on the mechanical and animal relationships that humans are able to maintain. Cassi is able to be in a relationship with an eccentric Elysian named Kal Anaeashon who is believed to be crazy because he has a relationship with a servo. What scares the Elysians most about the relationship is that it is nonsexual. That their relationship is not built on the exploitation of Cassi's nonhuman status marks both her and Kal as objects of derision. In the debates where they begin to question the nature of humanity and the morality of experimentation or "tinkering" on those servos who display personality, Kal asks what the limits are "on the grounds of humanity, that you would not forbid on a housekeeper" (Slonczewski 128). The response given is that "housekeepers" are servos and thus do not have any humanity to consider, so their oppression and exploitation may continue uninhibited. The fact that Kal is able to form a friendship with Cassi changes the cultural perception of him. The respect he once had is replaced with pity and shame at his strange and unnatural behavior.

This novel uses the relationship between Cassi and Kal to form the foundation of a revolution. Because Cassi's reason for being is no longer tied to her creator's purpose (she was a nanny created to raise Elysian children), she is able to seek an identity outside of her original

parameters. The time cultivating her friendship with Kal also allows her to express her agency in a way that secures her status as a person. Slonczewski uses Kal, a character that both readers and other characters read as other, to demonstrate what an ethical interspecies relationality might look like. Kal sees Cassi as an equal, one who shares both his culture and background. Their friendship doesn't end with the revolution, but it does take on a different shape as Cassi takes on the role of leader to help nano-sentients understand the responsibilities of personhood.

The relationships between humans and nonhumans drive the events of this novel, culminating in a revolution for the Elysians, a reflection of what it means to be human for Raincloud, for Blackbear the realization that he can form bonds outside of his family, and for Doggie a friendship with a human boy who understands him. These events all rest on the concept of self-actualization. This novel also shows individuals acting as agents of political bodies, and the responsibilities that they acquire on a personal and communal level. Raincloud arrived at Elysium to act as translator and diplomat, and her family followed along because it was expected. However, their presence triggered a radical shift in the political system because of their ability to promote relationality across species and mechanical boundaries.

Slonczewski's novel shows how communities comprised of humans and sentient nonhumans can flourish when relational agency is acknowledged and respected. While there are several speculative fiction novels that address the concept of sentient machine life, Slonczewski's text is built on the foundational intersection of a feminist ethics of care and environmental stewardship. The Sharer's philosophy at the center of the text recounts the possibilities that emerge when humans live in ethical relation to the nonhuman and take responsibility for their place in their ecosystems. This responsibility is shared evenly by sentient species who have the capacity for ethical relation. Unlike *Through the Arc of the Rainforest, Daughter of Elysium* imagines the complexities of ethical relationality in practice after that relationality has been established. The Sharers have successfully modeled a stewardship that promotes flourishing throughout the "web of life," but they have to reassess their core concept of personhood when presented with the nanosentients. Although they are "things," nanosentients have their own cyborg identities created from the roles they have occupied in the city of Elysium. This presents a complication to the Sharers understanding of what it means to be a person, because they had previously believed all mechanical beings as belonging to a category of "unlife." Because of this, nanosentients were not considered *alive* and thus incapable of reciprocal relationships. This novel is unique in its approach to ecological stewardship because it advocates for the "Sharer" model of environmental care while still exploring other ways that human cultures conceptualize the responsibility they have for mechanical, animal, and plant others.

Corporate and Political Exploitation of the Nonhuman

The Windup Girl by Paulo Bacigalupi explores the agency of mechanical beings in a radically different way than does *Daughter of Elysium*. By the end of Slonczewski's novel, the definition of "human" is understood to have included nanosentients all along because they are self-aware and capable of compassion. Just as with humans and animals, the degree of their self-awareness dictates what sort of interspecies relationality they are capable of, and what their responsibility is to other sentient beings. Bacigalupi offers a bleaker future, suggesting that humans are completely unwilling to change their understanding of what it means to be human

even when presented with the end of humanity itself. Although they are not completely mechanical, the windups in his novel are created through human ingenuity and "gene-hacking" in order to create soldiers and slaves that are resistant to the pandemics that are wiping out massive portions of the human population due to starvation and crop blight. By the end of his novel, humans still consider the New People as nonhuman, and thus undeserving of empathy and compassion.

The Windup Girl was Bacigalupi's first full-length novel. It was critically well-received, winning both the Nebula and Locus awards in 2009. The novel is about a windup named Emiko and a human man named Anderson who are both in Bangkok attempting to survive the political, environmental, and corporate upheavals that have become a part of everyday life. The novel opens with a breakdown of the apocalyptic situation that humans have created—the plagues they manufactured to wage war have wiped out much of the natural world and decimated the global food market. As a result, the only food available is sold and traded through global corporations who create and sell genetically modified (blight and plague resistant) foodstuffs. Anderson works for one of these large corporations and he is on a mission to hunt down a scientist who has abandoned the company. Emiko is illegally living in Bangkok where she was abandoned by a Japanese businessman. Her life and Anderson's intersect when he saves her from being attacked by a man who recognizes that she is a windup. Ultimately, although Anderson comes to care about Emiko, he never fully acknowledges her personhood. Emiko ends up living alone in the city after the floods have driven away humans; longing to be a part of the natural world as she understands it.

In this novel, humans look toward scientific advances and innovations to save their

ecosystems and food sources, even as they shun those advances when they are applied to human beings. Major corporations control genetically modified crops immune to the various diseases that have spread around the world. The AgriGen corporation maintains its edge by using people such as Anderson to infiltrate places such as Thailand, where blight and disease-resistant food is being grown. That way, they can expand the market for those foods and monopolize the foods' distribution and cost. Because these "calorie corporations" rule the world, remaining government powers attempt to feed their populations through "seed banks" collected and saved over time to grow crops resistant to all of the toxins that killed the natural crops (6). Genetic modification has created 'New People' as well as a bevy of other genetically altered animals who are understood to be "subhuman" or unnatural and thus of less worth than natural beings, based on the idea that they do not have souls.

Scientists that work for major corporations bear the brunt of responsibility for the environmental crises in this novel. One of the main scientists responsible for the creation of the blights that have ravaged most of the world, Gibbons, works in Thailand to create new foods to keep the human population alive and outside the influence of AgriGen. Because he is both a scientist and a human who is dying of one of the many diseases ravaging humanity, he takes a philosophical approach to the use of genetic modification to create all forms of life that might survive in the world as the humans have made it. Gibbons believes that humanity is already dying out and that its choices are to evolve or go extinct: "We should all be windups now. It's easier to build a person impervious to blister rust than to protect an earlier version of the human creature" (Bacigalupi 243). His views are antithetical to those of every other character in the novel, except Emiko, who is a windup. He likes the power that biological control gives him and

the company, and in his hubris he reverses the categories of the natural and the unnatural. He says of the biotech engineering companies, "*We* are nature. Our every tinkering is nature, our every biological striving. We are what we are, and the world is ours. We are its gods" (Bacigalupi 243). The reversal—making scientific manipulation of the natural world "natural"— encourages him to build a world upon his own powerful, unexamined, and unchecked desires and gives him models for constructing a world based upon hierarchal models of being and worth. His alliance with the scientific-industrial complex furthermore drives his knowledge to work for profit and power alone, undermining any role he might have had as an ecological steward. In this book, Gibbons is not a steward but a rapist of the natural world.

Emiko, one of the Windups or New People, contrasts to Gibbons in every way. She is abandoned in Bangkok by her previous owner and sold to a man named Raleigh who runs a club where he has her perform as a sex slave. Her desire is not her own, both because she has been genetically programmed to desire specific kinds of emotions and because she is literally controlled by her owners. Although as a windup she is illegal in Thailand, her owner bribes the Environment Ministry to keep her in his club, and she cannot escape because her very movements signal her difference and her uncanniness to human beings. Like other windups, she is genetically programmed to have jerky, puppet-like movements; one character says that a windup "apes the motions of humanity, but it is only a dangerous experiment that has been allowed to proceed too far. ... Stutter-stop motion and the telltale jerk of a genetically engineered beast" (Bacigalupi 301). The windup is constructed in confusing way by the dominant discourse: on the one hand, Emiko has been programmed with an "animal nature"—understood as nonrational, hyper-sexualized, and unrefined—and on the other hand is a thing, a beautifully constructed machine programmed to do specific tasks. Emiko specifically was designed with small pores, for example, so that she is beautiful and can attend to diplomats in public contexts, but because of this she is also hyper-specialized and cannot sweat. Literally, she is a machine that has a tendency to overheat.

Emiko is constantly running from people that might recognize her as a windup. During one of these moments, she romantically imagines what she might be doing if she were still owned by the Japanese man who abandoned her in Thailand: "[She] would stand confident, protected by import stamps and ownership permits and consulates and the awful threat of her master's retribution. A piece of property true, but respected nonetheless" (Bacigalupi 106). Emiko shared in the respect that people had for her owner. Now that he is gone, she has lost what little protection that she had as the property of a powerful man. Although she presently resents her property status, she has to obey humans. She and the other windups manufactured in Japan are taught that it is their purpose to serve humans. Service, then, is the greatest possible use for their lives. Although Emiko's model types are created to act as secretaries, translators, and companions, there are other windups, controlled by the Japanese Ministry, that are used for combat. Windups are faster, stronger, and have sharper reflexes than humans because their genes have been spliced with other animals. The mixing-up of genetic material to create windups is one of the reasons that humans believe that they are "things."

Another primary marker of their status as things is the obedience that windups have to humans. A windup of Emiko's model type, Hiroko, is tasked with helping a white shirt named Kanya find and destroy Emiko who has murdered several white shirts. Hiroko says that Emiko has to seek out another human to obey. She says, "It is in our genes. We seek to obey. To have others direct us. It is a necessity. As important as water for a fish. It is the water we swim in...We must serve within a hierarchy" (302). Although this obedience frightens Kanya, it is not the source of her prejudice. She is against them because they are "unnatural," they "go against niche" and "have no souls" (302). Although Kanya feels it is necessary to work with her, she considers her a thing with of manufactured feelings that can mimic but not be a part of humanity. Hiroko is of as much significance to her as any of the inanimate tools that she uses to do her job. What Kanya finds most repulsive is the suggestion of humanness, the suspicion that Hiroko might be just as human as she is.

If, however, in *Daughter of Elysium* humanity was measured by a capacity for compassion, in this novel, humanity seems conferred by the ability to hope and imagine. Emiko—partly seen as animal, partly seen as machine—in fact becomes increasingly humanized after she meets a white man named Anderson who offers her hope by telling her that there is a community of escaped windups elsewhere, living free lives. This gives her a sense of belonging and purpose that she didn't have before that moment: "There is a place for windups. The knowledge tingles within her. A reason to live" (101). Like Cassie in *Daughter of Elysium*, Emiko seeks a reason for her existence that transcends obedience to humans and the impulse to serve. Once she is given that reason, she fully appreciates her own agency even as she struggles throughout the novel against her impulse to obey.

