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Dedication

I dedicate this dissertation to my husband, Matthew Matrona, and to my father, Douglas Jones, who have lovingly supported me throughout this process. I also dedicate this work to my grandfather, Franklyn Jones, who told me how proud he was of me for pursuing my education on every long-distance phone call until our last conversation. May he rest in peace.

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Abstract

This dissertation examines literary, digital, virtual, and multimodal texts and spaces in regards to genre and world-building in Indigenous futurist works. I argue that by studying different genres like speculative fiction novels, poetry, video poetry, and museum exhibits, we can gain a more encompassing definition of world-building in regards to Indigenous futurisms, including interspecies world-building and the creation of virtual and digital Indigenous worlds. Interspecies world-building entails balance and collaboration between human and nonhuman and enacts what has been, and still is, idealized in traditional Indigenous knowledge and traditional ecological knowledge systems. Indigenous artists construct worlds in digital and virtual spaces that function differently than worlds in print novels and poetry collections because of how they correct online representations, circulate self-representations, and create new platforms. Audience and user negotiation are also important in creating and maintaining these worlds, and in promoting healing. Therefore, Indigenous futurist genres are not just fantastical; these genres are representative of traditions and lifeways, and they also build sustainable models of the Indigenous futures. The first section, “Human, Nonhuman, and Interspecies World-Building,” focuses on human, nonhuman, and interspecies agency in creating and re-mapping Indigenous worlds in Cherrie Dimaline’s novel *The Marrow Thieves* and Jennifer Elise Foerster’s poetry collection *Bright Raft in the Afterweather*. The second section, “Constructing Virtual and Digital Worlds,” explores how Blake Hausman’s novel *Riding the Trail of Tears*, *The Trail of Tears* exhibit at the Cherokee Heritage Center in Tahlequah, OK. The video poetry of Heid Erdrich and Kathy Jetñil-Kijiner constitute and construct virtual and digital Indigenous worlds.

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Introduction: Indigenous Futurist Worlds

Indigenous futurisms is a movement of literature, visual art, film, gaming, music, and related activism that often places Indigenous peoples in the future and/or re-examines the past to combat the trend of solely placing Indigenous peoples in the past. Indigenous futurisms entail world-making, creating alternative realities, and reimagining or reinvestigating the past. This dissertation examines literary, digital, virtual, and multimodal texts and spaces in regards to genre and world-building in order to demonstrate how worlds are constructed and constituted to create and sustain Indigenous futures.

There is a lot of scholarship about Indigenous futurisms in genres like Indigenous science fiction (sf) novels and Indigenous futurist films. In fiction, world-making is often defined as or inferred to be the construction of alternative or speculative worlds, often after a catastrophe. While sf and speculative fiction is getting well-deserved attention, I argue that by studying different genres in conversation with one another—here, speculative fiction novels, poetry, video poetry, and museum exhibits--we can gain a more encompassing definition of world-building in regards to Indigenous futurisms, a definition that takes interspecies, virtual, and digital world-building into account. Fictional worlds are created in speculative fiction to warn readers of implications of historical and current issues like climate change and forms of genocide, but worlds are also created in print texts to write future generations into being, acknowledge nonhuman environmental and animal agency, and share and form creation stories. Indigenous artists construct worlds in digital and virtual spaces that function differently than worlds in print novels and poetry collections because of how they correct online representations and create new platforms of art. Negotiation and collaboration through audience interaction are also inherent in Indigenous futurisms.

Defining Indigenous Futurisms

In the introduction to her issue of *Extrapolation*, Grace Dillon writes that “Indigenous Futurisms are not the product of a victimized people’s wishful amelioration of their past, but instead a continuation of a spiritual and cultural path that remains unbroken by genocide and war” (2). By starting off with this kind of inverse definition, one can note that this movement is not one that dwells in a state of victimization, but a movement that celebrates revitalization in various forms. Dillon is at the forefront of studies of Indigenous futurisms. In her groundbreaking anthology *Walking the Clouds*, she defines some of the main tenets of art and literature that come out of this movement. The portrayal of time is one important component. Dillon writes that Native slipstream “infuses stories with time travel, alternate realities and multiverses, and alternative histories” and “pasts, presents, and futures . . . flow together like currents in a navigable stream” (3). Indigenous science and Traditional Ecological Knowledge (TEK) are crucial to representation in Indigenous-centric narratives (Dillon 7). Indigenous authors and artists write about apocalypse and catastrophe, but through Indigenous, non-Western lenses (Dillon 9). Perhaps most importantly, Indigenous futurisms represent what Anishinaabe people call “Biskaabiiyang,” “returning to ourselves,” and “recovering ancestral traditions” (Dillon 10).

Futurisms are not just fantastical, though; they represent and create lifeways. Kristina Baudemann writes that Indigenous futurisms “in contemporary North American Indigenous art . . . show familiar landscapes and everyday scenes. Travels to alternate dimensions are imagined on the basis of traditional world views, and Indigenous cultures in general are depicted as resilient and sustainable” (118). Baudemann’s description of Indigenous futurisms begins to open up

definitions of Indigenous world-building in literature and art. Her definition relays that Indigenous futurisms represent TEK and traditions that have local tribal impacts, and that these practices will provide continued resilience in the future.

Dillon's coined term "Indigenous futurisms" stems from the movement of Afrofuturism and its history. There are many connections between these two movements. Ytasha Womack writes that "Afrofuturism is an intersection of imagination, technology, the future, and liberation" (9). Afrofuturism "combines elements of science fiction, historical fiction, speculative fiction, fantasy, Afrocentricity, and magic realism with non-Western beliefs" (Womack 9). I see the movement of Indigenous futurisms as a more global approach to Afrofuturism, a movement that blends fiction, reality, and fantasy while maintaining an Indigenous-centric core. Afrofuturism is uniquely and importantly representative of African Indigeneities and the African diaspora, while Indigenous futurisms can be adapted by any global Indigenous population. In the 1990s, Mark Dery posed this pivotal question: "Can a community whose past has been deliberately rubbed out . . . imagine possible futures?" (180). Clearly, the thriving innovations of Afrofuturism and Indigenous futurisms demonstrate that these communities can not only imagine futures, but that they enact futures through those imaginings.

Decolonizing Science Fiction

Early science fiction (along with some mainstream contemporary science fiction) often posed problematic colonial ideals. Nalo Hopkinson argues that "one of the most familiar memes of science fiction is that of going to foreign countries and colonizing the natives, and as I've said elsewhere, for many of us, that's not a thrilling adventure story; it's non-fiction" (7). For white Eurocentric mainstream writers and readers of science fiction, this kind of literature is a form of escapism as it enacts colonial fantasies. David Rieder views science fiction as a palimpsest with

“persistent traces of a stubbornly visible colonial scenario beneath” (15). Rieder also writes that “the early science fiction audience—middle-class, educated, and provided with leisure—seems to be one well placed to put into action the consumerism at the heart of modern mass culture” (28). Rieder’s analysis of early science fiction audiences echoes Hopkinson’s issues with science fiction tropes and presents the interesting study of the history of science fiction in regards to cultural norms. I add that the colonial scenario is not only buried beneath mainstream science fiction narratives, it is often at the forefront, especially in video games, television, and film that overtly allows users and viewers to act out colonial violence in virtual worlds.

One of the most popular analyses of science fiction is Darko Suvin’s *Metamorphoses of Science Fiction*. Darko Suvin argues that science fiction is “literature of cognitive estrangement” (4). Further, Suvin writes that “SF is, then, a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author’s empirical environment” and this “estrangement differentiates SF from the ‘realistic’ literary mainstream” (7-8). While Suvin’s study of science fiction was a thoughtful analysis of science fiction at its time of publication, I now ask, “*What about the cultures and populations who do not have the luxury of cognitive estrangement from very real-world instances of colonization, genocide, and other traumatic themes that science fiction often explores?*”

Suvin’s sf critique now seems wholly Eurocentric. In regards to sf’s problematic history, Afrofuturism expert Mark Bould writes, “Whatever their intentions, sf’s color-blind future was concocted by whites and excluded people of color as full subjects; and because of the particularities of US history, the most obvious omission was that significant proportion of the population descended from the survivors of the West-African genocide, the Middle Passage, and

slavery” (177). Bould specifically refers to the United States here, but his argument can be made on a global level for the harmful representations (or lack thereof) for people of color in science fiction. Placing Bould’s critique of sf in conversation with Grace Dillon’s view of sf in Indigenous futurisms creates a productive conversation. Dillon argues that “writers of Indigenous futurisms sometimes intentionally experiment with, sometimes intentionally dislodge, sometimes merely accompany, but invariably *change* the perimeters of sf” (3). Indigenous sf and speculative narratives are different, and intentionally so, from mainstream sf. While this sometimes meets with uninformed reviews from non-Native literary critics, Indigenous innovation as a whole across genres is intentionally upsetting the purpose and convention of this genre.

What is a World?

In the first section of this project, I argue that we need to extend definitions of worlds in Indigenous futurist literature to include the shaping of worlds by nonhuman agents and interspecies world-building methods. In my later chapters, I also expand the meaning of world-building to theorize and investigate how virtual and digital worlds are constructed and negotiated by Indigenous artists and audiences. In order to accomplish this, it is first important to review how scholars have theorized literary world-building and world-making. In sf, world-building is mainly considered to be the act of creating fictional and/or fantastical worlds in literature. A lot of scholarship supports this notion of world-building, but the concept of world-building ultimately needs to extend beyond this initial theorization.

In her study of Alexis Wright’s (Aboriginal Australian) novels, Linda Daley writes that “literature is clearly an object or phenomenon in the world,” but she also argues for “an idea of literature that also makes a world” (9). Therefore, Daley notes that literature is not solely a

representation of a world, it can also create worlds on its own. Kathy Short argues that “story is thinking and world making,” and “stories create our views of the world and the lens through which we construct meaning about ourselves and others. We also tell stories to make connections, form relationships, and create community with others” (9). The act of storytelling itself, then, creates worlds and forms communities. This can occur across any genre that employs storytelling techniques, not just fiction or print literature. I also add, though, that these communities are not solely created by human storytelling and agency.

Pheng Cheah has theorized world literature and world-making in literature extensively. Cheah writes that “literature creates the world and cosmopolitan bonds” and enables readers to “imagine a world through its powers of figuration, but also, more importantly, because it arouses in us pleasure and a desire to share this pleasure through universal communication. Literature enhances our sense of (being a part of) humanity, indeed even brings humanity into being because it leads to sociability” (27). Cheah’s scholarship mainly focuses on cosmopolitan bonds, but I believe we can extend the sense of connection and communication beyond humanity to explore nonhuman connection and world-building. This is where Gayatri Spivak’s notion of “planetary” becomes useful. Spivak explains the meaning of this term: “‘Planetary’ was figured as a word set apart from notions of the planetary, the planet, the earth, the world, the globe, globalization” (290). Planetary “is different from a sense of being the custodians of our very own planet” (Spivak 291). This concept destabilizes humans as owners or sole agents of the globe. Further, Spivak writes, “If we imagine ourselves as planetary subjects rather than global agents, planetary creatures rather than global entities, alterity remains underived from us; it is not our dialectical negation, it contains us as much as it flings us away” (292). The difference in

subjects and agents becomes imperative, and Spivak encourages human subjects to recognize how little control they actually possess when considered on a universal level.

Indigenous world-building occurs in various manners in various platforms and spaces and with various human and nonhuman agents. Leanne Howe's notion of "tribalography" is generative here. In her pinnacle essay on tribalography, she writes, "Native stories are power. They create people. They author tribes" (Howe 118). Storytelling has always created worlds. Storytelling in literature, in oral traditions, and in various forums are all powerful and take part in creation. Neumann and Zierold recognize that "cultural worldmaking is constituted by a host of different media, all of which operate within specific symbolic systems" (103). Therefore, while the scholarship on world-making in literature and world literature is extremely significant, in order to create an encompassing definition of world-building in Indigenous futurisms we need to consider various genres and types of media along with considering human, nonhuman, and interspecies world-building. Utilizing the scholarship of Kathryn Yusoff, Robin Wall Kimmerer, Zoe Todd, Elain Gan et al., Thom Van Doren, Donna Haraway, Elizabeth Grosz, Mary Lawlor, Angela Haas, Natanya Ann Pulley, Michelle Raheja, and Candice Hopkins, among other theorists, I will expand definitions of Indigenous interspecies world-building, and virtual and digital worlds in the following chapters.

Chapter Previews

This dissertation includes two sections and four chapters. The first section, "Human, Nonhuman, and Interspecies World-Building" includes Chapter 1: "Indigenous Anthropocenes in Poetry: Re-mapping Creek Homelands in Jennifer Elise Foerster's *Bright Raft in the Afterweather*" and Chapter 2: "Young Adult Indigenous Speculative Fiction: Interspecies World-Making through Catastrophe in Cherie Dimaline's *The Marrow Thieves*." In Chapter 1, I study three of Foerster's poems in order to argue that her recognition of human and nonhuman agency

and traditional Indigenous scientific literacies help re-map Creek homelands. I also argue for an earlier start date to the Anthropocene for Indigenous peoples (1492), and this, along with my discussion of Anthropocene poetics, leads into a section on historical Creek homelands before my analysis of the poems. In Chapter 2, I argue that Dimaline’s unique YA novel conveys that both human and nonhuman world-building are crucial in Indigenous futures and that interspecies world-building is the ultimate goal for Indigenous cultures to continue to thrive, especially after environmental catastrophes. Some of the tenets of human world-building in the novel include sharing story, reviving traditions, coping with trauma, dismantling colonial violence, and developing interpersonal connections. Nonhuman and interspecies world-building entail disregarding human exceptionalism and building kinship among animals, the natural world, and humans, along with recognizing and working *with* the power and agency of the natural world rather than *against* it.

The second section, “Constructing Virtual and Digital Worlds,” includes Chapter 3: “Re-living Removal and Curating Historical Trauma: Virtual Reality Experiences in *Riding the Trail of Tears* and the Cherokee Heritage Center Trail of Tears Exhibit in Tahlequah, OK” and Chapter 4: “Creating Collaborative Digital Poetic Worlds in the Video Poetry of Heid Erdrich and Kathy Jetñil-Kijiner.” In Chapter 3, I discuss Hausman’s novel alongside the Cherokee Heritage Center’s Trail of Tears exhibit in order to argue that both curate the trauma and survivance of the Cherokee Trail of Tears through virtual reality experiences that range from educational to Native appropriations—appropriating Native American cultures in order to reinforce stereotypes. Lastly, in my final chapter, I argue that Erdrich’s and Jetñil-Kijiner’s video poetry enact digital activism and visual sovereignty by creating a new digital world for poetry where users also contribute meaning through their own viewership, sharing, and comments.

Section I: Human, Nonhuman, and Interspecies World-Building

Chapter 1

Indigenous Anthropocenes in Poetry: Re-mapping Creek Homelands in Jennifer Elise

Foerster's *Bright Raft in the Afterweather*

In his book *Red Alert: Saving the Planet with Indigenous Knowledge*, Daniel Wildcat calls for a “cultural climate change” (5). This would entail a change in our thinking and actions regarding climate change and the environment. To Wildcat, the best solution for spurring a cultural climate change is “indigenuity,” his term for Indigenous ingenuity (74). Indigenous ingenuity is especially pertinent to Indigenous futurisms, as Indigenous activists and artists seek to build Indigenous futures through past, present, and anticipated future struggles, including attempted erasure by colonialism and Western culture. Muscogee (Creek) poet Jennifer Elise Foerster’s work begins to answer this call for a cultural climate change. Foerster released her second collection of poetry *Bright Raft in the Afterweather* in 2018. She blends time, weaving past, present, and future (in no particular order) to convey a catastrophic future mirrored by difficult, but resilient Creek pasts and presents. In this collection, Foerster also amplifies an Indigenous-specific notion of the Anthropocene. I argue that by recognizing Indigenous scientific literacies that include both human and nonhuman agency, Foerster utilizes this moment of the Anthropocene to re-map Creek lands, histories, and futures. This also brings healing to Creek peoples since colonial Anthropocene narratives largely ignore the devastating impacts that the settler-created Anthropocene brought for Indigenous peoples since first contact.

Foerster’s work ruptures what Mishuana Goeman has called the “colonial spatializing of our lands, bodies, and minds” that “has occurred since contact,” the “maps, travel logs, engravings, newspapers, almanacs, and many other forms of colonial writings” that “formed a systematic practice of confining and defining Native spaces from land to bodies” (296). With a

close study of Creek homelands, both physical and spiritual, readers can begin to pinpoint a decolonized mapping of Creek homelands with a special focus on the influence of nonhuman agents and Creek oral traditions. In a 2017 interview with the University of Arizona Press, Foerster discussed focus on the environment in her writing and in *Bright Raft in the Afterweather* specifically. Foerster states, “The characters of the poems are suffused by their ecologies and energy systems, including the systems we can’t see” (UA Press). Foerster often features recurring characters in and across her collections, and these characters have important connections to the environment and to Creek stories. She admits to wishing she had a “clearer knowledge of science and the environment” and wants to take “classes in geology, astronomy, physics and ecology” (UA Press). In fact, she believes “her sense of the environment is only intuitive” (UA Press). Although Foerster doesn’t believe she has a complete scientific understanding of the environment, I would argue the opposite. Her work exemplifies Indigenous scientific literacies, and the intuition of environment is neither simple nor unimportant knowledge.

Foerster also discusses important connections between poetry, the environment, and healing. She states, “Poetry, I believe . . . can reveal the invisible landscapes, histories, and stories that we’ve forgotten, that we need to remember in order to continue. When I say ‘transform’ I’m talking about healing, which naturally involves ecological balance” (UA Press). An important component of Indigenous futurisms, even in works with catastrophic themes and settings, involves healing. Ultimately, Foerster’s re-mapping of Creek homelands promotes the importance of Indigenous environmental knowledge and cultural healing. I read Foerster’s Anthropocene poetics as a symbiocene, a balance between human and nonhuman, and a poetics that seeks to heal, not just express and promote survival. In the following sections, I will review

definitions and theories of Indigenous scientific literacies, the Anthropocene, Anthropocene poetics, and the history of Creek homelands before analyzing Foerster's poetry to discuss her use of and re-mapping of these ecological and Indigenous futurist concepts.

Indigenous Scientific Literacies

Indigenous scientific literacies are one expression of "indigenuity" that pre-date all other knowledge systems, but with colonization came the attempted eradication of Indigenous life and culture, including traditional knowledge. The United States government is only now starting to consider Indigenous scientific knowledge a valuable asset in the face of climate change. Reports and literature reviews produced by the United States Department of Agriculture (USDA) recognize the "possibility" and potential of traditional ecological knowledge (TEK) paired with Western science to slow climate change (Vinyeta et al.). One such report states, "Indigenous populations are projected to face disproportionate impacts as a result of climate change in comparison to non-indigenous populations" (Vinyeta et al. i). However, the USDA must realize that Indigenous populations have *already* faced disproportionate devastations due to settler colonialism having affected their homelands and cultural practices and inflicted other trauma such as language loss due to not only obvious colonial practices such as boarding schools, but also to a warming climate and environmental change that make words along with practices obsolete. Although I by no means encourage the measuring of value in TEK from a dominant or Western culture perspective, this USDA statement represents the government's long-delayed acknowledgement of Indigenous scientific literacies or any non-Western scientific literacies in hopes to combat climate change when this knowledge has been the most effective weapon against climate disaster all along.

Vine Deloria, Jr. summarizes dominant culture's history of ignoring and devaluing Native science. Deloria writes, "As Western civilization grew and took dominance over the world, it failed to resolve some basic issues. A view of the natural world as primarily physical matter with little spiritual content took hold and became the practical metaphysics for human affairs" (4). Western culture demystified the spirituality of the natural world in order to justify human dominance over the environment. Later, Western scientists made what they considered to be breakthroughs about the natural world. Deloria uses the example of zoopharmacognosy in particular when he writes, "getting information from birds and animals regarding plants is an absurdly self-evident proposition for American Indians. It gives substance to the idea that all things are related, and it is the basis for many tribal traditions regarding medicinal uses of plants" (Deloria 43). If colonists had honored and listened to Native Americans, they would have already known that the natural world is ripe with information and that it functions with agency. Instead, colonists suppressed Native scientific literacies and later made "discoveries" when this knowledge would not serve as a threat to ongoing colonial agendas. Further, as Citizen Potawatomi plant ecologist Robin Wall Kimmerer writes, "Getting scientists to consider the validity of Indigenous knowledge is like swimming upstream in cold, cold water" (160). Thus, dominant culture's resistance to Native scientific literacies has only fast-tracked climate emergencies.

Grace Dillon defines and explains Indigenous scientific literacies and TEK in one of her articles about the prominence of scientific literacies in Native American literature. Dillon writes, "Indigenous scientific literacies are those practices used by indigenous native peoples to manipulate the natural environment in order to improve existence in areas including medicine, agriculture, and sustainability" (25). Although medicine and agriculture mainly serve humanity,

sustainability is a goal of Indigenous scientific literacies that benefits both humans and the natural world to create a stable balance. Further, Dillon argues that TEK “can be thought of as an intersection between researcher and indigenous knowledge, a collaboration rather than an appropriation” (27). Here, the researcher could be Indigenous or non-Indigenous; either way, collaboration in data collection methods between researchers and Indigenous peoples, and researchers and the nonhuman world is key.

Indigenous scientific literacies impact everyday life, along with ceremonial and traditional practices, while shaping how Indigenous peoples interact with nonhumans. Robin Wall Kimmerer writes that “the traditional ecological knowledge of Indigenous harvesters is rich in prescriptions for sustainability. They are found in Native science and philosophy, in lifeways and practices, but most of all in stories, the ones that are told to help restore balance” (179). TEK is all about achieving and sustaining balance between the human and nonhuman worlds, but it can be difficult to sustain balance when colonization disrupts these practices. Kimmerer also reminds her readers to turn to story to better understand the goal of balance. In terms of researching scientific topics, Kimmerer writes, “Experiments are not about discovery but about listening and translating the knowledge of other beings” (Kimmerer 158). This methodology takes the thrill of discovery away from human-centered approaches, and stresses that good scientists, and Indigenous scientists employing traditional knowledge systems, learn to listen and communicate nonhuman messages.

Similarly, in his book *How Forests Think*, Eduardo Kohn writes, “If thoughts are alive and if that which lives, thinks, then perhaps the living world is enchanted. What I mean is that the world beyond the human is not a meaningless one made meaningful by humans” (72). Kohn’s approach to anthropology is one that considers the Amazon rainforest as a host of

various thinking and living beings that are no less important than humans. Ecosystems and animals are also indigenous to place, along with humans. Kohn's notion of enchantment is one that provides a great place to start bridging the human and nonhuman in terms of the Anthropocene. The nonhuman world is enchanted, and in listening closely to its messages, we can join human and nonhuman and heal their relations.

Indigenous Anthropocenes

Eugene Storrer began the study of the Anthropocene in the 1980s, and atmospheric chemist Paul Crutzen popularized this term in the early 2000s (Grusin vii). The Anthropocene is “the proposed name for a geological epoch defined by the overwhelming human influence upon the earth” (Grusin vii). However, scientists cannot agree on exactly how recently this era began. Some scientists date the start of the Anthropocene in 1610, the start of the Industrial Revolution, or even as late as 1964. The date does matter, although it may never be agreed upon, because it affects the perception of human action on the environment (Lewis, Maslin 177). Geographers Simon Lewis and Mark Maslin note that the arrival of the Europeans in the Caribbean in 1492 and the “subsequent annexing of the Americas led to the largest population replacement in the past 13,000 years,” and “the cross-continental movement of food and animals alone contributed to a swift, ongoing radical reorganization of life on Earth without geological precedent” (174). This summation of the profound impact of colonization on Native populations and the environment paves the way for making an argument for a much earlier start date to the Anthropocene.