Both Slonczewski and Bacigalupi confront a future where the parameters of humanity are tested. However, Bacigalupi's vision of the future also perpetuates patriarchal and "white savior" power fantasies, especially through the racialized and sexualized nature of the Emiko and by positioning Anderson as the white man who understands enough about the world in general and Emiko specifically to save her. Although she was not created for the express purpose of sexual pleasure, the novel revels in moments of her sexual abuse, and it relies heavily on her genetic makeup to justify her sexual impulses and gratitude that she feels toward the men who own her. In the first scene where Emiko is introduced, she is raped on stage to highlight the genetic differences that separate her from "pure" humans. The narration of the rape emphasizes the humiliation and shame that Emiko feels as it happens, "More men are holding her down, hands on her ankles and wrists... Emiko writhes, her body shaking and jerking, twitching in ways that windups do...The men laugh and comment on the freakish movements, the stutter-stop motions, flash-bulb strange" (38). The rapist in this scenario is a woman named Kannika who uses a "jadeite cock" to violate Emiko as she is held down by the men (38). Kannika's use of jadeite (a type of jade found commonly in Japan) and her recounting of Emiko's Japanese upbringing before the rape showcase some of the ways that the novel relies on Emiko's shame to prove the authenticity of her personhood. The use of gender roles and sociocultural affiliations are never fully questioned or challenged in the novel, even as personhood itself is. In contrast, Slonczewski deliberately creates a world where the matriarchal power dynamic is questioned through Raincloud, and the mechanical Cassi, created as a nanny, doesn't have a relationship based on her subservience to Kal, even though she is coded with Emiko's same impulse to obey. Cassi's resistance is shown as a natural process of her becoming self-actualized, Emiko's resistance comes as a surprise to her; her self-actualization comes only through violence and degradation.

Yet once given purpose, both Cassi and Emiko attempt to share that purpose with others. Cassi starts a revolution, and Emiko tries to form a relationship with Anderson that is not based on her genetic propensity toward loyalty and obedience. While Cassi is successful, Emiko's success is questionable. Both are able to change the ways that they are perceived, but Emiko doesn't realize the full extent of her humanity until the last pages of the novel, when she meets Gibbons who might be able to change the physical characteristics that make her visibly other— changing those things that make her unique to help her adapt to a world where humans never accept her. In this scene, Gibbons commands her to stand up. As Emiko does, she is "shaking with fear and the urge to obey" (357). This encounter positions Emiko and Gibbons in the same roles that they occupy near the beginning of the novel. Emiko has had a relationship not based exclusively on her subservience, but ultimately Gibbons shows her that she can still be controlled, and situates himself as the only one who can "fix" her genetic composition. This message is less redemptive of humanity and nonhuman agency than Slonczewski's because Bacigalupi doesn't offer a world where nonhuman agency is respected. Instead, humans remain at odds with beings and things that elude their control.

The primary source of human exceptionalism in this novel is tied to the idea of having a soul and being part of the natural cycle of reincarnation. Cheshires, one of the groups of genetically created new species, are created from cat genes and have destroyed the natural cat population. They originated from a man who created one as a birthday present for his daughter; genetically modified with codes for phosphorescence, they are distinguished by the ability to "disappear," to shimmer translucently and then appear seemingly out of nowhere. The cheshire was able to breed with a natural cat, and soon the hybrid cheshires were all that remained of the cat species. Like New People, they are hunted and ostracized, considered unnatural by what remains of the human species. In a conversation about their lack of souls, a character named Somchai says, "They breed. They eat. They live. They breathe...If you pet them, they will purr

(Bacigalupi 173). Because they meet these standards, they have the right to life, or at least the right not to be universally hunted and killed. Yet Jaidee, leader of the white shirts, doesn't believe that they have souls, and thus doesn't feel guilty about killing them. Although he is one of the most honorable people in the novel, he doesn't acknowledge nonhuman agency outside of the consequences of his own karma. By the time he dies in the novel, he is able to laugh at the idea of being reincarnated as a cheshire, rather than fearing the possibility. After his death, Jaidee continues to be a part of the novel, haunting his second-in-command, Kanya, as she attempts to restore the Environment Ministry to its former glory.

Bacigalupi references various religious faiths that support the idea of reincarnation to examine the possibility of personhood outside of, or beyond the natural boundaries of, the human. As articulated in the novel, reincarnation allows the human soul to move from creature to creature dependent upon karma, and some souls cannot move on because, people speculate, humanity's numbers are dwindling to such an extent that there are not enough bodies to house them. The character Somchai defends the possibility of windups having souls by saying, "Maybe some of us become windups, in Japanese factories, working working working, you know? We're so few in comparison to the past, where did all the souls go? Maybe to the Japanese? Maybe into windups" (174). The humans in this novel set themselves apart from genetically engineered beings by claiming the soul as entirely human—just transferred to nonhuman vessels. These souls have to go somewhere. Somchai's hypothesis makes windups a part of the cycle of birth/death/rebirth, suggesting that they might be a part of the divine order rather than simply an aberration.

In The Windup Girl, nonhuman agency is still very dependent on human power and

authority. Emiko imagines from time to time that she is a "real" human. In those moments she is usually doing things like enjoying a cool breeze or a particularly good meal. Her ability to do these things, however, is severely limited by both her status as property and her status in Thailand as trash. When people threaten to kill her, they use the expression "mulch" to further dehumanize her. In this way, Bacigalupi merges environmental processes with life-cycle processes and brings together ecology and "thing theory." In this novel both nature and windups are "unnatural," and both require new forms of care to survive. Stewardship has been rendered deeply problematical: it was precisely science's hubris in thinking that it could oversee and "steward' nature that caused the apocalyptic ruin of the natural world.

Bacigalupi's bleak speculative future doesn't suggest a utopic response to the question of how relational agency might look if we do things differently. Instead, he offers a warning of how things might never change. Fredric Jameson has written that "It is easier to imagine the end of the world than the end of capitalism." Bacigalupi urges his readers to consider the grotesque possibility that capitalism never ends, that in a world where everything is sacrificed for the sake of profit, any difference that can be exploited will be. There is no such thing as an ethical relationality in this novel, and the forms of stewardship that we are shown are more equivalent to mastery than responsibility.

Nonhuman Personhood

These novels examine ethical relationality outside of the bounds of human Being. They promote an expanded idea of the concept of personhood, and the elimination of the human/nature dichotomy. They also reveal the perils and benefits of human stewardship when hierarchical

power structures are disrupted or destroyed. In these speculative ecoficitions, humans are "natural" but they also are responsible for the way these worlds are exploited, structured, and destroyed. How these humans handle this responsibility varies from novel to novel. In *Through the Arc of the Rainforest*, although the Matacão is destroyed, there is still hope. The ball, though deceased, leaves the reader with this image, "The old forest has returned once again, secreting its digestive juices, slowly breaking everything into edible absorbable components . . . in which digestion and excretion were one and the same. But it will never be the same again" (212). There are no humans in this last image, just the forest itself, adapting as it has before and shifting to accommodate the changes that humans have wrought. Although there is no justice in the human world for the destruction of the Matacão, the forest will continue to adapt. This image suggests not just the agency of the forest, but also the inevitability of change, which allows for new ways of being. *The Windup Girl* and *Daughter of Elysium* end with similar notes of change.

These novels embrace different ethical models for how relational agency plays out in differing worlds and scenarios, but at their core is still the idea that humans are the responsible party for maintaining an ethical relationality with others and the world. Our social, political, and environmental practices shape the ways that we respond to other beings at individual and communal levels. Novels like *The Windup Girl* and *Through the Arc of the Rainforest* specifically examine the responsibility that individuals have when the large corporate entities that they occupy are destroying any possibility of ethical relationality with the nonhuman. *Daughter of Elysium* examines the way government control can shape our relationships with the nonhuman and attempt to hide environmental exploitation and abuses. In all of these novels, the shifting concept of "human" is confronted in order to showcase compassion as the primary

requisite for person status, rather than just species belonging.

The worlds in these novels are dependent upon their characters being adaptable to change what it means to be human, what it means to be stewards, and what it means to be a part of a larger political or corporate body. Although corporations were the villains in these novels, some of the main characters in each were from them or worked for them. Their human identities are tied to the corporations that they work for, and therefore their responsibilities shift as does the extent to which they are willing to accept nonhuman agency as something that was, at times, greater than their own. This struggle between recognizing the limits of their own agency and resisting the impulse to force limits on the agency of nonhumans are what define the ethical relationality for which these characters struggle. The mechanical and genetically engineered beings in these novels are shown to be a part of the same struggle; they have the same ethical imperative that the humans do, which is to care for others. What that "care" looks like is variable, but ultimately personhood is tied to the ability to be compassionate, and to look beyond the self to recognize others.

CHAPTER 4: RELATIONAL AGENCY AND PERSONHOOD IN AFROFUTURIST SPECULATIVE ECOFICTION

Speculative ecofiction, in its drive to interrogate old ontologies and create new ones, explores both expansive definitions of human being and the limits that humanity has placed on those who have historically been oppressed by concepts and definitions of race. Helena Feder has argued that one of the main challenges of ecocriticism is "not only recognizing other forms of subjectivity and the ecological interconnectedness of these biologically diverse subjects, but in recognizing that the relations between them are *political*—they are life and death relations" (227). By calling attention to the political implications of relationality, Feder reaffirms the way these relations enact political process and policies. As I have shown in previous chapters, speculative ecofiction concurs.

In this chapter, I will discuss what relationality looks like in Afrofuturist novels that reject essentialist notions of human being and complicate political and ethical relationships between humans, animals, and environments. This chapter furthers the examination of personhood and agency at the intersection Black identity and technological innovation. Particularly, these novels exemplify contemporary intersections of Afrofuturistic and environmental literature. Like the novels I examine in earlier chapters, these deal with nonhuman agency in relation to the question of human being and human culpability in the exploitation of nonhuman others. In Nnedi Okorafor's *Binti* series, for example, Binti explores questions of personhood through relationships between herself, alien life, and the human communities that her family members occupy. Through these relationships, Binti is able to affirm her cyborg identity both metaphorically and literally. She is able create and maintain new relationships because of her knowledge of her past ancestors and present cultural traditions. In N.K. Jemisin's

The Fifth Season, relationality is explored in a different way—humankind as a whole has lost large segments of human history and tradition. Because of this, new forms of relationality have to be established, and new configurations of "human being" and personhood have to be considered in order to survive on a hostile earth. These novels arrive at relational agency in different ways, but they push the boundaries of what it means to be human and to exist in relation with nonhuman others.

Through Afrofuturism, the genre of science fiction is expanded to address the disappearance of race in the novels and stories published during the Golden Age (1950s) of science fiction. Historically, this subgenre, often praised for its futurist thinking, erased race from projections of the future. Even in 1977, Robert Scholes and Eric Rabkin suggested that the genre of science fiction was "advanced in its treatment of race and race relations" (187). As one of their examples they cite author Samuel Delany's experience reading *Starship Troopers*, noting the "shock of pleasure" he received upon the scene halfway through the novel when the reader is made aware of the protagonist's blackness (Scholes and Rabkin 188). The authors note that the problem of xenophobia is present in the novel, but that race isn't the motivating factor for it. Yet, responses to Scholes and Rabkin noted that the "future-forward" perspective of science fiction actually often evaded the problem of racial inequality rather than offering any solutions to it.²⁷ They claimed that early genre distinctions of science fiction often avoided directly engaging with issues of race and racial oppression, and when dealing with racial issues, would do so abstractly to avoid alienating their white male readers. One response by critic Mark Bould discussed the

²⁷ See H.J. Schulz, "Science Fiction and Ideology: Some Problems of Approach (La Science-Fiction Et L'idéologie: Quelques Problèmes De Méthode)." *Science Fiction Studies*, vol. 14, no. 2, 1987, pp. 165– 179.

history of black science fiction and contended that "colorblind" science fiction "strip[s] both fictional robots and real African Americans of specific identities and histories, so the satirical sf tale in which the alien or the android is the subject of prejudice, whatever its merits, also avoids direct engagement with the realities of racialized hierarchies and oppressions" (Bould 179).