Many Indigenous scholars date the beginning of the Anthropocene based on environmental impact at the beginning of European colonization of the Americas. Recent studies reveal that European settlers killed roughly “56 million indigenous people over about 100 years in South, Central, and North America” (Kent). This led to a rise in abandonment in farmland and

reforestation that decreased carbon dioxide levels, and by 1610, “carbon levels changed enough to cool the Earth” (Kent). The deaths of Indigenous peoples and the swift shift in land management changed the temperature of the earth forever. In her book *A Billion Black Anthropocenes or None*, Kathryn Yusoff writes that “Black and brown death is the precondition of every Anthropocene origin story” (Yusoff 66). The beginning of any Anthropocene narrative includes enslavement of Africans and/or genocide of Indigenous peoples. Similarly, Donna Haraway writes, “It’s more than climate change; it’s also extraordinary burdens of toxic chemistry, mining, depletion of lakes and rivers under and above ground, ecosystem simplification, vast genocides of people and other critters . . . in systematically linked patterns that threaten major system collapse” (159). Genocide is directly and systematically tied to environmental destruction, and Yusoff notes that while colonial Anthropocenes all start the same way, no population experiences the Anthropocene in the same way, hence the plural of the term. Further, various tribal nations have experienced (and continue to experience) the Anthropocene differently as well.

K.P. Whyte argues that what Indigenous peoples “are currently facing is not different from environmental destruction of settler colonialism in North America” (1). Settler colonialism brought the destruction of local plants, animals, and lands, along with the genocide of many Indigenous peoples. Just as Kent’s argument previously linked genocide to environmental destruction, Whyte also draws the connection between initial colonial struggles harming tribal lands and waters to contemporary twenty-first century struggles. Whyte argues that “in the Anthropocene . . . some indigenous peoples already inhabit what [their] ancestors would have likely characterized as a dystopian future” (Whyte 2). The dystopia that colonizers created for

Indigenous peoples early on only persists today, and it functions in complex systems that threaten various forms of sovereignty.

While many focus arguments on the start date of the Anthropocene, there is a strong call to shift the focus of the study of this epoch to humanitarian and environmental concerns stemming from colonization. Elizabeth DeLoughrey argues that “postcolonial critiques of the world-making claims of ecology and empire have been overlooked in the scramble for originary claims about the Anthropocene” (12). DeLoughrey contends that more pressing questions entail asking *who* and *what practices* caused the Anthropocene. This is also why scholars argue about the naming of Anthropocene. Heather Davis and Zoe Todd argue that “the Anthropocene, as a term, erases . . . questions of power” related to colonialism (763). Therefore, the “Anthropocene is a universalizing project; it serves to re-invisibilize the power of Eurocentric narratives” (Davis et al. 763). In their scrambling to date the Anthropocene to the 1600s or later, scholars and scientists overlook questions about early colonial structures and systems. Lewis and Maslin argue that “the Anthropocene as the extension and enactment of colonial logic systematically erases difference, by way of genocide and forced integration and through projects of climate change that imply the radical transformation of the biosphere” (769). This is why Indigenous scholars argue that we must shift the current discourse surrounding climate change and the Anthropocene for these reasons.

Studies of Indigenous Anthropocenes must consider dystopia and survival of both humans and nonhumans in the past, present, and future. Priya Kumar and Amit Baishya argue that “the Anthropocene is not only about the (deep) past, but also speculations on what comes after ‘us’” (8). Here, Kumar and Baishya emphasize the importance of temporality in theorizing the Anthropocene, but they also imply that scholars must look beyond human experience to the

nonhumans who have pre-dated and very well may live on long after humans. In reading Foerster's work, I seek to study human and nonhuman life and how the Anthropocene has impacted both. Studying Indigenous Anthropocenes brings justice to human and nonhuman animals by exposing colonial forces while also celebrating Indigenous survivance. Gan et al. believe that there are ways to study a type of palimpsest of human and nonhuman life as they theorize the "ghosts" of the Anthropocene. They write, "The winds of the Anthropocene carry ghosts—the vestiges and signs of past ways of life still charged in the present" (Gan et al. 1). These "ghosts are the traces of more-than-human histories through which ecologies are made and unmade" (Gan et al. 1). This argument implies that both making and unmaking are part of the Anthropocene, not unmaking alone. Foerster's writing creates a productive intervention and conversation with the science of the Anthropocene as well because her poetry imagines (or describes an already current) catastrophic present and/or future while conveying the relationship Indigenous peoples have with the environment to begin to heal colonial human impact.

Anthropocene Poetics

While a uniquely Muscogee Creek Anthropocene poetics, Foerster's work fits in with what the genre some call Anthropocene Poetics. Anthropocene Poetics is now its own sub-field of the humanities and the discipline of literary studies. In an interview with the University of Arizona press, Jennifer Foerster discusses the power of poetry to promote ecological knowledge in the United States specifically: "Poetry is especially needed in this country, which has written over and attempted the erasures of the continent's long-standing dynamic cultures, peoples, and ecosystems." Foerster's intuition about the environment and its potential of revealing hidden narratives and histories is in direct conversation with studies of decolonizing the Anthropocene and uncovering Indigenous Anthropocenes. Foerster first makes an argument for the

responsibility of poetry to contribute to decolonization, and secondly, she begins to suggest that poets and readers must begin to closely study and respect traditional ecological knowledge.

Therefore, I read Foerster's Anthropocene poetics as a symbiocene, a balance between human and nonhuman, and a poetics that seeks to heal, not just express and promote survival.

Zoe Todd writes that "an effective art of the Anthropocene is one that directly engages with the structural violence of heteropatriarchy and white supremacy as they shape discourse and praxis" (250). "This is where," Todd argues, "the work of Indigenous scholars and artists promises to speak back, reshape, and change the direction of current human-centric and Eurocentric framings of the Anthropocene" (250). Foerster's poetry is one powerful example of how a Muscogee Creek worldview can empower Indigenous communities to answer to climate change triggered by settler colonialism and share narratives that Eurocentric framings of human interaction with the environment have long hidden, and still try to erase.

Anthropocene poetry often has a more political and social focus than fiction. Amitav Ghosh writes, "Climate change casts a much smaller shadow within the landscape of literary fiction than it does in the public arena" (7). He argues that climate fiction does not have as large an impact on readers as public conversation or news does. Ghosh also argues that this is because "global warming defies . . . literary fiction common sense" but "poetry, on the other hand, has had an intimate relationship with climactic events" (26). Some scholars have taken up the study of an Anthropocene poetics along this line of thinking. David Farrier writes that "an Anthropocene poetics must address the knotty problem of love among knotted beings; the challenge of loving those creatures that seem to withdraw from or resist relation: the faceless, the swarming, or the microscopic" (93). Here, Farrier recognizes the importance of humans working to understand and even love nonhumans and to explore their interrelated fates and relationships.

Farrier also writes, “We need poets as much we need paleontologists” in order to understand and document “what will become of us” (23). Narrative and poetic works are crucial in understanding Anthropocenes.

Creek Homelands

Before I discuss Foerster’s poetry, it is important to cover some history of Creek homelands so readers can understand how Foerster’s poetry re-maps these physical and spiritual spaces. Originally, “the Creeks’ home encompassed what is now Georgia, most of Alabama, and the panhandle of Florida” (Green 1). To the Creeks, “what was important were the rivers, the piedmont, the coastal plain, and the fall line, for these natural features defined the Nation and marked its limits” (Green 1). The Creek nation had a “small fertile crescent,” “heavy tree cover,” and six major river systems (Green 2).

Historian Christopher Haveman dates the so-called voluntary emigrations and the forced removals from 1827-1877 in his published collection of removal documents. Some of the crucial treaties spurring Creek removal included the Treaty of Indian Springs and the Treaty of Washington. Haveman writes, “On 12 February 1825, William McIntosh and fifty of his handpicked supporters signed the Treaty of Indian Springs, ceding the Creek domain in Georgia and a large portion of their territory within Alabama to the federal government” (Haveman 11). McIntosh’s decision was not received favorably by other Creeks, and he was executed shortly thereafter. The Treaty of Indian Springs “expelled all Creek residents from the ceded land and forced them into the remaining part of the Creek Nation within Alabama” (Haveman 11). The 1832 Treaty of Washington “was a devastating setback for the Creek people. The Creeks had already surrendered more than half their domain to the United States, and hundreds more of their reserves were transferred to whites either through legitimate sales or because of fraud”

(Haveman 114). The Treaty of Washington sought to preserve Creek lands, but failed as Haveman writes. The Second Creek War of 1837 “gave Andrew Jackson the excuse he needed to relocate the entire population without a removal treaty. Unlike the Cherokee Trail of Tears, the Creeks who had not participated in the war were not forced west at the end of a bayonet” (Haveman 200). Although the Creeks may not have faced as violent a removal compared to the Cherokee people, the trauma they faced from the action of the U.S. government and loss of their southeast homeland is immeasurable.

Upon arrival to Indian Country, “the quality of the soil and water, and the diversity of the flora and fauna, varied greatly . . . depending on location” (Haveman 151). The Creek people experienced issues building homes and obtaining fresh water. Haveman describes the new Creek land:

The western Creek country was a mix of rolling and gently rolling prairies, cut up by numerous rivers and streams. Timber grew in “streaks and groves” along the riverbanks and was interspersed throughout the prairie lands. Cottonwood, various species of oaks, and pecan were the most common tree types. The area is sandstone, limestone, and shale country, and the rock not only underlay much of the terrain but also was exposed in many areas near the rivers and tributaries. (152)

The Creek people forged a new homeland in Indian Territory, though it was a challenging task. After being removed and coerced out of most of their homelands in the southeast, this land would become important for continuance of and evolving Creek ways of life and tradition. The natural features of rivers and tree cover slightly mirrored their southeastern land, and the Creek people always remembered their geographical homelands.

Returning to the Creek homelands of the southeast, researchers have studied the changes in the use of Creek homelands after removal. Foster et al. studies the Fort Benning Military Reservation which is “situated along the fall line which borders the Appalachian Piedmont and the Gulf Coastal Plain in central Georgia and Alabama” (150). They discovered that:

The military base is on land that was occupied for at least 15,000 years by Native Americans. The native population used the land for hunting and seasonal occupation for the majority of that time and then during approximately the last 2000 years engaged in shifting cultivation of native plants. They fished and hunted for deer, bison, and turkey. The native horticultural techniques included removing trees by girdling the trunk, burning undergrowth, and multicropping the same field every year until the crop yield was unsatisfactory, after which they would establish new fields nearby (Williams 1989:35). Fields were usually on the rich soils near major rivers such as the Chattahoochee River (Foster 2003). The land was used in this way until around 1825 when the Native American peoples were forcibly removed to Alabama and eventually to Indian Territory (now Oklahoma). (150-151)

After Creek removal, the use of land shifted drastically. The history shows that “settlers from Georgia and other regions of the United States began using the land for intensive agriculture” (151). To study the change in geographic features of the land, Foster et al. used land survey maps and satellite data (151). They also “supplemented archaeological settlement data with historic data from ‘witness trees.’ Witness trees are land boundary markers that were recorded on historic maps by government land surveyors” (Foster et al. 151). This study of witness trees is an interesting one, and I will return to trees as witnesses later in regards to Foerster’s poems. This unique blend of research approaches led to many discoveries of changes in the Fort Benning

landscape. Originally, “pine forests dominated the landscape at Fort Benning in the early 1800s. Native Americans lived where Fort Benning is located until about 1825. At that time over 75 percent of the land area was in pine forest with the second highest category, mixed forest, covering only about 12 percent” (Foster et al. 153). However, “by the early 1970s, pine forests had declined to about 25 percent of the cover, and deciduous forests dominated the landscape” (Foster et al. 154). From these studies, it is clear that settlers, including the U.S. military, quickly changed Creek homelands and depleted the forests. However, the data collected by researched also reveals that the palimpsest of Creek presence remains.