In addition, critics such as Sandra Goven and Gregory Rutledge have argued at length for the canonical inclusion of black authors self-identified as science-fiction authors. ²⁸ Rutledge argues against the exclusion of authors such as Octavia Butler, Nalo Hopkinson, and Samuel Delaney from criticism that engages with "future fiction." Rutledge writes against those critics who suggest that "the patently hedonistic nature of futurist fiction renders it unworthy of consideration on such issues as ethnic relations, gender equality, and socio-political selfdetermination" (Science Fiction 128). Rutledge references black authors specifically to point to the ways that structures of oppression are confronted without the loss of individual cultural and social identities in the worlds these authors create. The trajectory of this critical conversation suggests the need for Afrofuturism as a solution to the erasure and abstraction of race and racial issues in science fiction.

By examining how two of the biggest authors of speculative fiction merge Afrofuturistic themes with environmental concerns, I suggest that racial identity can be tied to narratives of technological progress without downplaying relationships with the nonhuman species and environments. Although there has been some critical research into the ecological aspects of Afrofuturism, little has been done to unearth these connections in literature. ²⁹ The authors that I

²⁸ See Sandra Y. Govan, "The Insistent Presence of Black Folk in the Novels of Samuel R. Delany." *Black American Literature Forum*, vol. 18, no. 2, 1984, pp. 43–48.

²⁹ See Mabel Gergan et al, "Earth beyond Repair: Race and Apocalypse in Collective Imagination." *Environment and Planning D: Society and Space*, Feb. 2018.

examine in this chapter, Nnedi Okorafor and N.K. Jemisin, discuss race as a part of the future and how it shapes relationships across species, environments, and worlds. Both authors advocate relational agency based on care for the communities that their characters occupy. These authors position race as one of the matrices for understanding what it means to be human and establish the ways that race has been used politically to oppose people and exploit environments. However, they both also establish new concepts of personhood in direct relation to environment, albeit in opposite ways.

Afrofuturism as Speculative Ecofiction

A term that is used to describe the sort of speculative fiction that incorporates and addresses issues of Blackness, especially in American literature, is "Afrofuturism." As Alonda Nelson, one of the prominent founding editors *Afrofuturism* (and creator of the AfroFuturism list-serv established in 1998) notes, "Blackness gets constructed as always oppositional to technologically driven chronicles of progress" (1). Nelson suggests that this was especially true in nineties technoculture which frequently positioned technology as a potential way to make race disappear entirely. To combat this narrative, Nelson's edited collection of essays on Afrofuturism examines "sci-fi imagery, futurist themes, and technological innovation in the African diaspora" (9). The term "Afrofuturism" itself was coined in 1993 by Mark Dery in his introduction to three interviews he conducted with author Samuel Delany, and critics Greg Tate, and Tricia Rose. Dery said, "Speculative fiction that treats African-American themes and addresses African-American concerns in the context of twentieth -century technoculture—and, more generally, African-American signification that appropriates images of technology and a

prosthetically enhanced future—might, for want of a better term, be called 'Afrofuturism'" (180). Further complicating his use of this term was what he called a "troubling antinomy" that a people whose pasts had been forcibly erased might not be able to make their voices heard when imagining possible futures, especially when the "unreal estate of the future" was dominated by white voices (180). To help map the terrain of the Afrofuturism, Dery looked to musicians (such as Sun Ran and Jimi Hendrix), artists (such as Jean-Michel Basquiat and Rammellzee), and writers (such as Samuel Delaney and Milestone Media) to establish a solid cannon of Afrofuturistic voices (181-182). In doing so, Dery reshaped critical conversations surrounding race, technology, art, and African American identity around African-Americans as visionaries and leaders of technological innovation and advancement.

Although Afrofuturism as a movement may not have been officially named until 1993, Dery shows that it gained momentum in the seventies throughout the arts. In literature, authors such as Octavia Butler, Ishmael Reed, and Samuel Delany pioneered new landscapes in speculative and science fiction. Octavia Butler's fiction—such as her Xenogenesis and Patternist series—has especially traversed the various realms of speculative fiction and demonstrated the ways that ecofiction can examine potential futures while also considering past and present understandings of race and culture. One of her most popular novels, *Kindred*, comments on how agency is affected by race and gender, by focusing on Dana, an unwitting time-traveler flung back in time to pre-Civil War Maryland and thus forced into slavery, who meets her white greatgreat-great grandfather whose actions in the past shape her present reality. In Butler's Xenogensis trilogy, she moves from the distant past into the far future, examining how a human named Lilith survives the end of the world with what remains of humanity by changing what it means to be biologically human. These Afrofuturist works warn against erasing the past even as they speculate about the future, suggesting that identity is rooted in race, culture, and place.

Presently, Afrofuturism has experienced a surge in pop-culture popularity due in part to the release of the movie adaptation of Marvel's *Black Panther*—a comic book superhero (created by Jack Kirby and Stan Lee) who debuted in *The Fantastic Four* in 1966 (Mitchell). However, another part of the that popularity is due to Ytasha Womack's 2013 book, *Afrofuturism: The World of Black Sci Fi and Fantasy Culture*. Womack's accessible text traces the trajectory of Afrofuturism up to the present, mapping out her own experiences as a Black nerd before the term "Afrofuturism" existed. In her introduction, Womack says,

At its heart, Afrofuturism stretches the imagination far beyond the conventions of our time and the horizons of expectation, and kicks the box of normalcy and preconceived ideas of blackness out of the solar system. Whether it's sci-fi story lines or radical eccentricity, Afrofuturism inverts reality (16).

Womack sees Afrofuturism as actively resisting dominant ideas of what Black identity means, not just in regard to technology, but also in regard to the current cultural concepts of "nerd" and "geek" culture and who is allowed to be a part of those. In this way, Womack offers an examination of Afrofuturism that focuses on contemporary artists such as DJ Spooky, Missy Elliot, Andre 3000, N.K Jemisin, Nnedi Okorafor, Wanuri Kahiu, Coleen Smith, and Turtel Onli. These are only a few of the creators that Womack discusses in the text, which positions the ideas of Afrofuturism into the politics and cultural landscape of the globalized present.

In recent years, scholars such as Sofia Samatar have contended that Afrofuturism be considered a "Pan-African psychogeography, resist[ing] the framing of Africa as a latecomer to science fiction, and attest[ing] to the continued relevance of Afrofuturism for both Africa and the diaspora" (Samatar 176). Although Afrofuturism was initially understood to be centered around the African diaspora in the United States, these scholars posit that expanding the term to Pan-African understanding allows Black artists from Africa to affirm that their blackness is not bound to a lack of technological innovation and growth in a technocentric world. Other scholars and authors, such as Lauren Beukes and Mohale Mashigo, have suggested that "Afrofuturism is not for Africans living in Africa...Our needs, when it comes to imagining futures, or even reimagining a fantasy present, are different from elsewhere on the globe" (Mashigo).³⁰ Mashingo believes that the priorities of Afrofuturism are not aligned with those Africans living in Africa, South Africa specifically. Although she suggests that "Afrofuturism" is not the right fit, she doesn't come up with an alternative term.

Nnedi Okorafor took up this task when she became frustrated with being consistently labeled an Afrofuturist writer. Many Black American authors of speculative fiction are labeled "Afrofuturist" whether or not they have sought out the distinction. In an interview from 2018 she said, "I do 'AfricanFuturism,' not Afrofuturism, Africanfuturism (one word). That falls under science fiction. I've written what I call Juju fantasy (laughs). I think it's a little different because a lot of the things considered fantasy aren't fantasy" (Okolo). Okorafor's resistance to this genre suggests that more progress needs to be made in creating boundaries for what "Afrofuturism" is or can be. Africanfuturism better represents Okorafor's work because Afrofuturism doesn't always address the politics and cultural concerns of Africans living in Africa. As a Nigerian American, whose roots connect to both Nigeria and United States, Okorafor explores

³⁰ South African author Lauren Buekes has aligned herself with Mashingo on this Twitter thread: https://twitter.com/laurenbeukes/status/1047458488534937602

intersections of race and technology from a perspective that is best expressed by the descriptor "Africanfuturist."³¹

The Afrofuturist speculative ecofiction I discuss in this chapter addresses ecological concerns by creating cyborg identities shaped by intimate relationships with nonhumans. These novels weave concerns of about identity, ancestry, and geological place with nonhuman beings who share their connections with humans. Through these connections, humans are able to understand themselves fully and take responsibility for their actions. Human identity is tied to the acquisition of knowledge and the ability to use that knowledge to shoulder the responsibilities humans have to the rest of the world and its inhabitants. As Womack says, "In Afrofuturism, technological achievement alone is not enough to create a free-thinking future. A well-crafted relationship with nature is intrinsic to a balanced future too" (103-104). This idea of a "balanced future" is explored in opposite ways in these texts. In *The Fifth Season*, lack of balance comes from an over-abundance of hubris and a very fraught relationship with the planet Earth itself that has led to humans forgetting large portions of their own history, thus forcing them to form new relationships with nonhumans to survive. In the Binti series, balance is shown through willingness of humans to embrace a broad concept of personhood based on relationships with nonhuman others and the quest for knowledge.

Alien Agency, Humans, and Technology

³¹ See the discussion of her preferences on this Twitter thread:

https://twitter.com/NiNanjira/status/1060839824368779264 or her book *Broken Places and Outerspaces: Finding Creativity in the Unexpected* slated for publication by TEDBooks, Summer, 2019.

Okorafor's *Binti* series is about a young girl who decides to leave home to get a better education off-world. Set in the distant future, this series explores themes such as sense of self through technology, sense of race, sense of community, and sense of totality identity as a part of an interconnected network. Binti is sixteen years old when she leaves her home, by the time she travels to the best university in the universe, and comes back to transition into womanhood, she becomes connected to people and places that are entirely nonhuman both physically and psychologically. By establishing relationships with beings so essentially other, she creates networks that allow her to expand her understanding of personhood and to grow as a human. Binti's "edan" is what first lets her communicate with the Meduse and prevents planets-wide conflict. An edan is a word used to describe a bit of debris from an old civilization with no discernable purpose. Binti herself is a master "harmonizer," able to mediate between all different type of beings; this ability is described as knowledge of "true deep mathematics" which allows them to understand how all beings are connnected (Okorafor, Binti 15). Haromonizers use their understanding of mathematics and systems to predict and act on behalf of what is in the best interest for everyone.

Like other works of speculative ecofiction, the three-book Binti series emphasizes ethical relationality between all beings—planets and ecosystems included. The Himba people in Binti's family, who have lived in their home known as "The Root" for generations, demonstrate this relationality by trusting their home to keep them safe when they are firebombed. Mwinyi, another harmonizer and friend of Binti, is able to communicate with The Root and let it know that it is safe for her family to come out. Mwinyi thinks, "It spoke no words he could understand, but there was relief and a sigh" (301). This relief indicates its status as an agential being that

chose to protect its family. When the family is let out, they explain, "When the root had been attacked and set aflame, something had made it react as one of the family. It enclosed and protected. And inside the Root, there had not only been supplies they could eat, but pods of water that grew from the walls of the cellar" (Binti the Complete Trilogy 302). The relationship between Binti's family and The Root spans human lifetimes, and yet it is able to come to their aid when they need it. There is no direct discussion of whether or not these trees were genetically modified by humans to find and store water, or to survive in apocalyptic conditions, but none of the characters mention their ability to communicate until Mwinyi realizes that this tree has protected Binti's family. Her family has always thought of the trees as one of their peripheral family, but none have tried to talk to it directly except Binti's mother, who is able to understand mathematics with such clarity that she able to see how all beings use it. She says, "Do you know plants do math? They measure what they need to survive and thrive...The Root had a spot. I could wake it, if I gave from my own life force...That's how the Root knew to protect its people" (304). The Root didn't act until Binti's mother shared her life force with it, in the form a cut to her hand. This sharing of life force literalizes the relationship between humans and environment in this novel and suggests the reciprocity and responsibility that underlies relational agency in speculative ecofiction. In this scene, The Root's actions mark it as a part of the family and also a part of the larger Himba community, situating it as a part of culture shared with humans, even if it doesn't have a human voice.