Foster et al. argue that “data from anthropology and ecology can be successfully synthesized in order to create usable metrics of ecological change for environmental managers and broaden policy options” (155). They also conclude that “anthropological data offer information about human impacts on the past, the intensity of the impact, and the type of impact. Historical data are necessary for an understanding of culture and the relations of power that underlie how humans interact with landscapes” (Foster et al. 155). The mapping and tracing of Fort Benning that Foster et al. performed is an important approach not only to track the colonial changes to a portion of Creek homelands, but to also track the Creek history and cultural practices embedded in the land.

While the Creek Nation in Oklahoma is the current homeland, it does not minimize the importance of homelands from which Creek people were removed. With movement comes new connections to new places. Most recently, the 2020 Supreme Court ruling in the case of *McGirt v. Oklahoma* affirmed “that much of eastern Oklahoma falls within an Indian reservation” (Healy, Liptak). This was a big win for the Muscogee Creek nation on multiple levels. Ian Gershengorn, one of the lawyers who argued on behalf of the tribe in hearing, stated, “Congress

persuaded the Creek Nation to walk the Trail of Tears with promises of a reservation — and the Court today correctly recognized that this reservation endures” (KickingWoman). *McGirt v. Oklahoma* simultaneously ensures that the Creek nation has tribal jurisdiction over crimes committed on their reservation while providing federal recognition of Creek sovereignty over the land. While no one can give or take sovereignty away, acknowledgment from the Supreme Court represents the honoring of Native treaties that have long been broken by the U.S. government.

Following shifting Creek culture as related to land in what is now the state of Oklahoma along with shifts in southeastern homelands allows us to understand how original homelands were not forgotten and remain spiritually and culturally important. Foerster’s poetry is interspersed with this remembrance and her work re-maps Creek homelands, if not altogether upsets the notion of what a homeland is. Foerster’s poetry reveal that homelands are not rooted in one solitary place. Homelands can be physical geographical spaces. They can be embodied. They can be spiritual. And they can be re-built.

Poems

Bright Raft in the Afterweather is divided into 4 sections: “Before the Hurricane,” “At the Midnight Galleries,” “After I Bury the Nightingale,” and “The Outer Bank.” Some common threads are the movement of the sea, the slippery nature of memory, the disjointed body or the disembodied self, and fractured or circular time. In the poem “River” a woman questions “what if we were to dream / each moment before us as we dream / each moment behind us?” (16-18). Imagined futures and remembered pasts, along with imagined pasts and remembered futures, are critical to Foerster’s collection. The poems warn of the impact of climate change by investigating the past and present as they also recall imagined futures. Through these memories and reflections, Creek homelands are conjured, from the past, present, and future. Gan et al. writes

that “Anthropogenic landscapes are also haunted by imagined futures. We are willing to turn things into rubble, destroy atmospheres, sell out companion species in exchange for dreamworlds of progress” (2). The notion of Anthropocene ghosts also closely relates to David Farrier’s concept of future fossils. Farrier writes, “In my search for future fossils, I took to the air, the oceans, and the rock, from the bubble of ice drawn from the heart of Antarctica to a tomb for radioactive waste deep beneath the Finnish bedrock” (22). Farrier stresses the significance of scouring for “landscapes and objects that will endure the longest and the changes they will undergo” and recognizing that seeking future fossils is also a “search for what will be lost” (22). These theories of Anthropocene ghosts and future fossils are particularly powerful in connection with Foerster’s poetry. The characters and agents in the collection haunt the landscape and seascape, the nonhumans, especially, exist within their own temporalities, living long before and after humans. Foerster examines the colonial culpability relevant to environmental destruction while paving a way for Creek futures. I will analyze three poems from the collection in order to examine how Foerster amplifies one particular Muscogee Creek Indigenous Anthropocene by remembering and recovering Creek homelands through the mode of poetry.

Old Woman and the Sea

Creation stories are imperative to all homelands (both physical and spiritual). The first poem of the collection “Old Woman and the Sea” relays a kind of creation narrative through the dialogue of three different agents: a woman figure named Hoktvlwv, the speaker of the poem, and the sea. A note at the end of the poem tells readers that “Hoktvlwv” is Mvskoke for elderly woman. Throughout the collection, Hoktvlwv often appears as a female spirit or figure of the coastline. Hoktvlwv may also be analyzed as a time traveling ancestor. Channette Romero theorizes the use of spiritual temporalities, especially as they are utilized in literature written by

women of color. Her concept of “spirit time” seems relevant in understanding who Hoktvlwv is in Foerster’s poetry. Spirit time “describes a temporality where spirit beings and ancestors literally reinsert themselves into the present” and “this temporality shows how all times are connected, how the past always touches the present through the existence and embodiment of spirits” (57). Hoktvlwv appears in order to help create futures while also embodying the past and Muscogee traditions in the collection. The reference to Hoktvlwv as an “old woman” in the title also supports the analysis that she is an ancestor or spirit with powerful traditional knowledge. “*A star, the sun, was born in the dark. / Salt leached from rocks. / The ocean rusted*” the poem begins (1-3). The poem alternates between italicized stanzas and non-italicized stanzas, creating the distinction between Hoktvlwv’s voice and the speaker’s voice. The speaker and Hoktvlwv are “talking / at the shore beside the tin carcasses” (4-5). A new world beginning from a previous ending is implied from these lines through language like “rusted” and “carcasses,” which suggest a kind of deterioration. The poem also states, “The continent drapes its burnt cape behind us” (9). The scorched mass of land and water creases and decays from slow violence.

This term “slow violence” comes from Rob Nixon. He defines slow violence as “violence that occurs gradually and out of sight, a violence as delayed destruction that is dispersed across time and space, an attritional violence that is usually not typically viewed as violence at all” (Nixon 2). A few examples of slow violence that Nixon identifies that are relevant to Foerster’s poetry include climate change, deforestation, and acidifying oceans (2). The deforestation of Creek lands in the Southeast by the U.S. government and military is one form of slow violence against both the land and the Creek peoples. Climate change is another. With the very first poem of the collection, however, Foerster does not suggest that it is impossible to heal from this slow

violence. She proposes a way forward while acknowledging this violence inflicted upon the natural world.

Here in this first poem, the reader can recognize ecological themes and glean an Indigenous perspective on the Anthropocene where humans emerge from the natural world, but may fail to return enough care and reciprocity to it. There is a simultaneous unmaking and remaking occurring as scholar René Dietrich would contend. Dietrich argues that “remaking becomes necessary in order to counter the threat of nothingness experienced in the historical catastrophe” (331). Further, “more than a post-apocalyptic poem simply being a creation after the destruction, and standing for the possibility of creation in the face of destruction, the processes of creation and destruction are inextricably linked” (Dietrich 336). The ending and beginning of worlds in catastrophic and Indigenous Anthropocene poetics document the simultaneous making and unmaking which cannot be separated. The re-making or re-building that Hoktvlwv facilitates also suggests that what makes a homeland is spirit and memory, not just a physical place.

Hoktvlwv is able to hum/speak/sing things into existence. The poem states “Hoktvlwv hums / A ship’s light passes” (10-11). She seems to possess the power to conjure the ship into existence, or at the very least, detect the ship’s arrival through the signs that the sea provides. In this way, Hoktvlwv is able to read and communicate with the sea. Lines 12-15 of the poem read:

Lava, ash

and song began us.

The foam drags back,
unclenches its hand.

The movement of the sea is constant. There is a push and pull between shoreline and sea, a giving and a taking away as the sea foam of the waves touches the shore and recedes. The personification of the hand of the sea also relays the grasp and control that the sea has over the land and humans alike. Kimmerer writes that “the animacy of the world is something we already know, but the language of animacy teeters on extinction” (57). Kimmerer notes that Indigenous knowledge inherently purports that nonhumans and the natural world are alive and agential, but Western cultures seeks to undermine this fact. The term “animacy” and the idea of personification of nonhuman worlds also threaten the true enchantment and thought, in Eduardo Kohn’s terms, of plants, animals, water, land, and all other nonhuman agents. In “The Old Woman and the Sea,” the movements of the waves mirror the relationship between the natural world and humanity. Reciprocity and balance is intended, but is not always achieved. Later in the poem, the speaker tells us that Hoktvlwv writes in the sand: “*What the sea returns / is enough*” (19-20). She etches this sentiment in to the coastline. Readers are left questioning if humans return enough to nonhumans, or if what humans return is mostly harmful instead of reciprocally beneficial.

The sea has its own kind of currency that it gifts Hoktvlwv, a figure of balance. Earlier in the poem, the speaker states “sand dollars clink at our feet” (17). The tide sends in this symbol to Hoktvlwv and the speaker. Later, Hoktvlwv “clears a briar path” (24) with “coins in her cart” (23) and the poem ends with the line “Her tracks are jagged and deep” (26). Hoktvlwv collects the blessings that the ocean has offered and moves inland. Hoktvlwv walks away from the shore further inland and leaves traces of her presence for the speaker to follow. She works with and against nature here, clearing briars and imprinting her feet to the earth. This creates a path for the reader to follow Hoktvlwv throughout the rest of the collection.

The term “old woman” is a name found in Nahue stories and contemporary Indigenous narratives with “Hoktvlwv” as one particular example. The name of this poem may also be re-naming or re-working of the Ernest Hemingway novel *The Old Man and the Sea*. Foerster’s poem features the female figure Hoktvlwv and a speaker who listens and learns about the sea and its languages. Hemingway’s novel features an old man protagonist and his young friend who fish together off the coast of Cuba. The protagonist, Santiago, struggles with a marlin and shark in the novel. In “Old Woman and the Sea” there is no article “The” before the title like there is in *The Old Man and the Sea* which suggests more of a communal approach to Indigenous women and nature in contrast the rugged male individualism of Hemingway’s title and the themes in the novel. Hoktvlwv is a spirit figure who teaches the speaker of the poem about a symbiotic relationship with the sea, whereas Santiago is alone in his quest to catch the marlin throughout most of the novel. Although Santiago may think of the marlin as a worthy adversary, he does not seem to establish or seek a mutual relationship with the ocean or its beings. He wants to catch and kill the marlin. Hemingway expresses a dualistic man vs. nature ontology as Santiago reflects heroic individualism in trying to tame nature. Whether Foerster had this literary reference in mind or not, “Old Woman and the Sea” is interesting to place into conversation with Hemingway’s novel because of its Indigenous feminist approach to a reflective and balanced relationship with the ocean.

Nightingale

“Nightingale” is a four and a half page poem that appears roughly mid-way through the collection. Hoktvlwv also appears in this poem, but on land, along with a nightingale and the speaker. “I’ve heard the nightingale tapping at the window, / seen her singing in the pitch-black trees” (1-2) the poem begins. The black trees are important in this poem as a source of memory

and permanence. The trees are also a kind of Anthropocene ghost. We can refer back to the Foster et al. study of “witness trees” of the Southeastern Creek homelands as a way of understanding how natural monuments witness the nonhuman and human activity of a landscape. Daniel Williams calls nonhuman witnesses “attestants’ to get at the sense of an ensemble bridging human and nonhuman worlds in a testimonial sense” (7). Williams writes, “The portmanteau concept of the nonhuman witness . . . helps disclose the narrative, ethical, and ecological work performed by peripheral objects in literature, showing the necessary entanglement of human and nonhuman concerns” (2). In this poem, the witness trees seem to extend the boundaries of homelands, creation, loss, and re-creation beyond physical levels. They are attestants to change over time. Although Foerster does not directly refer to specific geographical Creek homelands in this poem as she does in other poems in the collection, this idea of creating and re-making homelands through natural disasters is always implied.

Hoktvlwv remains a figure of creation in “Nightingale.” The speaker states, “Hoktvlwv walks out in the moonrise. / She wakes the nightingales, pierces their throats, / steals the eggs and the blind chicks crackling” (8-10). Hoktvlwv is a figure of both creation and destruction, death and birth. She propels an awakening of the nightingales and the resting earth.