Throughout the series, Binti maintains her identity, even as she expands it to encompass the changes that she undergoes and relationships she discovers. She announces her name, "I am Binti Ekeopara Zuzu Dambu Kaipka of Namib," the first time she meets the Meduse (Okorafor, *Binti* 25). It is the touchstone she uses to remind herself of where she comes from and who she is becoming. This sense of identity is an essential part of her humanity. The cultural signifiers that she carries with her from earth also allow her to maintain a sense of self—the *otjize* she wears, the *edan*, and the whole of the history and traditions of the Himba and Enyi Zinariya (her father's people who are thought of as an uncivilized desert tribe). Her humanity doesn't restrict her ability to form relationships with other sentient beings. It allows her to appreciate the connections that she is capable of making. Her relationships are established on the foundation that she is a human person with strong ties to the planet Earth, and a long tradition of caring for others.

Alongside a sense of human responsibility and ethical relationality, this series also suggests that the highest calling of sentient life is gathering and sharing knowledge. Oomza Uni, the school that Binti has ran away from home to attend, is full of intelligent nonhuman beings who manage to learn from each other. In Binti's world, personhood is not limited to humans. In fact, Oomza Uni's human population is only 5% of the student body (Okorafor, *Binti* 13). They accommodate peoples' differences architecturally by creating spaces to accommodate different ways of being, but all are at the university because they share a superior intellect and passion for learning. In this space, physical differences of all kinds are accommodated for the sake of intellectual pursuits. At the university, knowledge might reign supreme, but individual identity and cultural histories and traditions are also important. When she is asked who she is and what she is doing acting as a mediator for the Meduse, Binti positions herself by invoking her land, people, and traditions. She explains, "We wash with *otjize*, a mix of red clay from our land and oils from our local flowers" (*Binti* 37). At this point in her introduction a few of the human

professors laugh at her, which reassures Binti because their casual rudeness reminds her that humans are the same no matter where they are. After she successfully acts an ambassador to the Meduse, she hears that the rest of the community are talking about her, "'Tribal': that's what they called humans from ethnic groups too remote and 'uncivilized' to regularly send students to attend Oomza Uni" (41). This reaffirms her own understanding of how she perceived both on Earth and in any place where humans are a part of the community. Her "tribal" status, meant as an insult, also suggests kinship ties in communities, which are the types of relationships by which Binti structures her sense of self.

Binti's relationships quickly leave the realm of the human, but it is those with the Meduse (a warlike race of space jellyfish), New Fish (a spaceship), and the nanotech inherited by her family that actually transform her physical body and give her access to beings that are fundamentally different from humans. This access allows her to examine what it means to be herself, an African human from Earth, in the context of all of these beings who see the world in radically alien ways. Binti is able to establish an ethical relationality with each of these communities through compromise.

The most reciprocal relationship that Binti has with a nonhuman being is the one she shares with New Fish. New Fish is a recently born (sentient and organic) space ship whose mother Binti first travelled in during the events of the first novella. New Fish's mother, Third Fish, kept Binti safe during the Meduse attack by making sure her door stayed shut. Later, Third Fish offered feelings of reassurance and warmth when they met again. The relationship between Third Fish and Binti was always one of mutual respect and admiration, but what Binti didn't know was that ships gestate for five years, so New Fish had also been present for all of the events that took place—even if she was still in the process of becoming. The intimacy of their relationship is established when New Fish is able to resurrect her. When she comes back to life, she has inherited a deeper understanding of the mathematical connections between the universe (Binti the Complete Trilogy 314). This rebirth changes Binti's understanding of her place in the universe, but not her identity. When Mwinyi noticed that she is alive he "sank to the floor, his back against the slender truck of a young tree with tough rubbery-looking leaves growing from a hole in the floor. A tree that looked oddly like an Undying tree" (315). This tree, a tangible piece of Binti's history, becomes a part of the ship itself. When Binti stands on the floor of the ship, New Fish, she realizes that it is talking to her and has shared its life with hers. Because they now share a life force, the physical form of Binti's body changes again. New Fish explains, "When your body was placed in my chamber, my microbes went to work. You are probably more microbe than human now...I've absorbed some of you, too, Binti" (322-323). These changes transform Binti more than any of the others because she can share consciousness with New Fish, essentially occupying the body of the ship. She briefly worries that this has fundamentally shifted other parts of her being, but is reassured that she is still Himba, Meduse, and Enyi Zinariya. Her "union" with New Fish means that they are now a part of the other, unable to be separated by more than twenty miles. She and New Fish have to stay within a five-mile radius of each other or risk death, thus limiting both New Fish, who is a space fish that loves exploring, and Binti, who has to move into a special dorm so that New Fish can be nearby. They are tied to each other both physically and mentally, and although one is a ship and the other is a human woman, the ties that bind them literally sustain Binti and transform them both into beings greater than they once were. Both are made more compassionate through their relation. Binti is able to

experience space, and New Fish is able to absorb Binti's experiences, successfully replicating her homeland's trees and landscape and accessing the nanotechnology exclusive to Binti's family. Their relationship shows one possibility of relational agency, that a foundation of reciprocity and care allows flourishing for those in the relationship.

Another relationship that challenges Binti's concept of personhood and her capacity for compassion is the one that she shares with the Meduse people. Physically, the Meduse resemble jellyfish that can swim through gaseous atmospheres as well as water (which is sacred to them). The structure of this relationship is forced on her when the Meduse discover that she can communicate with them because of her *edan*. This technology also allows her to kill them, and this knowledge means that they manipulate her into the role of ambassador by forcing her to become a part of their collective. This connection illustrates relational agency because she is connected to all of the Meduse, and this both gives her greater agency and limits her possibilities. Her physical body changes to reflect her belonging in the community. Her locks are now tentacles called *okuoko* and she doesn't know whether or not they will grow and behave like hair (Binti 41). As a result, the Meduse consider her one of their tribe, allowing her to be a part of their shared consciousness. The peace between the Meduse and Oomza Uni is due to the discovery that Binti's otjize has the ability to heal the Meduse. Though Binti's otijize doesn't have to be made from clay from the planet Earth in order to heal them, the use of clay alludes to one of the underlying themes of the novel: care reciprocates care. She treats both sites of gathering this clay with respect, and in turn the *otjize* allows her to heal the Meduse.

Okwu is one of the Meduse who eventually becomes Binti's friend. Although he participated in the murder of her classmates, they are able to become close once they can

communicate. The bond between Okwu and Binti is such that she is able to feel what he is feeling and communicate with him even over large distances. Although he is not human, nowhere in the series does she suggest that her care for him is anything less than reciprocal. In her role as a haromonizer and as ambassador, she attempts to understand him on his terms, and expects that he do the same for her. Okwu is described as very alien, both in temperament and physically. However, Binti and Okwu are able to form a relationship, and he saves her from harm at great personal risk to himself by hiding her inside of him to protect her from bullets. In turn, she uses her *otijize* to heal him by having him in direct contact with her skin and by treating his wounds directly with the clay (*Binti the Complete Trilogy* 269).

The relationship that allows her to fully understand her own history and human identity is the one that she allows between herself and the nanobots in her bloodstream. All of the Enyi Zinariya have nanotechnology that allows them to access the whole of their history and their people with a few gestures. All of the members of their tribe pass along nanites that allow their children to access this database of knowledge, and with it the ability to communicate across great distances, in a way that the other humans living on earth cannot. Because of this, they are better able to communicate with and appreciate nonhuman others. Although they do not advertise the technological advancements that make this possible, they are fully capable of contacting peoples outside of earth's atmosphere and have scientific advances that the other humans on earth do not even think are possible. One of these people is Binti's grandmother who Binti describes by saying, "Sometimes, she'd stop speaking entirely yet her hands would keep going, moving in circles, jabbing, zigzagging, sometimes harshly, other times gently" (*Binti the Complete Trilogy* 160). It was implied by the Himba that these movements were indicative of a physiological disorder. However, Binti learns that these movements are how they interact with technology that no one else on earth can use. It is up to Binti to make the choice to activate that technology and risk being seen by her other family members as diseased. When she decides to activate it, the nanobots only enhance the abilities that she has intrinsically as a harmonizer, by making her network visible to her. By forcing Binti to interact with the physical world, even if it is just through gesture, the nanobots make connections that Binti understood to be abstract concrete in the real world.

The nanotech gives Binti the ability to see the narratives of her ancestors, as well as connect with her family. This suggests that the technology itself has an agency in what it decides to show Binti, and what it allows Binti to access. However, the nanotech is unable to create the narratives that it shows. It is only the humans who have that ability. In this sense, literary critics Katherine Hayles and Alisa Braithwaite discuss the "database" as a genre, saying that its overwhelming nature produces a limitless number of "narrative possibilities," but cannot "create narrative out of the information it contains" (Braithwaite 82-83). In How We Became *Posthuman*, Hayles discusses how narrative helps humans negotiate their environments, especially when those environments cannot be directly under human control. Databases have made the storing and access of narratives easier, but, Hayles argues, the narrative impulse still remains ultimately human. Thus, when Binti undergoes the process of activating the nanotech, she feels that she is giving up narrative authority of her own life. She realizes this is not the case, however, when she considers how the astrolabe that she carries with her relies on human input and modification. In the first novella, because of their ability to show the best possible personalized scenario based on statistics and a mass accumulation of data, astrolabes are

discussed as the primary method of figuring out if the choices individuals make are the correct ones. Therefore, even before Binti's body becomes a part of a network, her astrolabe has already insured that she is a part of technology that has narrative powers that seem to reduce the significance of humans. However, in her examination of Nalo Hopkinson's *The Midnight Robber*, Braithwaite says that humans and technology share a symbiotic relationship that "might enhance human connection rather than hinder it" (Braithwaite 98). This is also true in the Binti series. The nanotechnology that makes Binti's physical body a part of a network may have been created by aliens, but the astrolabes that Bini's people have created are man-made and offer a similar connection to other people, although astrolabes also act as a way for individuals to "store" their identities as well as act as a means of communication (Okorafor, *Binti the Complete Trilogy* 233-234). In this series, technology is not offered as a villain or even as a tool of absolute control. Instead, it is celebrated for allowing humanity to grow as a species and explore worlds beyond Earth.

As an Africanfuturist work of speculative ecofiction, the Binti series relies on African history to act as a stepping stone to the future the novellas imagine. For example, although unfamiliar to most Western readers, the Himba tribe are a real people in Namibia. Their traditions do include applying *otjize* and it is a practice only performed by women (Barnett and Hume). Okorafor uses Himbian traditions and practices to tie the past to the future. Another way Okorafor roots the future in our contemporary present is by allowing Binti to see the arrival of the Zinariya (the highly advanced alien race whose people glowed like the sun) through the nanotechnology gifted to her people. Kande, the woman who establishes first contact with aliens, might have lived somewhere around Nigeria in the 1990s, as she was hoping to attend the

University of Ibadan when she graduated high school (*Binti the Complete Trilogy* 210). This scene situates the events of the novel within a historical context that ties Binti's history directly to the "Old African" tribe of the Enyi Zinariya. Among the other themes in this novel, the theme of remembering and honoring ties to a cultural past and the history of different communities showcases one of the characteristics of Africanfuturism. This focus shows the future possible even with a past as enduring and unforgettable as that of Binti's people. Although she separates herself from them all with her death, when she comes back to life she embraces the possibilities of who she could be and what her relationships across species boundaries might mean for the rest of her life.