The poem continues:

Later I carried her into the woods—
scratched off sap—balm
for her body—stitched us
a new bark throat (12-14)

The speaker utilizes sap and bark from the dark tree to heal Hoktvlwv, and the verbs “carried” and “stitched” suggest a kind of birth and re-making. The speaker fashions a bark throat and the

tree becomes part of Hoktvlwv's body. Hoktvlwv embodies the tree, then, which is a marker and witness of Creek history that functions differently temporally. The tree has its own time and slow rhythm. As a much older enchanted being than humans, the tree possesses the power and remedies to heal.

The healing attestant tree also binds human and nonhuman. Elizabeth Grosz studies the phenomenon of the "nature/culture opposition," which implies that nature is "understood as timeless, unchanging raw material, somehow dynamized and rendered historical only through the activities of the cultural and the physical orders it generates" (45). Grosz takes issue with this perspective, and I would add that Native American and Indigenous peoples would also largely disagree with this stance on nature as something that is changed by humans and culture instead of viewing nature as a set of forces with their own agency. Grosz argues that "the natural is *not* the inert, passive, unchanging element against which culture elaborates itself but the matter of the cultural, that which enables and actively facilitates cultural variation and change" (47). For Creek peoples, and for all removed and relocated Indigenous tribes, the natural world and new landscapes in Indian Territory did lead to a change in cultural practices and stories. Nature has agency that shapes and changes culture. Donna Haraway's "naturecultures" helps erase a nature/culture divide as she expresses that her companion species manifesto tells "a story of co-habitation, co-evolution, and embodied cross-species sociality" (4). It is far more important to turn to the symbiotic and interrelation of human and nonhuman in forging Indigenous futures than to continue to distinguish between and divide the two.

Creek oral tradition also enlightens the role of the dark trees and the nightingale in this poem. According to one creation story, the Cowetas, a Muskogean-speaking group, were "delayed during their emergence by a root of a tree that grew in the mouth of the cave"

(Grantham 17). In this story, the tree had the power to slow the emergence of people, sending a message of lack of readiness in the land for humans. Animals are also significant nonhumans. Birds “are an important class of Upper World beings among all Creek groups. They have the ability to transcend all three worlds” (Grantham 32). The three worlds Grantham refers to here are the Upper, Middle, and Lower worlds of Creek cosmology. The middle world is considered to be the Earth where humans dwell and the upper and lower worlds are where powerful spirits and/or “departed souls” reside (Grantham 21). This does not mean that these worlds cannot and do not intersect and interact, though.

The nightingale in the poem can certainly be considered a bird with the ability to travel among the worlds and send messages to other beings. This interaction, along with Hoktvlwv’s communication with humans and animals, points out the interrelated web of human and nonhuman beings. In her pivotal Indigenous feminist book *The Sacred Hoop*, Paula Gunn Allen argues that “the structures that embody expressed and implied relationships between human and nonhuman beings, as well as the symbols that signify and articulate them, are designed to integrate the various orders of consciousness” (63). Therefore, as Allen argues, human and nonhuman consciousness always do, and should, overlap.

The roles are reversed between Hoktvlwv and the speaker later in the poem as Hoktvlwv nurtures the speaker. The speaker awakes “in a bathtub to an old woman / sponging down [her] bloody abrasions” (45-46). Hoktvlwv heals the speaker, gently cleaning her wounds. Later in the poem, there is a bit of slippage between Hoktvlwv’s and the speaker’s voices. The speaker states, “I have slipped through the cracks / of the clock hands, / peeled the bark from my throat” (76-78). The speaker mended Hoktvlwv earlier in the poem by pressing bark to her throat, but now they peel it from their own neck while they slip through the clock. Time is non-linear as the

speaker becomes Hoktvlwv or Hoktvlwv and the speaker blend into one figure. This may even refer to the speaker returning to the past with Hoktvlwv as a figure from the future.

The speaker then states:

*Old woman, immortal bird
perched in your silent, forever-green glade
will you weave me a nest,
lay me down in the shade? (72-75)*

Here, Hoktvlwv may be the immortal bird or the old woman who walks alongside the immortal bird, and they last through a time of eternal greenery and life. Hoktvlwv as the old woman also confirms her role as a spirit figure/ancestor from “Old Woman and the Sea.” The speaker asks Hoktvlwv to make her a dwelling or resting place to lay them down. The nightingale as an “immortal bird” relates to an earlier reference in the poem. The speaker refers to the nightingale as an “old ghost” (34). The shade in this passage may represent the end of a human life, or just a period of dormancy between the ending and beginning of worlds. In one of the last lines of the poem, the speaker says, “*leave the root in the ground, / cut just above the node*” (84-85), which alludes to their awareness that one must sever part of the growth of the tree in order for new life to flourish in the future. The root of the tree returns back to the Coweta story of the root of the tree as an agent in the story of human life. It is a symbol and witness to or attestant of new life. The ending lines also suggest these cycles of life and death as there are “bones scraping the sky” (91). The bones of the earth (both human and nonhuman) pile to the realm of the sky, and transcendence occurs.

Lost Coast

The poem “Lost Coast” traces the continuous splitting and reassembling of the continent through non-linear time. It is the second-to-last poem in the collection. “The continent is dismantling. / I go to its shores— / the outer reaches of a fracturing hand” (1-3) the poem begins. This dismantling and fracturing may refer to contemporary climate change causing the splitting of earth and glaciers or may refer even as far back as splintering Pangea. In “Lost Coast” the speaker refers to the city as “a ship in a bottle” (10). The city appears to exist within a fleeting, ephemeral moment in time. It is easily manipulated, and will most likely end up being tossed into the ocean.

Hoktvlwv appears again in this poem and the following lines refer to her:

She birthed twin girls
by blowing sand
from her palm’s crease—

moon unsheathed from clouds,

cities bloomed from her mouth. (5-9)

Hoktvlwv creates two humans out of the natural element of sand that emerges from her own hand. With the reveal of the moonlight, cities are shaped and they flourish, stemming from Hoktvlwv’s being. The two line breaks in this passage function to create space on the page representing the progression of creation which involves both Hoktvlwv and natural elements like the moon and night sky.

Like the other poems in Foerster's collection, there is a continuous push and pull, a cycle of destruction and re-creation. The ocean is a hungry tide, coming to swallow the earth that humans have polluted and destroyed. But the speaker also longs to bond with the sea and create a connection. The speaker states, "Dense fog spills over studded chimneys" (13). These lines paint imagery of air pollution spilling out from building chimneys and human chimneys, harming public health which also harms the environment's health. The human pollution directly connects to rapid changes in the environment, reinforcing the contemporary effects of the Anthropocene. The lack of a symbiotic relationship between humanity and the environment also leads to a loss of spiritual connection. The fog may be natural, but it may also be clouded with smog and pollution. The speaker of the poem states, "Often I have gone to the sea / and not been able to find it" (45-46). The speaker does not refer to the literal inability to be able to find the sea, but the inability to connect with the water spiritually because of a broken relationship. Kimmerer writes, "Cultures of gratitude must also be cultures of reciprocity. Each person, human or no, is bound to every other in a reciprocal relationship" (115). When this relationship is broken, both human and nonhuman suffer.

Along with the "lost coast," the poem features an urban center where people commute by train, and the speaker tows their "trash to the curb" (18). These mundane tasks are contrasted with catastrophic events like hurricanes and coastal flooding. Hoktvlwv's "body splits into continents" (43). These lines are separated from the previous stanza to create the physical separation on the page as well. Later, the speaker states, "This continent is a memory / remapped each morning" (56-57). Hoktvlwv is part of this continual mapping. Mishuana Goeman writes that "our ability to understand the connections between stories, place, landscape, clan systems, and Native Nations means the difference between loss and continuity" (300). Stories and

memory of loss, of unmaking, also aid in re-making and creating. Hoktvlwv embodies the fracture and the re-making of home and homeland.

Foerster specifically refers to Creek homelands in the southeastern United States as stated in the following lines: “The southeastern deltas / will soon be blooming. Soon / the ark will sail without me” (62-64). The blooming may refer to the flourishing of the tribe, or algal blooms, or an invasion of settlers, or all of the previously mentioned simultaneously. The biblical reference to the ark that leaves without the speaker also creates the possibility of several connotations. It could represent the Creek people who left on their own and traveled up to Alabama or migrated West “voluntarily” with money from the U.S. government in their pocket. It could also represent forced relocation, the throngs of Creek people who were mercilessly forced out from the Southeast.

The fracturing continent also stands in for the fractures of Creek culture caused by displacement. It represents the duplicity of existing within multiple physical homelands and nations along with the scattering of the population and goals to transfer homelands to spiritual embodied homelands. In the poem, the ocean splits the city. “Dissembled by the sea / the city collects itself / ravenously around me” (77-79). The speaker, and the city, is surrounded by the sea. One woman survives the coastal flooding:

I gather eelgrass
tangled in foam

weave a raft of seaweed
beneath the churning fog

blow white sand
from the creases of my palm

until there is only
one woman in the sea

and me in the remains
of a coastal city. (86-95)

The speaker uses her ingenuity to survive the storm, weaving a raft. She is the only woman in the sea. Again, there is slippage between the speaker and Hoktvlwv. Earlier in the poem, Hoktvlwv blows sand from her palms to create a new world, but here, the speaker does the same until they are the only person left in the remains of the city. This brings us back to the first poem in the collection, “The Old Woman and the Sea,” where Hoktvlwv emerges from the sea to help create a new world.

This theme of catastrophe found in “Lost Coast” is inevitably tied to the Muscogee Creek Anthropocene. Jessica Horton argues that “for many indigenous people apocalypse concerns the past as much as the future” (60). Colonization was one kind of apocalypse, not one of total loss and destruction, though. Pre-contact Indigenous knowledge of the environment and Indigenous survivance post-contact are both invaluable assets to those communities. Hoktvlwv is a powerful figure of survivance and ingenuity. Lewis and Maslin write, “This indigenous resistance in the face of apocalypse and the renewal and resurgence of indigenous communities *in spite* of world-ending violence is something that euro-Western thinkers should have as we contend with the implications of the Imperial forces that set in motion the seismic upheaval of worlds in 1492”

(773). If the resistant USDA, for example, wants to truly address climate change, then they will need to acknowledge Indigenous experience and knowledge and work with Indigenous communities.

In “Four Theses” Chakrabarty argues that “we have to insert ourselves into a future ‘without us’ in order to be able to visualize it. Thus, our usual historical practices for visualizing times, past and future, times inaccessible to us personally—the exercise of historical understanding—are thrown into a deep contradiction and confusion” (197-198). “Lost Coast” poses Indigenous survivance in the face of the Anthropocene, past, present, and future. It also models coping and survival for the Western world while encouraging re-evaluation of the Anthropocene in regards to its ties to colonization and removal. As readers can see in these three poems from Foerster, it is possible to visualize a time “without us” in the past and in the future in order to bring justice to nonhumans and begin to make efforts to achieve balance.

Conclusion

Catastrophe and unmaking are part of re-making and world-building, especially for Indigenous peoples. The Anthropocene seems new to white people who have never weathered such devastation to the degree that global Indigenous populations have due to colonialism and its horrid realities. Art, and poetry in this case, helps relay the reality that not only have Indigenous peoples experienced human-induced radical change to culture and the environment before, but that they have survived and re-created. Mishuana Goeman suggests, “Rather than rely on settler-colonial legal systems that restructure Native lands and assert settler ownership, Native communities need to promote the forms of spatiality and sovereignty found in tribal memories and stories” (301). Jennifer Foerster’s keen focus on reviving Creek homelands while creating new homelands on the page itself promotes sovereignty and storytelling while challenging

accepted narratives of the Anthropocene and imposing a new notion of the Anthropocene for Indigenous peoples.

After centuries of suppression of Indigenous knowledge, language, and culture, through mass genocide, forced removal, devastation of homelands, boarding schools, and continued discrimination, Indigenous peoples and lands have survived many catastrophes. It is crucial to look at how both human and nonhuman have survived in order to build reciprocal Indigenous futures devoid of colonial epistemologies. As one example of this recognition of the ties between human and nonhuman, Robin Wall Kimmerer recognizes lichens as “some of the Earth’s oldest beings . . . born from reciprocity” (275). Kimmerer writes:

These ancients carry teachings in the same ways that they live. They remind us of the enduring power that arises from mutualism, from the sharing of the gifts carried by each species. Balanced reciprocity has enabled them to flourish under the most stressful of conditions. Their success is measured not by consumption and growth, but by graceful longevity and simplicity, by persistence while the world changed around them. It is changing now. (275)

As Kimmerer listens to lichens and communicates their invaluable lessons, Foerster looks to nonhumans and Indigenous Anthropocene ghosts to inform humans how the world is changing and how to translate catastrophe into healing. This healing preserves homelands, forms futures, and ultimately begins to restore balance.