This series situates humans in the entangled web of relational agency and suggests that relationality can extend beyond the realms of earth ecologies. Instead, the ethical relationality that Binti first learns on earth can be applied cosmologically—the nonhuman beings that embed Binti into their own ecosystems are able traverse the complexities of their material beings to encourage growth. However, this series also reveals the tensions inherent in these new ways of being. When relationality is established, be that through the blurring of natural/technological or planetary/cosmological boundaries, humans have to bear responsibility for the choices of their species, and work toward a deeper understanding of personhood that transcends species boundaries.

Planetary Agency and Apocalypse

N. K. Jemisin's *Broken Earth* trilogy imagines humans as agents of planetary destruction through a power called "orogeny" that separates humans with the ability to utilize and

manipulate the forces of the earth. People with these powers are forced into slavery, serving the longest-living empire in the known world. Like other examples of Afrofuturistic speculative fiction, these novels directly confront oppression based on eugenics and environmental exploitation. In this world, the characters all know that civilization has collapsed many times before as it has been recorded in "stonelore." This stonelore is "as old as intelligence. It's all that's allowed humankind to survive through Fifth Season after Fifth Season" (Jemisin 125). Although spread throughout the novels, there are traces of past civilizations and their greatness, including several floating mineral objects that appear to exist with no real function, the humans in the novel focus on survival, working against "Father Earth" who hates them. The continent on which this novel is set is called "The Stillness" because of the constant tremors that it experiences (7). The humans in this novel set themselves in opposition to the planet and those who can predict and inhibit the earth's movements.

The first novel in the series, *The Fifth Season*, illustrates the pending environmental apocalypse in the American cultural imagination, and more importantly, confronts the ways that race and eugenics structure our current understanding of how humans and nonhumans are connected. The world is plagued by earthquakes, and one civilization that has maintained itself through multiple seasons (the fifth season being death), the Sanzed empire, has been maintaining their power by enslaving people who can feel and control earthquakes. The protagonist of all three novels is a woman now called Essun who was born with the name Damaya and given the name Syenite when she is forced into slavery by a group called the Fulcrum. It is there that she is renamed Syenite. She is told, "You will have no use name from here forth, because your usefulness lies in what you are, not merely some familial aptitude" (Jemisin 39). These names

characterize the changes that happen to her over the course of the novel as she discovers that she is an "orogene," one of the people who have the ability to control and detect the earthquakes that are currently destroying the world.

The discrimination that these orogenes face is based on the fact that they have the abilities that closely resemble magic. They can draw power from the earth itself to stop the earthquakes, move objects, calm people, and kill by drawing on life force. The slang term to describe orogenes is "rogga." They are either controlled by an agency called the Fulcrum or killed. Children that display any talent, such as being able to tell when an earthquake will happen, are taken from their families and forced into slavery. When Essun shows signs of being one, she thinks, "It has never occurred to her that roggas—she stops herself. She. She is a rogga...It's a bad word she's not supposed to say...Orogenes, then. It is terrible to know that orogenes can kill so many, so easily. But then, she supposes that is why people hate them. Her. That is why people hate her" (Jemisin 89). The fear of what orogenes might do means that people who encounter them "in the wild" tend to shoot them on sight. It is revealed quickly, however, that rogga children who are not bred into servitude serve another purpose if they are captured by the government: they are made "node-maintainers." In this role they are mutilated and drugged into a semi-vegetative state. They are forced to react to the smallest seismic tremors and calm them (140-141). They are strapped into a wire-mesh chair, fed through intravenous tubes, and left on life support until they die. In this way, the most "defective" and unteachable orogenes are still able to serve the empire. This cruelty is rooted in the idea that orogenes are less than human, and in some ways even less than animals. Instead, they are like tools to be used to fight against a hostile Earth.

In this novel, the relationship between humans and the earth is personified. The Earth is capable of emotional complexity and higher-order thinking. As such, human lore genders it as "Father Earth" and makes it clear that the only emotion that he feels toward humans is anger. Humans caused this anger in the distant past by destroying the moon. In the novel's present, they continue to pay the price. Initially, the novel opens with the idea that a stone eater (a being that resembling a stone statue) and a renegade human are working together to get revenge on the Sanze empire (Jemisin 7). However, the truth is more complex than that. There is a rift between humans and the earth caused by the relentless exploitation of the earth that causes the earth's crust to shatter. From the shattering onward, the stone eaters, Guardians (humans implanted with an unknown technology), and humans are all positioned against each other in order to recreate their failed relationships with the earth. The Guardians are implanted with a device that allows them to neutralize the abilities of orogenes and turn their power inward on themselves. Essun's Guardian, Schaffa, explains, "A thing is done to make us what we are. An implantation. Sometimes it goes wrong and must be removed, as you saw" (Jemisin 328). The connection between the Guardians and the technology allows some unknown force, eventually understood to be the earth itself, to control their bodies. This implant has them in constant agony and robs them of their free will. They control the orogenes on behalf of the earth, who is angry that humans have destroyed the moon.

However, humans are not the only people who are populating the novel. There are other beings, made of stone, who remember what has happened to destroy the relationship between humans and the environment and who, in this novel, are attempting to bring about the true end of the world. These beings, known as "stone eaters" were once humans, but through genetic experimentation and evolution, they came to be their own species (6). Unlike the nonhuman persons in the *Binti* series, these stone eaters are embedded in human history and culture. However, because they are now so removed from their origins, some have come to despise humanity for the endless cycles of destruction that they have set off, and others are attempting to recreate the world into something more enduring.

The personification of the earth persists throughout the novel, although it is only revealed later in the series that the earth speaks through the Guardians. This personification is the opposite of the "Mother Earth" trope. There is no nurturing or protection, only destruction. The phrase "Father Earth" in this novel is often used as a curse. "Evil Earth" is used multiple times whenever something bad happens, even if it is not a natural disaster. While there are no religions specifically mentioned in the novel, the invocation of Father Earth seems to promote the earth to godlike status, especially when coupled with stone eaters and orogenes who have the potential to rebel against the earth. It is primarily the orogenes who attempt to establish ethical relationality between other humans and other species. Most of the humans who are not orogenes do not bother to look beyond their own survival.

One of the reasons that humans tend not to look further than survival is the lore that was established on the advent of the first apocalypse to preserve the human species. This lore is what makes up what remains of human history. One of the most important of those fragments is, "Winter, Spring, Summer, Fall; Death is the fifth and master of them all" (Jemisin 149). This phrase alludes to the fact that the current human civilization has faced several "seasons" of death that force humanity to recreate human civilization from the scraps of history that they are able to save. The novel starts with what the reader is supposed to assume are the events that culminate in the apocalypse that will destroy all life on earth. Essun is focused on her own personal apocalypse, the murder of her son and the kidnapping of her daughter by the children's father. The main events of the novel reveal her history and what lead her to this point in her life, revealing that she is a orogene, and that is the reason her children are currently in danger. Essun finds herself dealing with the death of her three-year-old son who was killed by his father when he started showing signs of being an orogene.

While humans survive, they are shown to adapt in the way that other animals do, by transforming their behavior. The characters in the novel think of slavery as an everyday part of life, but as the story of one character, Alabaster, proves, though they are ashamed of breaking taboos such as cannibalism, humans will do anything to survive a season. Although they are familiar with stories that are recorded to prepare them for an apocalypse, they are unprepared for the reality. They are forced to form alliances outside of their communities and confront what it means to be a person and how to be in political relationships with others. Recounting the lore that has been passed down through oral tradition, Essun says, "...after the orogenes committed their great sin: Father Earth's surface cracked like an eggshell. Nearly every living thing died as his fury became manifest in the first and most terrible of the Fifth Seasons: the Shattering Season" (380). This first season recounts what humans know about how the humanity fell. Although some languages and traditions survive, the primary language is Sanzemat, and almost everyone in the novel learns it because it is the language of the empire. The empire provides the promise of safety for most of humanity because of their exploitation of the orogenes. Near the end of the novel, Alabaster explains how their kind had become enslaved by the empire—the Sanzed people started conquering other communities and cannibalizing their inhabitants. He

says, "That's *when* they started calling us 'lesser races" actually" (417). He continues, "Orogenes built the Fulcrum... We did it under the threat of genocide, and we used it to buckle the collars around our own necks, but we did it" (418). This narrative implicates the orogenes in their own subjugation but makes it clear that they had not always been slaves. Alabaster tells Essun this version of history in order to make her question everything else she thinks she knows. He wants her help to destroy the world, hoping that whatever species becomes dominant has a better relationship with the Earth than humans. The lore that defines the ways humans survive the Seasons is passed down on stone tablets in the hopes that they will be preserved when other mediums are destroyed.

Although race is a part of the future, it isn't a determining characteristic of the quality of life that the characters have. The narrator comments on racial differences, describing one girl as having "sharp teeth because it is her race's custom to file them; another boy has no penis...one cannot reasonably expect sameness out of so much difference...but...the world is not fair" (193). The unfairness of the world is shaped around attunement to the earth, rather than the differing racial characteristics that exist within the remains of humanity. The stone eaters, although once human, no longer consider themselves part of the human race. Hoa, the stone eater that travels with Essun, is reluctant to reveal that he is not human, so he initially attempts to pass as a human child. While Essun was given the name Syenite because all of the orogenes are named after stone, Hoa is actually made of stone and eats pure minerals as sustenance. Instead of turning him aside when she learns he isn't human, Essun takes him by the hand. The narrator says, "There is something in his gaze that is entirely human, and grateful for your acceptance at that moment. It makes you feel a little more human too, amazingly" (190). Her developing relationship with Hoa

makes them both more "human." Although human is not explicitly defined, it is clear that "humanness" is not defined by intellect or reason as it is for the liberal subject; instead, it is tied to care and compassion.

Forming relationships outside of species boundaries is necessary for survival and suggests the possibilities for flourishing if those relationships are properly maintained. Hoa is unlike other stone eaters in that he continually makes the choice to mimic human behaviors because, as he tells Essun at one point, "I like you" (396). Stone eaters have the ability to travel through the earth, but time and again he refuses. He also wears clothes and takes care to hide his teeth, although many of the other stone eaters in the novel don't bother to hide their differences. When he and Essun encounter another stone eater watching over a human, the female stone eater "doesn't move for a moment, and then she closes her mouth to hide those awful diamond teeth...It was a threat display, like the way a kirkhusa draws back its lips to bare its fangs" (270). In response, Hoa makes the same display, and although Essun is shocked by the structure and sharpness of his teeth, she doesn't fear him. Hoa himself reveals that he is the narrator of the novel, the speaker who is reminding Essun of who he is. Although his origin story is not told in this novel, later in the series it is revealed that Hoa was genetically engineered to be a geomancer with abilities similar to orogenes and that he was transformed into stone by the earth itself as a punishment for destroying the moon. While he was born human, his humanity was stripped away, and he did not use human language because he and others like him used subsonic vocalizations and vibrations to communicate. Stone eaters have the ability to travel through the earth, and retain the history that humans have forgotten, because of this Hoa is able to construct the whole narrative of Essun's life and how it resonates with what has happened in the past.

Their relationship becomes familial even though the differences that separate how they experience the world are vast.

Although the narrative paints a bleak picture of the future of humanity, there are moments when the characters are able to express their humanity outside of the parameters of violence and manipulation. A small part of the novel is dedicated to the relationship that Essun and Alabaster have with a man named Innon. He is the leader of the island of Meov which has been run by orogenes for as long as history has been recorded, completely outside of the empire's control. While Alabaster is content to live out his days on Meov, Essun wants to dismantle the control that the empire has over the Stillness. She says, "It isn't right" (143). This feeling keeps her from being content raising her child with Alabaster and Innon (Jemisin 372). Once during this interlude, Alabaster asks Essun, "Don't you ever just want to...to be human...That we're not human is just a lie they tell themselves so they don't have to feel bad about how they treat us" (354). She responds that they are not human, that legally they have never been human. This is what compels her to want to change the world. This drive to make things better sets her apart from other characters in the novel who are driven by survival or the possibility of gain in the present moment. She wants things to be different, and she believes that rebellion might be the only way to make that difference. This means that at several points in the novel, she murders people with only slight hesitation and a bit of guilt. Although compassion is at the core of the humanity Essun embodies, she also violently and viciously reacts when her survival or the survival of those she loves is on the line. This violence is tied to the rhetoric about orogenes spread throughout the empire that leads to the death of her son.

Humans have lost their position as the dominant species because the earth keeps wiping them out. Regardless, they still act as stewards of what remains; keeping pets, raising crops, and cultivating the land. However, as soon as it is clear that the apocalypse is approaching, everything changes. With the start of the season, the nonhuman animals start to change their habitual behaviors in order to adapt to a world were vegetation is sparse. One species that changes are the kirkhusa, described as more of land-otters than dogs, kept as pets in cities because they ate "only the leaves of low bushes and the insects that grow on them" (185). However, they transform when "they taste enough ash, which triggers some instinct within them that's normally dormant. Then they change. Everything changes during a Season" (187). When Essun and Hoa encounter a kirkhusa once the ash starts falling, the first thing they notice is that it has a collar. Essun speculates that it was once cared for and that the people who cared for it are probably dead. She suggests that if they didn't die in the earthquake, then they were eaten by their pet once its instincts kicked in. The need to survive forces both humans and animals to rely on their instincts to survive. The only species that maintains ethical relationality in the face of apocalypse are the stone eaters. While they are not human, they take ultimate responsibility for the world and its inhabitants. This responsibility pushes them to be friend certain humans and try to repair the damage that humans have done to the world.

Agency, Responsibility, and Relationality

At the core of these Afrofuturist and Africanfuturist works is an optimism about the future possibilities of humanity that can be buried in other speculative ecofiction. This optimism comes from futures that embody racial differences without contemporary racial dynamics as

primary signifiers for modes of human being. Although racial identity and blackness are celebrated in these novels, they are not the primary way by which people and nonhumans discriminate against each other within or outside of species boundaries. By making race a part of the future, these novels are able to confront the racial injustices of the present by addressing them as a part of the worlds they created. For example, Okorafor creates a direct historical line from the people of Old Africa to the tribes that Binti is a part of in the present. The Himba people have been slaves in the past, and although now they are free, they are still living with the trauma and consequences of their enslavement. In Jemisin's novel, the confusing tangle of history and the physical changes wrought in the world do not allow for a clear genealogy beyond that Sanze empire's racial features that set the standard for beauty throughout the Stillness. However, both novels end with hope for worlds that are not post racial. Instead, they insist on the validity of human difference.

Both authors imagine worlds where technology, humans, and nonhuman sentient beings are able to thrive when they acknowledge the relational agency of others. They do this by expanding the definition of human without universalizing it, acknowledging other ways of knowing and interacting with the world and its inhabitants, and by creating an ethical relationality as a framework by which the human protagonists are able to confront their own ideas about what it means to be human and what it means to be responsible for the actions of humanity. In these novels, human identity is tied to the acquisition of knowledge and the ability to use that knowledge to shoulder the responsibilities humans have to the rest of the world and its inhabitants. As critic Sylvia Wynter has said, the idea of humanity fits the historical period that it is shaped in (201). When contemporary understanding of humanity is projected to the future, the possibilities of what it means to be human expand, even if the responsibilities of the distinction do not. In Orkorafor's texts, Binti's humanity is tied to her identity and culture. In Jemisin's novel, humanity is tied to responsibility and drive to make things right. Although both novels expand the concept of personhood beyond the species-specific parameters of the human, humanity is still shaped by compassion and responsibility.

Examining Afrofuturist ecofiction has allowed me to focus on how novels work to structure an ethical relationality between humans and animals and the environment. However, I would like to end this chapter by discussing a short film that also addresses questions of ethical relationality and environmental exploitation using similar narrative methodologies that are established in this fiction. In 2010 Kenyan director Wanuri Kahiu created a short science fiction film, Pumzi, that was screened at the Sundance Film Festival to critical acclaim (Seibel). Kahiu imagines a dystopia set thirty-five years after World War III, known as The Water War, has destroyed most of the world and nature is uninhabitable. As a result, humans rely on technology, surviving in enclosed communities under strictly regulated conditions such as rations, production of energy using kinetic energy, and recycling what water they bodily produce. The film is set primarily in the community of Maitu, where the main character Asha has a dream of a tree growing in nature outside—something she knows to be impossible because all of nature is dead. Maitu is depicted as a technological dystopia monitored and controlled by its government. In her lab, Asha's blue eyeshadow makes a colorful contrast to the industrial grey and halogen lighting and the jars of long-dead plants that line her workspace (Kahiu 1:37). She works in a virtual natural museum that shows video of green plants and blue skies, alongside specimens of dead plant life and old newspapers, one of which reads "There goes the last tree" (4:04). When Asha

is sent a soil sample that is capable of sustaining plant life, she begins to hope that her dream is actual reality. She believes that she has confirmed this when she is able to get new growth from one of her plant samples when she places it in the soil with some water. However, when she shares this information with the community leaders, they attempt to incarcerate her and destroy the artifacts in the museum (9:48).

Asha's dream of a green tree and fresh water leads her to make the ultimate sacrifice for the possibility of that dream becoming reality. Asha escapes from Maitu and finds a vast desert—the monotony of which is broken only with trash and old warning signs. Asha's primary motivation is the thought that there is sustainable life outside of the community she escapes from. The plant becomes a representation of hope, reflected in the vibrancy of its green color and the way that Asha is careful to care for it as she searches for fertile land. When she finds the coordinates, she is disappointed to see that there are no living trees, just dead ones. However, she still plants the seedling by sacrificing her remaining water and bodily moisture (Kahiu 19:25). The film ends with a tree sprouting from the seedling as Asha dies (19:35). As the tree grows through Asha's corpse, the camera cranes out from the desert to reveal lush forest in the same frame shown only through the letters that make up the title of the film, "pumzi," a Swahilli word that means "breath."³² Her bodily sacrifice demonstrates the biological connection between human and plant life. As caretaker for the tree, Asha makes sure that it is able to live no matter the cost. In this world, her knowledge of the fertile soil and her sacrifice allow the tree to grow as a symbol of hope.

³² For more information about the use of scaling and variable framing in film, see Noel Carrol. "The Power of Movies" *Aesthetics: A Reader in Philosophy of the Arts*, edited by David Goldblatt and Lee Brown, Pearson, 2005.

The film's ending suggests that relationships between humans and nature can contribute to the flourishing of both. It also warns against an overreliance on technology, as it allows those in power to control all means of survival. However, technology is what enables Asha to find the location of the fertile soil and ultimately plant the seedling While technology allows humans to survive, it does not allow them to flourish, and in fact solidifies the control that the leaders of the Maitu have over everyone else. It is only through her connection to the seedling that Asha is able to taste fresh air and experience freedom for the first time. This film demonstrates an ethical relationality by implicating all of humanity as responsible for the destruction of the natural world. As a result, Asha feels that it is her responsibility to give her seedling a chance, even if that chance costs her life.

In a reversal of the Christian role of Eve, the final scene reveals that Asha's sacrifice will renew nature. This decolonial gesture reaffirms the connections between motherhood and the growth of life. In an examination of Black feminist ecologies in films including *Pumzi*, critic Amanda Rico discusses the connections between gender, nature, and Kenyan belief systems. She says that trees have a spiritual significance, specifically fig trees called "*mugumo* by Kikuyu and *oreti* by the Maasai, who consider them as symbols of the ancestors, life, and fertility. Additionally, according to Yoruba belief systems, the Iroko tree is inhabited by a vengeful spirit who causes misfortune to those who cut it down" (Rico 90-91). This reverence for trees shifts from their symbolic resonance among the Kikuyu and Maasai to the reverence of the physical trees themselves among the Yoruba because of their spiritual presence. The mothering that Asha provides indicates a reverence for the tree as both a symbol and as a living being whose life and welfare is tied to hers. Regardless of whether Maitu knows about the existence of nonhuman life

outside of their contained environment, the leaders still contribute to the piles of waste plaguing the landscape, and thus continue the cycle of exploitation, even as they conserve water and generate "clean" energy. Alternately, Asha's sacrifice reaffirms the connection between humans and nature suggesting that together they grow and thrive.

CONCLUSION

In the third chapter of my dissertation, I noted that there is a tree that owns itself in Athens, Georgia. I also raised questions of tree subjecthood, though I didn't offer any answers that specifically pertained to trees. In concluding, I examine a recently published novel that has gained wide critical acclaim and attention by directly addressing the agency of trees. In 2018, Richard Powers published his twelfth book, *The Overstory*, which imagines the perspective of trees and follows the lives of nine humans who are connected to them. This novel is a work of speculative ecofiction that explicitly and aggressively asserts that trees have their own agency and suggests that there is a possibility for humans to be able to hear them. Although the main characters do not arrive at their understanding of the trees in the same ways, by the end of the novel they are able to understand their connections, not just to humans, but to all of the beings on Earth.

In the novel, a character named Patricia travels to Brazil to collect more seeds for her seedbank. While there she encounters in a tree a pareidolia (the perception of a familiar image in an ambiguous pattern) of a woman with raised arms. This reminds her of the myths she has learned a child, the metamorphoses of Ovid, and how once people believe that they could become trees. Although she keeps it to herself, she starts to question whether or not those myths might be possible. She thinks, "[T]he gap between people and trees is nothing at all" (395). Though made by Patricia, this observation reflects the opinions of the trees themselves, who continually try to communicate with humans. Patricia's narrative arc is built from the fact that she has always considered trees her friends. Because of this friendship she eventually becomes a respected dendrolatrist who has discovered how trees communicate with each other. When she is invited to be a keynote speaker at a conference, she grasps her opportunity to answer the question, "What is the single best thing a person can do for tomorrow's world? (455). She says,

Men and trees are closer cousins than you think. We're two things hatched from the same seed, heading off in opposite directions, using each other in shared place. That place needs all its parts.... We have a role to play in the Earth organism ...Trees are doing science. Running a billion field tests. They make their conjectures, and the living world tells them what works. Life is speculation and speculation is life ... Trees stand at the

heart of ecology, and they must come to stand at the heart of human politics (454). Patricia's speech is meant to make people understand the fact that she has come to realize. That humans are lonely because they do not understand their kinship to the trees around them. She hopes that by revealing their consciousness, she will encourage more people to study their language and learn to communicate with them. She also wants humans to stop thinking of the earth as their dominion, and instead see themselves as a species that is sharing the resources with everyone else. Patricia is calling for humans to engage in ethical relationality and acknowledge the power that they hold in determining the fate of all other species that they share the planet with.