Chapter 2

Young Adult Indigenous Speculative Fiction: Interspecies World-Building through Catastrophe in Cherie Dimaline's *The Marrow Thieves*

While Jennifer Foerster's poetry seeks to restore and imagine Creek homelands and a reciprocal human-nonhuman balance, Métis novelist Cherie Dimaline conjures an interspecies community in her speculative fiction Young Adult (YA) novel *The Marrow Thieves*. *The Marrow Thieves* tracks an intertribal group of young adult and elder survivors of dystopic Canada. Frenchie (Métis) is the young teenage protagonist whose mother, father, and brother have all been captured by "Recruiters" who hunt Indigenous people for their marrow. Miigwans, Miig, is the Anishinaabe leader of the group that Frenchie joins. Miig is a beautiful storyteller, and he shares traditional creation stories as well as new creation stories of how the world came to its current state. Miig explains that, after rampant disease and cities falling into ocean, sadness caused a lack of dreams in the majority of the population. Only Indigenous peoples were still able to dream.

The Marrow Thieves is a clear example of Indigenous futurisms since the setting is in the future and the narrative centers around an intertribal community working to survive and carry on their traditions. This novel is unique, however, because it is written for young adults and places young protagonists in difficult and traumatizing situations. It also gives a voice and focus to the natural world and its agency in the future, especially in reaction to centuries of environmental destruction wreaked by settler and extractive colonialism. Although world-building is traditionally theorized in terms of creating fictional and fantastical worlds, this novel imagines how Indigenous communities can thrive in the future by examining the lasting devastations of colonialism, re-learning and passing on Indigenous knowledge, and recognizing that both human and nonhuman world-building are crucial. Further, her work suggests interspecies world-building

as the ultimate goal for Indigenous cultures in continuing to thrive, especially after environmental disaster and catastrophe.

Some of the tenets of human world-building in the novel include sharing story, reviving traditions, coping with trauma, dismantling colonial violence, and developing interpersonal connections. Nonhuman and interspecies world-building entail disregarding human exceptionalism, building kinship among animals, the natural world, and humans, along with recognizing and working *with* the power and agency of the natural world rather than *against* it. Grace Dillon argues that “Native apocalyptic storytelling . . . shows the ruptures, the scars, and the trauma in its effort ultimately to provide healing” (9). The storytelling in *The Marrow Thieves* reveals the legacies of trauma and struggle for Indigenous peoples in the past and the future. The power of story within the novel also reflects that an interspecies world-building and multispecies kinship serve to heal trauma and build new communities. In the following chapter, I will cover the necessity of Indigenous YA speculative futures for young readers, how human, nonhuman, and interspecies world-building function in the novel, and why a multispecies kinship like the kinships presented in the novel paves the way for Indigenous futures.

Indigenous Speculative Fiction

Indigenous science fiction (sf) is a unique branch of speculative and science fiction and one genre of interest in the movement of Indigenous futurisms. Palyku (Australian Aboriginal) YA novelist Ambelin Kwaymullina writes, “We had no fractured stories, until the colonisers arrived, bringing with them tales that divided people from people and people from the earth. Indigenous peoples learned to navigate these stories too; we had to if we wanted to survive.” Kwaymullina’s statement serves as a useful reminder that colonization was a catastrophic time for Indigenous peoples and their environments. The notion, then, of catastrophic stories

originates from colonial powers destroying their own communities and environments as well as from the lived experiences of Indigenous peoples under colonial regimes. Kwaymullina cogently argues that colonizers' fractured relationships with the earth correlates with destruction and divisiveness that then permeates to colonial human interactions. The two-fold critique of colonialism in this passage is imperative to my analysis of human and nonhuman world-building in *The Marrow Thieves* after centuries of colonial violence.

Many scholars note that Indigenous sf presents two distinct opportunities: to represent and critique colonialism and to celebrate Indigenous survival and resilience. Roslyn Weaver argues that "writers can use apocalyptic fiction to critique Eurocentric political and historical systems and reveal an alternative history" (101). Similarly, Stina Atteberry argues that "Indigenous science fiction often extrapolates the horrifying conditions of ongoing colonial abuse into darkly futuristic settings, exploring possibilities for adaptation and survivance in an apocalyptic world" (95). Atteberry's argument also demonstrates the complexity of time in Indigenous sf, because these works of fiction simultaneously replicate strategies of survival from past Indigenous apocalyptic periods, while they also anticipate future strategies for survival from contemporary contexts. Atteberry uses Gerald Vizenor's term "survivance" which Vizenor defines as a "sense of narrative resistance to absence, literary tragedy, nihilism, and victimry. Native survivance is an active sense of presence over historical absence, the dominance of cultural simulations, and manifest manners. Native survivance is a continuance of stories" (1). Beyond sheer survival, cultural continuance is crucial for Indigenous futures.

The focus on survivance and the power of Indigenous knowledge to see peoples through their most difficult pasts, presents, and futures is what makes Indigenous science and speculative fiction unique and important. David Higgins writes that "one of the most striking aspects of

Indigenous speculative fictions is a consistent refusal to sanctify victimry” (53). Higgins’ observation also connects to Vizenor’s resistance to victimry in terms of survivance. Indigenous sf protagonists are strong and resilient. They “narrate themselves out of catastrophe and into the potentiality of healing solutions” (Scott 76). Many of the characters in *The Marrow Thieves*, young and old, take control over their own stories and lives and share their various moments of survivance in a post-apocalyptic world. Survival, continuance, and healing are three strong pillars of Indigenous futures, especially for a young audience of readers to take away.

Indigenous YA Futures: Human World-Building

I begin with human world-building not because human world-building is the most important kind of world-building, but because it is often studied and more readily understood than nonhuman and interspecies world-building. Human world-building will serve as the base layer for my discussion of world-building in this chapter. Pivoting from Indigenous sf to YA literature—and Indigenous sf YA literature specifically—allows readers to analyze how the characters in *The Marrow Thieves* function and build their human community in this genre. Tracy Baxley and Genyne Boston argue that “YA literature reflecting the experiences, culture, and history of people of color continues to be represented in limited facets of the publishing arena” (4). Representation for Indigenous youth in fiction is not any more widespread than representation for Indigenous adults.

Some key themes in YA fiction across the board include sexuality and puberty, trauma and mental illness, and development of complex interpersonal relationships. For Indigenous YA fiction specifically, there is a more specific focus on intergenerational traumas, colonialism, and a return to or adaptation of tradition. In regards to Indigenous futurist YA fiction, Lynette James writes, “These fictions question received ideas of agency, gender, and ethnicity, uses of violence

and technology, and even the meaning of survival and triumph, while extending more nuanced concepts of tradition, community, scientific exploration, environmental and social consciousness, power, and responsibility” (152). Therefore, some common topics and themes of mainstream YA are present, but they are complicated through an intersectional and culturally-specific lens.

Ambelin Kwaymullina writes:

The world of the young is a place that abounds with infinite possibilities and infinite terrors. Every horror that can be visited on the grown ups of this world exists too in the lives of the young, only they must cope with their realities with less experience and less resources. And the stories that shape and inspire and comfort the diverse children and teenagers of this world are not the stories they’ll read when they’re all grown up. It’s the stories that speak to who they are now. That is why it is so important to ensure not only that the young have access to stories, but that at least some of those stories are written by and about someone like them.

Here, Kwaymullina explains the very mature themes that seep into Indigenous YA literature and stresses the importance of giving children and young adults examples of protagonists with varying fictional life experiences in order to represent them and to also help them navigate their own worlds. Kwaymullina does have one rule for writing about these difficult topics, though, for young adults. She states, “I am often asked if there are any limits on what I would write for the young. I accept at least one limit, and it is this: I will never tell a story without hope”

(Kwaymullina). Messages of hope and healing, even through catastrophe, are crucial elements of Indigenous sf literature, especially for young Indigenous audiences.

Similarly, in an interview, Cherie Dimaline stated, “I can’t imagine being a teen today. On the one hand, they are faced with full exposure, immediate judgment . . . On the other hand,

they live in tumultuous times where our governments are unbalanced, the earth is starting to react to pollution and corruption, and critical decisions that will directly impact their futures are playing out right in front of them” (Diaz). Dimaline also speaks to the importance of Indigenous representation in literature: “I also really needed Indigenous youth to see themselves in the future, and not just holding on by the skin of their teeth kind of surviving, but being heroes and leaders. And I wanted all youth to be collectively drawn to the conclusion that they would never let something as horrible as residential schools (which existed in Canada until 1996) ever happen again” (Diaz). Dimaline does not just want Indigenous youth to have hope, she wants them to see themselves in the future enacting social justice and fighting for their communities.

Indigenous authors are always writing to multiple audiences. The most important audience is Indigenous readers, but non-Indigenous readers can also learn how to become better allies by reading this literature. Mandy Suhr-Sytsma argues that Jeanette Armstrong’s YA novel *Slash* is one example of an Indigenous YA novel that “teaches young non-Native readers how to develop their voices by questioning colonialist perspectives and by listening to Indigenous voices that have too often been silenced” (37). While *The Marrow Thieves* certainly has an insider audience in mind, all audiences, young adult and adult and Indigenous and non-Indigenous readers, stand to learn important messages about the past and present, but also about how to proceed as activists and allies in the future.

The Marrow Thieves follows an intertribal group in post-apocalyptic Canada. Frenchie is the Métis teenage protagonist who joins Anishinaabe Miigwans’ (Miig) group. All of the members of Miig’s group tell their own “creation stories” that they share with one another throughout the novel. These stories include pre-apocalypse and post-apocalypse life. They bond and band together to survive and avoid the Recruiters who are trying to take them away to

experiment with and study them. Lynette James writes that “in many YA dystopia stories protagonists have lost or been permanently separated from their families and any people not within their age group beyond enemy representatives of totalitarian regimes” (167). Separating children from elders was also a tactic used to prevent traditional knowledge and Indigenous languages in United States and Canadian boarding and residential schools. Each character in *The Marrow Thieves* has their own tale of loss or separation from family and community. These are called their “coming-to stories” or “creation stories” in the novel. Frenchie starts off alone with his brother, but when he joins Miig’s group, there are elders. Therefore, hope then exists for knowledge to transfer across generations. The group must also be skeptical and careful of other Indigenous characters and groups because some are selling out Indigenous people to the Recruiters for money. Wab, a young woman in Miig’s group, states, “There was good money in snitching on Indians” (Dimaline 81). This monetary gain for survival, even for turning in a fellow Indigenous person, is a difficult thing with which to contend.

Despite the fear of the government and of other Indigenous communities, Frenchie’s community forms their own family. Frenchie’s group builds trust and community with one another as they reveal their histories and stories, some extremely traumatic and tragic. Miig explains why only Indigenous peoples were still able to dream. Miig tells his group, “Dreams get caught in the webs woven in your bones. That’s where they live, in that marrow there” (18). The ability to dream exists within the body and is engrained on a deep cellular level. Miig’s stories take the characters to the past, but they also propel this group into the future. All of the characters build their present and future world by sharing their stories and carrying on the oral tradition. Frenchie states, “We needed to remember Story. It was [Miig’s] job to set the memory in perpetuity” (Dimaline 25). Dimaline capitalizes “Story” to demonstrate its power and

function, not just as something one might ephemerally share. Stories take people to the past and into the future. Stories create.