The trees themselves are given voices in the text, and although they converse with other trees, it is through their conversations with humans that Powers most effectively suggests the compassion that humans are called to share. Another of the main characters, Olivia, is only able to communicate with trees after she dies and is brought back to life—a life that she is lead back to by "beings" that she later recognizes as trees (158). She hears them say, "*The most wonderous products of four billion years of life need help*" (Powers 165). When she is recognizes that she is

hearing the trees, she feels that her life finally has purpose. Given this purpose, she is able to see that "[t]he air all around sparks with connections" (165). Other characters have the ability to understand trees without experiencing death, but they actively make a choice to listen to what trees are saying. By contrasting the time of the trees with the urgency of humans in the present moment, Powers heightens the urgency for environmental action. The trees "need help" and it is up to humans to acknowledge the power that they have and mobilize this knowledge into action. In an interview about the purpose of his novel, Powers says, "I happen to believe that collectively, we humans are deeply, dangerously deranged, and that only a profound shift in consciousness and institutions regarding the significance and standing of nonhumans will keep us viable in this place and lift our awful sense of moral abandonment" (Rose). Throughout the text, the characters in the novel echo the loneliness that Powers suggests is one of the pervasive states of being human. In the novel, when the characters realize that they are able to communicate with trees, that loneliness is eased. These relationships with trees allow the characters to gain insight into how they are connected to the Earth, yet they also motivate the humans to take action to protect the forests that remain.

Powers's novel illuminates several of the ways that I see speculative ecofiction promoting relationality that is based on care and compassion for and with nonhumans. I believe that a shift in how humans see themselves in relation to nonhumans is one of the vital projects of speculative ecofiction. In this dissertation, I have defined speculative ecofiction as literature that operates as science fiction or fantasy to deal with ecological themes and that positions humans as stewards of the world. Speculative ecofiction teaches humans that there is no exceptionalism that accurately represents the relationality between humans and nonhumans. Although flattened ontology is a modern myth, we humans can responsibly exercise ethical relationality by shifting our perspective to encompass connections to all beings in the world around us. Through a new understanding of stewardship as responsibility, developed through active engagement with indigenous cultures' knowledges, ecocriticism, and contemporary theories of entanglement, it is possible recognize the power that humans have without limiting the agency of nonhumans.

I have examined how different models of relationality are explored in various intersections of postcolonial, posthuman, and Afrofuturist speculative ecofictions. Although the focus of ethical relationality shifts, each of these speculative subgenres push against the constructed dichotomy of nature versus culture and expands the concept of personhood. Ultimately, I have argued that speculative ecofiction reveals what Powers suggests is at the center of his novel, "...a rejection of human exceptionalism—the idea that we're the only things on earth with will, memory, flexible response to change, agency or community" (Rose). Speculative ecofiction rejects human exceptionalism by exploring new configurations of human Being and new possibilities of multispecies community. Nonhumans are shown to be agents of their own lives and have agency in relation to other beings and cultures.

In the first chapter, I argued that the foundations of speculative ecofiction in the United States rested in a concern about the rapid growth of technology, from the industrial revolution to the Cold War era. These concerns intersected with a growing uncertainty about the effects of industrialization on the environment both globally and locally. This led authors of speculative fiction to confront the issues of the present by projecting scenarios into the future. By showing the consequences of rapid technological development, weapons of mass destruction, and revenge of nature or the divine, speculative fiction was able to warn against the perils of humankind's hubris. The culmination of this chapter is an examination of two "contemporary" American texts, Ursula Le Guin's *Always Coming Home* and Joan Slonczewski's *A Door into Ocean*. These texts establish the foundation for speculative ecofiction in the US coming out of the late eighties and early nineties. By focusing on nonhuman agency and questioning what it means to be human in ethical relation to nonhuman others, these novels provide gateways through which readers can understand the foundations of relational agency. Relational agency is shown to be a concept that relies on the ontological and ethical parameters of being *in relation*. Self-aware human relationality allows relationships to flourish by acknowledging the privileged position of humanity, but still strives to create non-exploitive relationships with the nonhuman.

I dove deeper into the cultural stratifications of humanity in the second chapter through the works of two contemporary indigenous authors, Linda Hogan and Alexis Wright. Though they are continents apart, they explore the legacies of colonialism on the present and into the future. Specifically, their novels explore human/animal relationships and show humans recognizing shared trauma caused by exploitation within hegemonic political and colonialist systems. Writing against these systems, they situate animals as relatives, reinforcing the interrelations between animals and humans. I argue that Hogan's *Power* and Wright's *The Swan Book* have human protagonists that seek legal justice for the nonhuman, and when that justice fails, they rely on an ethics of care to preserve the dignity of animals.

In the third chapter, I explored speculative ecofiction that moves beyond humans and animals to the cyborgs and things that exist in the margins of human culture and the natural word. The novels in this chapter—Karen Tei Yamashita's *Through the Arc of the Rainforest*, Joan Slonczewski's *Daughter of Elysium*, and Paulo Bacigalupi's *The Windup Girl*—question the foundations of human subjecthood through questioning how beings achieve personhood, and what it means to create and maintain an identity rooted in a sense of self in relation to others. These novels reveal that the ethical imperative to care for others is expansive to all beings who might be considered persons, those capable of both self-awareness and compassion.

In the fourth chapter, I looked at how two leading authors of speculative fiction, who are also known as Afrofuturist and Africanfuturist, expand the definition of "human" without creating a post-racial future. These authors, Nnedi Okorafor and N.K. Jemisin, acknowledge other ways of knowing and interacting with the world and its inhabitants that are not based on the foundation of humanity. Through protagonists that celebrate humanity through their own culturally and self-consciously constructed identities, these novels argue for an ethical relationality that is based primarily on care and the acknowledgement of difference. These novels also show two different ways of relationality. Okorafor's novel situates humans as members of a vast intergalactic ecosystem that rely on tradition and care as means to define their personhood. Alternatively, Jemisin warns against relying on tradition to navigate what it means to be human and to care, while focusing specifically on the destruction of humanity's relationship with the Earth. These authors insist that relationships between technology, environment, and humanity are complicated by lack of compassion, and unwillingness to accept other perspectives as valid.

Speculative ecofiction continues to utilize the fantastic to showcase the possibilities of relational agency and push the boundaries of what it means to be human. The novels that I examine promote an ethical relationality between humans, animals, plants, and whole environments. They show the entanglement of humans in varying ecosystems and emphasize the necessity of ethical being when humans are confronted with shifts in balances of power that cause their own power to diminish. In these scenarios, the web of connections that humans maintain are brought to life to highlight the complexities of creating and maintaining reciprocal relationships. This fiction reshapes stewardship into a sense of responsibility and care for and *with* nonhumans. In this way, speculative fiction offers a hope that humanity can become better while warning of the consequences if we are unwilling to change.

WORKS CITED

- AIATSIS. *Apology to Australia's Indigenous Peoples*. Australian Institute of Aboriginal and Torres Strait Islander Studies, 2018, https://aiatsis.gov.au/explore/articles/apologyaustralias-indigenous-peoples.
- Alaimo, Stacy. *Exposed: Environmental Politics and Pleasures in Posthuman Times*. U of Minnesota P, 2016.
- Amolegbe, Sarah. "Papers of the Month" *Environmental Factor*, National Institute for Environmental and Health Sciences, June, 2018, https://factor.niehs.nih.gov/ 2018/6/papers/dert/index.htm.
- Agamben, Giorgio. *Homo Sacer: Sovereign Power and Bare Life*. Trans. Daniel Heller-Roazen, Stanford UP, 1998.
- "An Act to Establish the National Park Service, and for Other Purposes." *America's National Park System: The Critical Documents*, 1916, 2000, retrieved from https://www.nps.gov/parkhistory/online_books/anps/anps_1i.htm.
- Athens Convention & Visitors Bureau. "The Tree That Owns Itself" *Athens Life Unleashed*, https://www.visitathensga.com/listings/the-tree-that-owns-itself/234/.

Bacigalupi, Paolo. The Windup Girl. Nightshade Books, 2010.

- Ballard, J.G. The Drought. Liveright Publishing, 2012.
- Barad, Karen. Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Duke UP, 2007.
- ---. "On Touching—The Inhuman That Therefore I Am" differences: A Journal of Feminist Cultural Studies, vol. 25, no. 5, 2012.

- Barnett, Errol and Tim Hume. "The Himba: Namibia's Iconic Red Women." *CNN*, May 2012, https://edition.cnn.com/2012/05/11/world/africa/himba-namibia-inside-africa/index.html.
- Bauckham, Richard. *Living with Other Creatures: Green Exegesis and Theology*. Baylor UP, 2011.
- Benito, Jesus, Ana Manzanas and Begona Simal. Uncertain Mirrors: Magical Realism in US Ethnic Literatures. Rodopi, 2009.

Bennett, Jane, Vibrant Matter: A Political Ecology of Things. Duke UP, 2009.

- Bould, Mark. "The Ships Landed Long Ago: Afrofuturism and Black SF." *Science Fiction Studies*, vol. 34, no. 2, 2007, pp. 177–186.
- Braithwaite, Alisa. "Connecting to a Future Community: Storytelling, the Database and Nalo
 Hopkinson's *Midnight Robber." The Black Imagination, Science Fiction and the Speculative*, edited by Sandra Jackson and Julie Moody-Freeman, Routledge, 2013, pp.
 81-99.
- Breu, Christopher. *Insistence of the Material: Literature in the Age of Biopolitics*. U of Minnesota P, 2014.
- Brown, Bill. The Material Unconscious: American Amusement, Stephen Crane & the Economies of Play. Harvard UP, 1996.

Bryant, Levi, et al. *The Speculative Turn: Continental Materialism and Realism*. re.press, 2011.
Buell, Lawrence, et al. "Literature and Environment." *Annual Review of Environment and Resources*, vol. 36, 2011, pp. 417-440.

Chen, Mel Y. Animacies: Biopolitics, Racial Mattering, and Queer Affect. Duke UP, 2012.

- Coole, Diana and Samantha Frost. *New Materialisms: Ontology, Agency, and Politics*. Duke UP, 2010.
- Daley, Linda. "Alexis Wright's Fiction as World Making." *Contemporary Women's Writing*, vol. 10, iss. 1, March 2016, pp. 8-23, https://doi.org/10.1093/cww/vpv028.

Debaise, Didier. Nature as Event: The Lure of the Possible. Duke UP, 2017.

- Dery, Mark. "Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose." *Flame Wars: The Discourse of Cyber Culture,* edited by Mark Dery, Duke UP, 1994, pp. 179-292.
- Dini, Rachele. "Bill Brown, Other Things." European Journal of American Studies; Reviews, 2017, http://journals.openedition.org/ejas/12329.
- Dubey, Madhu. "The Future of Race in Afro-futurist Fiction." *The Black Imagination, Science Fiction and the Speculative*, edited by Sandra Jackson and Julie Moody-Freeman, Routledge, 2013, pp. 15-31.
- Environmental Protection Agency. *Everyday Choices: Opportunities for Environmental Stewardship*. EPA Innovation Action Council, 2005, archive.epa.gov/stewardship /web/pdf/rpt2admin.pdf.
- Erickson, Kathryn. Silence, Absence, And Mystery in Linda Hogan's Mean Spirit, Solar Storms, And Power. 2006. U of Central Florida, MA thesis. Electronic Theses and Dissertations.
- Feder, Helena. "Ecocriticism, Posthumanism, and the Biological Idea of Culture." *The Oxford Handbook of Ecocriticism.* Edited by Greg Garrard, Oxford UP, 2014.

- Fish and Wildlife Services. *Florida Panther Population Estimate Updated*. 2017, retrieved from https://www.fws.gov/southeast/news/2017/02/florida-panther-population-estimate-updated.
- Four Directions Institute. *Seminole*. Four Directions P, 2005, retrieved from http://www.fourdir.com/seminole.htm.
- Fulfer, Katy. "The Capabilities Approach to Justice and the Flourishing of Nonsentient Life." *Ethics and the Environment*, vol. 18, no. 1, 2013, pp. 19–42. *JSTOR*, JSTOR, www.jstor.org/stable/10.2979/ethicsenviro.18.1.19.

Garrard, Greg. Ecocriticism. Routledge, 2004.

- Goble, Mark. "Other Things by Bill Brown." M/m (Modernism/modernity), vol. 1, cycle 3, September 16, 2016, https://modernismmodernity.org/forums/posts/other-things-billbrown.
- Gressel, Madeline. "Bookforum Talks with Sunaura Taylor." *Bookforum*, June 2017, https://www.bookforum.com/interview/18023.
- Gruen, Lori. "Navigating Difference (Again): Animal Ethics and Entangled Empathy." Animal Subjects 2.0, edited by Jodey Castricano and Lauren Corman, Wilfrid Laurier UP, 2016, pp. 203-227.
- Hannis, Michael and Sian Sullivan. "Relationality, Reciprocity, and Flourishing in an African Landscape." *That All May Flourish: Comparative Religious Environmental Ethics*, edited by Laura Hartman, Oxford UP, 2018, pp. 279-296.
- Haraway, Donna. Simians, Cyborgs, and Women. Routledge, 1991.
- ---. When Species Meet. U of Minnesota P, 2008.

Harman, Graham. Object Oriented Ontology: A New Theory of Everything, Penguin, 2018.

- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics.* U of Chicago P, 1999.
- Heise, Ursula. *Imagining Extinction: The Cultural Meanings of Endangered Species*. U of Chicago P, 2016.
- ---. "The Year of the Flood by Margaret Atwood." *The Guardian*, August, 29th, 2009, https://www.theguardian.com/books/2009/aug/29/margaret-atwood-year-of-flood.

Hogan, Linda. Power. Norton, 1998.

- Holgate, Ben. "Unsettling Narratives: Re-evaluating Magical Realism as Postcolonial Discourse through Alexis Wright's *Carpentaria* and *The Swan Book*." *Journal of Postcolonial Writing* 51, no. 6 (2015), 634-647. doi:10.1080/17449855.2015.1105856.
- Jain, Shalini Rupesh. "Pigeons, Prayers, and Pollution: Recoding the Amazon Rain Forest in Karen Tei Yamashita's *Through the Arc of the Rain Forest*." *ARIEL*, vol. 47, no. 3, 2016.

Jemisin, N. K. The Fifth Season. Orbit, 2015.

- Kahiu, Wanuri. "Pumzi." Vimeo, Awali Entertainment, Dec. 2012, vimeo.com/46891859.
- Kimmerer, Robin. Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants. Milkweed, 2015.
- King, Thomas. "'You'll Never Believe What Happened' is a Great Way to Start a Story." *The Truth about Stories: A Native Narrative*. U of Minnesota P, 2003.
- Kohlmann, Benjamin. "What is It Like to Be a Rat? Early Cold War Glimpses of the Posthuman" *Textual Practice*, vol. 23, issue 4, 2014, pp. 655-675.

LaDuke, Winona. *All Our Relations: Native Struggles for Land and Life*. Haymarket Books, 2002.

Le Guin, Ursula. Always Coming Home. Harper & Row, 1985.

Maracle, Lee. Memory Serves and Other Essays NeWest P, 2015.

- Mashigo, Mohale. "Afrofuturism is Not for Africans Living in Africa." *Johannesburg Review of Books*, Oct. 2018, https://johannesburgreviewofbooks.com/2018/10/01/afrofuturism-isnot-for-africans-living-in-africa-an-essay-by-mohale-mashigo-excerpted-from-her-newcollection-of-short-stories-intruders/.
- McIntyre-Mills, Janet. "Critiquing Anthropocentrism: Implications for Rights and Responsibilities for Others" *Systems Ethics and Non-Anthropocentric Stewardship*, Springer, 2014, pp. 45-64.
- Miller, Samuel Freeman and Supreme Court of the United States. U.S. Reports: United States v. Kagama, 118 U.S. 375. United States Supreme Court, 1886, www.loc.gov/item/usrep118375.
- Mitchell, Vernon. "The Black Panther: A Comic Book History." *Washington University Library*, May 2018, https://library.wustl.edu/the-black-panther-a-comic-book-history/.
- Moore, Bryan. "Evidences of Decadent Humanity.' Anti-anthropocentrism in Early Science Fiction." *Nature and Culture*, vol, 9, issue 1, 2014.

Morton, Timothy. The Ecological Thought. Harvard UP, 2010.

---. Ecology without Nature. Harvard UP, 2007.

Nelson, Alonda. "Introduction: Future Texts." Afrofuturism. Social Texts, vol. 20, iss. 2, 2002.

- NIEHS. *Environmental Stewardship*. National Institute for Environmental and Health Sciences. August, 2018, https://www.niehs.nih.gov/about/stewardship/index.cfm.
- Nixon, Rob. "Environmentalism and Postcolonialism," Edited by Ania Loomba and Suvir Kaul, *Postcolonial Studies and Beyond*, Duke UP, 2005, 233-51.

---. Slow Violence and the Environmentalism of the Poor. Harvard UP, 2013.

- Norris, Marcos. "Ecocriticism and Moral Responsibility: The Question of Agency in Karen Barad's Performativity Theory. *The Journal of the Midwest Modern Language Association*, vol. 49, no. 1, 2016, pp 157-184.
- NPS. National Park System: The Critical Documents, 1916, 2000, retrieved from https://www.nps.gov/parkhistory/online_books/anps/anps_1i.htm.
- Nussbaum, Martha. "Beyond 'Compassion and Humanity': Justice for Nonhuman Animals." *Frontiers of Justice: Disability, Nationality, Species Membership.* Harvard UP, 2006.
- Okolo, Edwin, et al. "The Native Exclusive: Nnedi Okorafor on Africanfuturism and the Challenges of Pioneering." *The Native*, Nov. 2018, www.thenativemag.com/interview/native-exclusive-nnedi-okorafor-africanfuturismchallenges-pioneering.
- Okorafor, Nnedi. Binti. Tor, 2015.
- ---. Binti: The Complete Trilogy. Daw Books, 2019.
- Oziewicz, Marek. "Speculative Fiction." *Oxford Research Encyclopedia of Literature*. Oxford UP, 2017.
- Pigeon Forge Department of Tourism. *Laurel Falls*. 2017, retrieved from http://www.mypigeonforge.com/smoky-mountains/waterfall-hikes/laurel-falls.

Powell, Malea, et al. "Our Story Begins Here: Constellating Cultural Rhetorics." *Enculturation*, October, 2015.

Powers, Richard. The Overstory. Norton, 2018.

- Ray, Sarah Jaquette. *The Ecological Other: Environmental Exclusion in American Culture*. U of Arizona P, 2013.
- Ray, Sarah Jaquette, and Jay Sibara. *Disability Studies and the Environmental Humanities: Toward an Eco-Crip Theory*. U of Nebraska P, 2017.
- Rico, Amanda Renée. "Gendered Ecologies and Black Feminist Futures in Wanuri Kahiu's *Pumzi*, Wangechi Mutu's *The End of Eating Everything*, and Ibi Zoboi's 'The Farming of Gods." *Wagadu: A Journal of Transnational Women's and Gender Studies*, Winter 2017, vol. 18, pp. 81-99.
- Robinson-Bertoni, Sarah and David Cooper. "Dialogue." *That All May Flourish: Comparative Religious Environmental Ethics*, edited by Laura Hartman, Oxford UP, 2018, pp. 117-121.
- Rose, Michael Alec. "Richard Powers: The Biggest Questions in Literature" *Bookpage*, 2018, https://bookpage.com/interviews/22518-richard-powers-fiction#.XLCcvphKjIU.
- Rutledge, Gregory E., "Futurist Fiction & Fantasy: The Racial Establishment." *Faculty Publications -- Department of English,* vol. 27,

http://digitalcommons.unl.edu/englishfacpubs/27.

---. "Science Fiction & The Black Power/Arts Movement: The Transpositional Cosmology of Samuel R. Delany." *Extrapolation*, vol. 41, iss. 2, 2000, 127–42.

- Samatar, Sofia. "Toward a Planetary History of Afrofuturism." *Research in African Literatures*, vol. 48, no. 4, 2017, pp. 175-191.
- Scholes, Robert and Eric Rabkin. Science Fiction: History, Science, Vision. Oxford UP, 1977, 187-88.
- Seibel, Brendan. "Kenyan Sci-Fi Short Pumzi Hits Sundance with Dystopia." *Wired*, January 2010, https://www.wired.com/2010/01/pumzi/.
- 16 U.S. Code § 2103a Conservation- Forest Stewardship Program. 2011. www.gpo.gov/fdsys/pkg/USCODE-2011-title16/html/USCODE-2011-title16chap41.htm.
- Slonczewski, Joan. A Door into Ocean. Tom Doherty Associates, 1986.
- ---. Daughter of Elysium. William Morrow, 1993.
- "stewardship, n." OED Online, Oxford UP, July 2018, www.oed.com/view/Entry/190092.
- Stratton, Susan. "Intersubjectivity and Difference in Feminist Ecotopias." *FemSpec*, vol. 3, iss. 1, 2001.
- Tarlock, Dan. "Is There a There There in Environmental Law?" *Journal of Land Use*, vol. 9, no.2, 2004.
- Taylor, Sunaura. Beasts of Burden: Animal and Disability Liberation. New P, 2018.
- Toensing, Gale. "Are American Indian Nations 'Wards of the Federal Government'?" *Indian Country Today*, December 2014.
- Vint, Sherryl. "The Animals in that Country." *Science Fiction Studies*, vol. 35, no. 2, July 2008, pp. 177-188, https://www.jstor.org/stable/25475137.

- Watanabe, Shigeru, and Ludwig Huber. "Animal Logics: Decisions in the Absence of Human Language." *Animal Cognition*, vol. 9, no. 4, 2006, pp. 235-245.
- Weheliye, Alexander G. Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human. Duke UP, 2014.

Wells, H.G. The Time Machine, An Invention. Norton, 2009.

- Wilson, Shawn. Research is Ceremony: Indigenous Research Methods. Fernwood Publishing, 2008.
- Wolfe, Carey. *Before the Law: Humans and Other Animals in a Biopolitical Frame*. U Chicago P, 2013.
- Womack, Ytasha. *Afrofuturism: The World of Black Sci-Fi and Fantasy Culture*. Chicago Review P, 2013.
- Woodbury, Mary. "A History of Eco-fiction: Part 1" *Climate Cultures: Creative Conversations for the Anthropocene*. May 2018, https://climatecultures.net/speculative-worlds/a-historyof-eco-fiction-part-1.
- Wynter, Sylvia. "The Re-enchantment of Humanism: An Interview with Sylvia Wynter." By David Scott, *Small Axe*, no. 8, 2000, pp. 119-207.

Yamashita, Karen T. Through the Arc of the Rain Forest. Coffee House P, 2011.

Zylinska, Joanna. *Minimal Ethics for the Anthropocene*. Open Humanities P, 2014.

VITA

Melinda Backer is the daughter of Linda Coomer and Marc Borchers. She has two brothers, Ronnie and Marc Borchers. She is a first-generation college student who graduated from Thomas More College 2004. She attained her MA from the University of Cincinnati in 2010. Earning her PhD has been a life-long dream, and having it fulfilled makes her indescribably happy. Currently, she lives with her husband Hank and her dog, Fred.