Wab's coming-to or creation story is one of the most powerful stories in the novel. Wab is a beautiful and strong young female character. Frenchie describes Wab as strikingly beautiful, intimidating, and "practically a woman" at eighteen years old (Dimaline 21). Frenchie and the other young characters desire her, respect her, but also fear her because of a "vicious keloid slash that split her face nearly in two" and the unknown story behind it (Dimaline 21). Every character has suffered unspeakable trauma before and/or during the apocalypse, but Frenchie states that Wab's trauma "was less defined, messier somehow, and therefore more dangerous" (Dimaline 77). Frenchie suggests that Indigenous women's trauma is extremely complex. Paula Gunn Allen writes that Indigenous women's "struggles are on two fronts: physical survival and cultural survival. For women this means fighting alcoholism and drug abuse . . . rape, incest, battering by Indian men . . ." (191). Although we see the struggle for both physical and cultural survival, Wab's story is one of sheer physical survival at first.

When Wab shares her story with her community, they begin to understand and honor her trauma and survival. They learn that Wab is an athletic runner, and she ran supplies and facilitated trade for people who lived near her for a year after the environmental catastrophe began in order to feed her mom and herself. One day, while she was making a run, she was unknowingly traded by an Indigenous man for a pack of danishes. She was captured and gang-raped for two days. At first, she fought and struggled against the group of men. Wab states, "Then he was pulling off my pants. Then I stopped feeling all together" (Dimaline 85). She describes having to disassociate from her bodily pain in order to survive. Lynette James argues that "teenage Indigenous futurist heroines pay attention to their bodies, yes, but in the same way

and for the same reason they attend to their minds and spirits: they must know their limits and needs in order to fulfill community and personal responsibilities” (162). James’ passage describes puberty and development of sexuality, but it also pertains to physical and embodied traumas. Wab’s body as runner reflects strength and endurance, but she also listens to her body during her rape as she shuts down her mental terror and physical pain in order to survive. The scar across her face is a physical reminder of her brutal assault, but it is also a symbol of her survival. Wab’s story is also representative of the horrific number of Indigenous women who are trafficked or face violence within and outside of their own communities. Wab’s story may come across as brutal for young readers, but she ultimately escapes, survives, and finds a place of belonging.

Storytelling is one way that Miig’s intertribal group builds community and fellowship, but it also educates the younger characters like Frenchie about the history of First Nations peoples in Canada. Miig shares the story of first contact with white settlers. He tells the group, “We lost a lot. Mostly because we got sick with new germs. We almost lost our languages” (Dimaline 23). As Paula Gunn Allen argues, there is always more than one form of survival at risk with colonization and violence. Miig articulates how Indigenous peoples struggled to survive from widespread disease and epistemic violence that threatened the continuance of culture and language. In the end, Miig states that his people, Anishinaabe people, “rebuilt, relearned, regrouped” (Dimaline 24). This also draws a parallel to Miigs’ current community as well, rebuilding after another apocalypse. Miig states, “We’ve survived this before. We will survive it again” (Dimaline 33).

Miig also narrates the events that occur after the environmental apocalypse that pre-dates the novel: “At first, people turned to Indigenous people the way the New Agers had” (Dimaline

88). But then Indigenous peoples were moved off their land for government use and ads calling for “Indigenous bloodlines” for “medical trials” began to appear as the government tried to “siphon dreams” out of Indigenous peoples’ bones (Dimaline 89). The old boarding schools become a space of recycled and intergenerational trauma as they are utilized once again to house captured Indigenous peoples against their will. Miig shares that these buildings “were based on the old residential school system they used to try to break our people to being with, way back” (Dimaline 5). Again, Miig highlights the connections of government force capturing Indigenous peoples from centuries ago to their current situation. The current and past catastrophes intertwine.

The old residential schools are used for medical experimentation and torture. When Indigenous people are “recruited” in the novel, they are taken to old residential schools. This government-chosen term of “recruiting” in the novel is a careful choice of language to avoid scaring Indigenous peoples off in hopes of having them volunteer themselves for a trade-off of shelter, even though they are to be experimented with and killed. It also represents the colonial history of masking violence under the façade of assimilating Indigenous peoples when the proper vocabulary that represented the reality of the situation was *committing genocide*. Frenchie describes the Recruiters’ appearance. They wear “high-waisted navy shorts, gym socks with red striped pulled up to their knees above low, mesh-sided sneakers” (Dimaline 4). Their shirts read, “Government of Canada: Department of Oneirology” (Dimaline 4). These uniforms reflect a militant and mobile group of men whose job and motivation is to capture any remaining Indigenous peoples for state use. Frenchie associates these images with his parents and brother being taken and often has nightmares of that moment (Dimaline 39). This Department of Dreams

(oneirology meaning study of dreams) haunts Frenchie's dreams. One thing is certain about where the Recruiters take captured peoples: "Indians are harvested" (Dimaline 143).

Scenes inside these schools troublingly mirror previous holocausts as Recruiters give each captured person a number and label their age and tribe like "67541B, 23 year old male, Odawa-Miqmaq" and "67781F, 15 year old male, Inuit" (Dimaline 144). Minerva, the wise elder of Frenchie's group is captured and described as having her hair cut, skin shaved, and being hooked up to an electric conductor (Dimaline 171). The tattoos and numbering mimic the Jewish Holocaust and the Reservation and Reserve eras in the United States and Canada that began the issuing of numbered Indian Status cards and CDIB cards. Minerva is tortured and experimented with. Stina Atteberry writes about Canadian and U.S. boarding schools in her analysis of the Syfy network television series *Helix*. Atteberry writes that "biomedical experimentation served as a way of assimilating Indigenous children into western culture, mirroring the cultural genocide of the Boarding School program in Canada and the US" (102). There is a clear link between medical experimentation and residential schools in *The Marrow Thieves* as well. Further, she argues that "importance placed on experimentation as a national project in Canada and the US" expresses "the metaphor of the reservation as a natural laboratory" (Atteberry 102). Colonial government systems have always devalued and defiled Indigenous bodies, and the desire to maintain control after the catastrophe leads the Canadian government to capture and experiment with Indigenous peoples whose ancestors have already survived the catastrophe of colonization and all of its horrors.

Minerva is a wise elder who is part of Miig's group, and she embodies knowledge, language, story, and song. She uses these tools to help her destroy one of the schools. When she is captured, "Minerva hummed and drummed out an old song on her flannel thighs throughout it

all. But the wires were fastened to her own neural connectors, and the probes reached into the heartbeat and instinct, that's when she opened her mouth. That's when she called on her blood memory, her teachings, her ancestors. That's when she brought the whole thing down" (Dimaline 172). Her powerful song tears the residential school down that has caused trauma for so many generations. Her body, "blood memory," and song are able to help her escape this incident of torture. Although this scene is one of destruction, it is also one of creating and building. Her present community, her ancestors, and the powerful songs of her tribe that all manifest in the present apocalypse and help destroy one of the facilities torturing Indigenous peoples. Later, Frenchie and the group try to secure her escape when she is being transported to a new facility. However, she is shot and killed. Although she dies, she has already passed on an abundance of her knowledge to the young people in Frenchie's cohort and was able to place one more powerful song into the world. She teaches Frenchie's friend and love interest, Rose, some Anishinaabe language and shares many traditional stories with the group before she is killed.

Physical survival and cultural survival are important components of world-continuing and world-building, but human world-building also entails navigating trauma on both communal and individual levels. As the protagonist of the novel, Frenchie battles his own traumas. When he first meets Miig's group, he shares, "I was embarrassed to be so broken in front of all these new Indians" (Dimaline 17). He witnesses their resilience and feels ashamed of his own grief of being separated from his family and not knowing if they are alive or not. The most difficult moment Frenchie faces, though, is killing a man. Frenchie shoots Travis, a man who killed the young girl RiRi who was part of his community. Frenchie narrates, "I pulled the trigger and the wind stopped blowing" (Dimaline 137). The world around him seems to pause in this pivotal moment. After he kills Travis, even though he was avenging RiRi and preventing Travis from killing any

other community members, Frenchie is traumatized. Frenchie states, “Something had changed since I’d fired the gun, since I’d killed Travis. It was like a color had ceased to exist and now the world seemed dull” (Dimaline 139). Frenchie struggles to return to his normal sense of self and cannot experience the world in the same way. He feels guilty, depressed, and forever changed after taking a life. He states, “I wasn’t sure I even wanted to run anymore. Maybe I could just sit and wait for the Recruiters to pick me up. Maybe I could use the bullet I had in my gun to just go away” (Dimaline 140). Frenchie’s thoughts of suicide are not unique to sf or Indigenous sf novels. YA novels sometimes include characters struggling with trauma and mental illness. Frenchie’s suicidal ideation after killing a man in a catastrophic world where he is being hunted solely for being Indigenous certainly raises the stakes, but suicide is not something young readers are not all together unfamiliar with.

Kia Richmond writes about mental illness and trauma in YA novels. One of the novels she writes about features a protagonist who “does not tell anyone about [her] sexual assault and receives no treatment for her subsequent PTSD symptoms during the course of the novel” (115). Therefore, young “readers learn what kind of treatment or help the character receives (if any) and how that affect that person and the outcome of the book” (Richmond 7). Young readers can learn about untreated and treated mental illness and trauma by reading. In *The Marrow Thieves*, young readers are exposed to a variety of traumas including rape, suicidal ideation, torture, abduction, and intergenerational historical trauma. Frenchie struggles to deal with taking someone’s life and the impact that his actions have on his mental health afterward. Miig, however, notices that Frenchie is struggling and shares a similar experience. Miig tells Frenchie that he didn’t want to live anymore after his husband Isaac was captured, but he found a community to help him survive and heal. The characters in *The Marrow Thieves* do not exist in a world where they can

seek professional psychological or medical help for their traumas, but they do share their stories and fathom their situations together which may provide some catharsis and healing. Following Richmond's logic, though, *The Marrow Thieves* also shows young readers the toll of untreated trauma and mental illness. This is not uncommon to Indigenous communities even outside of an apocalypse. Indigenous communities, especially reservation and rural communities, often lack access to mental health resources. *Mental Health America* reports that "Access to mental health services is severely limited by the rural, isolated location of many Native/Indigenous communities" and that "access is limited because most clinics and hospitals of the Indian Health Service are located on reservations, yet the majority of Native/Indigenous people in America live outside of tribal areas." *The Marrow Thieves* shows young readers that, if nothing else, speaking to others about your struggles can be a good start to finding help and healing.

Just as easily as trauma can both alienate and bring communities together, so too, can love and maturation. The threads of love, romance, and sexual maturation are important to human world-building. These universal themes draw young readers and adhere to traditional conventions of YA fiction, but these themes also open up new worlds for young adults through the introduction of life experiences inevitable for teens and adolescents to eventually encounter. Frenchie's romance with Rose is another stronghold of building bonds through dystopia and portraying complex and sometimes bittersweet transitions from adolescence to adulthood. Frenchie often cuddles with Rose at night. He narrates his intimacy and arousal at being close to her: "It's like the shape of her body heat fit right into me and I couldn't ignore her for long" (Dimaline 37). Frenchie and Rose experience their first sexual encounters in the novel, just as teens and young adults would outside of a catastrophic setting. In terms of puberty and the sexual maturation, Eric Tribunella notes that "it is precisely the child's experience of his or her body

and its development. . . that largely accounts for the frequent invocation of loss in children's and young adult's literature" (131). There is always a sense of loss of childhood with sexual/physical development and changing understandings of one's own body.

For Frenchie and the other young characters, the loss of childhood occurred at the turn of environmental catastrophe when they began to focus on basic survival on a daily basis. But, on top of this, the characters must also face changes like puberty that would occur pre-catastrophe and these experiences present different challenges. For the young women especially, these challenges include worrying about menstruation products, creative or natural birth control tactics, birthing tactics, and seeking out knowledge from female elders. Overall, some of the romantic relationships in the novel, including Miig's being reunited with his husband Isaac, create a sense of hope. Frenchie's budding romance with Rose provides him a sense of comfort. Frenchie's father tells him that "babies are the most important thing we have to move ahead" (Dimaline 182). Reproducing is quite literally one of the most important ways to build and continue human worlds through catastrophe, and Frenchie's father speaks with knowledge and wisdom of his ancestors before him who carried on and created new life through colonization.

One of the last lines of the novel reads: "As long as there are dreamers left, there will never be want for dream" (Dimaline 231). This hopeful message at the end of the novel follows Kwaymullina's earlier quotation about never writing a YA novel without the message of hope for young readers. Cherie Dimaline states,

In Indigenous communities, we are seeing more and more youth not only getting the highest levels of education in the school system, but who are returning to ceremonies, learning their languages, and challenging the status quo. All youth are sacrificing their

carefree years to learn, to build, to take action. They are learning hard histories that their predecessors buried. And they are running out in front to take the lead. (Diaz)

The Marrow Thieves demonstrates a return to ceremony, language, and culture even through the most challenging times, and the young protagonists build a new world inspired by the survival and knowledge of their ancestors.

Nonhuman and Interspecies World-Building

Mandy Suhr-Sytsma also argues that the YA novel *Slash* enacts the concept of “collaborative sovereignty” (46). *The Marrow Thieves* creates a collaborative sovereignty not just among humans, but with the environment and nonhumans as well. Indigenous futurisms in YA literature hold certain themes in common, like sovereignty and survivance, but *The Marrow Thieves* specifically interrogates how a seemingly mismatched group of Indigenous characters are able to interact with one another and with nonhumans after an environmental catastrophe. Although the novel is narrated from human character perspectives, the nonhuman world is represented as having its own agency and language. The struggle with recognizing nonhuman agency in literature is usually that the mode of narration creates anthropocentric superiority and descriptions of the nonhuman world. And although the novel is narrated from Frenchie’s perspective, it is possible to trace the interspecies world-building that occurs. Thom Van Dooren argues, “Our worlds are not preexisting, static entities. They are becomings that must be put together—from the inside—by, through, as the embodied imaginings, presences, and intra-actions of innumerable beings and forces” (8). Indigenous sf novels speak to these becomings and the new worlds that are created by humans and nonhumans through community and interspecies building. In *The Marrow Thieves*, both Indigenous and non-Indigenous peoples struggle to work against (and eventually learn to work with) the agential natural world that takes

over after catastrophe. Frenchie and his community first feel that they are working against the environment and all of its expressed agency in many ways, but they then figure out how to achieve balance and community with nonhumans.

The novel's focus on environmental catastrophe and rapid regrowth lend to a mention of the Anthropocene. As I established in Chapter 1, many disagree on a start date to the Anthropocene, but Indigenous Anthropocenes began at first contact. Dimaline's novel is certainly an example of Indigenous futurisms, but within sf and apocalyptic fiction, *The Marrow Thieves* could be also considered an example of Anthropocene fiction because it examines how human impact on the environment leads to a collapse and catastrophe, but also how the natural world reacts and rebounds after the destruction. Adam Trexler notes that the term "Anthropocene has appeared in two hundred peer reviewed articles" (1). Studying the Anthropocene is certainly an important and popular topic right now, but Trexler argues that literature and the humanities may add something to the conversation that scientific articles are not able to. Trexler argues, "Anthropocene fiction addresses the historical tension between the existence of catastrophic global warming and the failed obligation to act" (9). Fiction, in other words, may explore human action and inaction and ethics in terms of the Anthropocene in ways that other studies do not. Further, Trexler writes that "fiction offered a medium to explain, predict, implore, and lament" (9). For Indigenous Anthropocene fiction specifically, writers and readers also have the opportunity to explore the colonial legacy of cultural and environmental genocide. Thom Van Doreen writes, "The Anthropocene isn't located in any one place; it doesn't 'take place' here, or there, any more than anywhere else" (115). Therefore, a wide range of Anthropocene stories are necessary to document and predict experiences of the Anthropocene and the futures it creates.

Indigenous Anthropocene fiction is capable of story-ing the Anthropocene through the lens of interspecies world-building. In his pivotal text *The Wake of Crows*, Thom Van Dooren theorizes multispecies ethics. Van Dooren writes that “community is frequently thought about as either exclusively human . . . or excluding humans” (32). However, in order to understand Indigenous epistemologies and Anthropocenes, we must explore both human and nonhuman worlds and investigate their interactions. Adeline Johns-Putra argues that “postcolonial ecocriticism has identified how the project of imperialism and the ideology of racism on which it depends have facilitated the domination of both racial and nonhuman others in the name of conquest and civilization” (32). Indigenous Anthropocene fiction as a point of postcolonial ecocriticism can examine shared oppression between humans and nonhumans along with showing readers (and young readers, in this case) that multispecies world-building provides for stronger futures.

In *The Marrow Thieves*, the human characters have a hard time reforming to the powerful wildlife and natural forces that evolve and re-grow after the environmental catastrophe. Johns-Putra argues that “future human and non-human beings may be ‘strange strangers,’ which is term that Timothy Morton coined to describe the “unknowability of all objects” (33). Johns-Putra contends that humans and nonhumans will face even greater estrangement in future worlds. In the novel, the reader learns that before the environmental catastrophe, “the Great Lakes were polluted to muck” (Dimaline 24). Miig also states, “After the rains started and the lands shifted so that some cities fell right into the oceans, people had to move around. Diseases spread like crazy. With all this sickness and movement and death, people got sad. One of the ways sadness came out was when they slept. They stopped being able to dream” (Dimaline 29). The human destruction of the environment displaces peoples as animals were once displaced due to human

development. Disease spreads, and the environment's reaction to millennia of human mistreatment creates physical and psychological impacts for humans. Thom Van Dooren argues that the natural world is a "watching, not passive background" (2). I add that it is also an active and reactive foreground in the case of *The Marrow Thieves*. The novel demonstrates this idea and communicates that even before the massive environmental devastation, the nonhuman world was an active agent that greatly influenced human life.

Donna Haraway's concepts of double death, double birth, and the Disappeared are extremely useful in understanding how the current world in the novel came to be. Double death is "the surplus killing of ongoingness, the wanton surplus extinction of kinds, of whole patterns of living and dying on earth, of genocides across human and other than human groups" (Haraway 69). Dominant culture commits mass genocide that impacts both humans and nonhumans. Haraway calls the victims and survivors of genocide "the Disappeared," and this group includes "human resisters to criminal nation states, the imprisoned, missing generations of Indigenous and other oppressed people and peoples" (73). During and after this erasure, a phenomenon called "Double birth" occurs. Double birth is the "perversion of birthing, industry, capitalism" and also "forced life for economist value production" (Haraway 69-70). So, industries birth economic possibilities and surplus, and life is manipulated to gain profit. These processes of double death and double birth often occur simultaneously, but the Disappeared are not truly disappeared. Haraway writes, "Among the nonhumans, the Disappeared are as fiercely absent and hauntingly demanding" (78). Systems like colonialism often dehumanize certain groups of peoples, like Indigenous peoples and people of color; therefore, Haraway recognizes them in this group of nonhumans that those in power wish to disappear. Haraway's grouping of nonhumans is not intended to suggest her view of Indigenous peoples as dehumanized, but merely to conjoin those

oppressed by greedy perpetrators of violence. Dominant culture works to dehumanize and oppress Indigenous people, and all people of color, in alignment with mistreatment of the natural world. Haraway contends that nonhuman absence is actually very noteworthy and striking, and injustices committed to Indigenous peoples, nonhuman animals, and the environment critically intersect.

Women of color, and Indigenous women in particular, have long embodied environmental injustice and racism. Johns-Putra writes that “women disproportionately bear the consequences of . . . [ecological] impacts within their own bodies (dioxin residues in breast milk, failed pregnancies)” (86). Reproductive issues are just one example. In the introduction to their book *Making Kin Not Population*, Adele Clark and Donna Haraway state their intersectional purpose for the text: “We seek to bring feminism, reproductive justice, environmentalism and environmental justice together while *simultaneously disengaging* from ongoing colonizing frames of knowledge and practices” (2). This statement cogently demonstrates the connections among humans (especially women), nonhumans, and the environment.

In the novel, Wab represents a great responsibility to the environment while also conveying her profound traditional knowledge. She teaches the young men like Frenchie to hunt. Frenchie reflects on Wab’s labor as related to nonhumans/nonhuman animals:

As the woman of the group, she was in charge of the important things. Even though she’d hunted that day, she decided to take care of things herself. Wab gathered her long bleached hair into a ponytail, looked us over once with her small, dark eyes, and then set about skinning the animals on a flat rock with her beloved blade. She liked this solitary work, her fingers catching and releasing, pulling and knotting in old rhythms, especially after having to mentor the Hunters. (Dimaline 37)

Wab possesses a lot of responsibility as a kind of mediator between the elders like Miig and Minerva and the young characters like Frenchie even though she is only eighteen. She enacts and thus models traditional knowledge regarding hunting, skinning, and foraging for food in the natural world. The description of her hunting and skinning also shows how she takes her responsibility to the nonhuman world, not just to her human community, seriously. Her ritual of skinning the animals enacts “old rhythms,” and she takes great care to respectfully prepare animals for human use and sustenance. Robin Wall Kimmerer writes that “cultures of gratitude must also be cultures of reciprocity” (115). Further, Kimmerer writes, “If an animal gives its life to feed me, I am in turn bound to support its life. If I receive a stream’s gift of pure water, then I am responsible for returning a gift in kind” (115). Wab practices traditional ecological wisdom through the way she interacts with nonhumans, especially when she must take something from the nonhuman world. Wab is a powerful heroine in the novel who suffers greatly, but fiercely survives, protects, and educates others.

All of the characters are not as equipped to deal with the chaos of the environmental catastrophe as Wab is, though. Miig shares how the world came to exist in its current frantic state, a contemporary kind of creation story. He states that “a melting North meant the water levels rose and the weather changed. . . And all those pipelines in the ground? They snapped like icicles and spewed bile over forests, into lakes, drowning whole reserves and towns” (Dimaline 87). At first, there is a purging of manmade systems like pipelines, making human neighborhoods and communities unlivable and even killing people. The water and weather cycles shift. Miig shares, “The Melt put most of the northlands under water, and the people moved south or onto some of the thousands of tiny islands that popped up out of the Melt’s wake across the top of our lands” (Dimaline 25). As a result, Frenchie states, “. . . the world had gone

mad with lush and green, throwing vines over old electrical poles and belched up rotten pipelines from the ground. Animals were making their way back, but they were different. Too much pollution and too much change. Miig said if we gave them another half a century, they'd take everything back over and we would be hunted" (Dimaline 91). The verb "belched" and Miig's warning of animals taking over the world demonstrate clear agency of the natural world and its beings. The environment reacts to human pollution and mistreatment and then begins to revive and rebuild.

After the initial drastic reactions of the natural world, wildlife rules the land. Frenchie states that "the sidewalks were shot through with arterial cracks and studded with menacing weeds that had evolved to survive torrential rain and the lack of pollution. Wildlife was limited to buzzards, raccoons the size of huskies, domestic pets left to run feral, and hordes of cockroaches that had regained the ability to fly like their southern cousins" (Dimaline 8). Plants and wildlife quickly evolve and grow unchecked by lack of human pollution. Frenchie also gestures to some of the animals as facing mutations from toxins as well, though, and this is the early stage of the natural world re-growing with human toxicity still embedded in the nonhuman world. The height of weeds alone are described as "menacing." Domestic animals are now freed to live in the wild, and species quickly alter in size and even regain previously lost abilities.

Frenchie has two notable interactions with animals in the novel that at first demonstrates his lack of kinship with nonhuman animals, but then allows him to empathize with and learn to constructively cohabitate with them. Early in the novel, he encounters a pack of guinea pigs with "prehistoric teeth" and "surprisingly muscular front legs" (Dimaline 8). This species has evolved and changes like the previously mentioned raccoons and cockroaches. Frenchie describes the guinea pigs as a "nuclear family, a circle of two smaller females and about eight bucktoothed

guinea pig children” (Dimaline 8). He quickly identifies them as a family and the comparisons between his own community of protectors and young people are notable. In a moment of frustration, Frenchie yells to them, “We’re all dead anyway. I should make a shish kebab of your kids” (Dimaline 8). But his attitude shifts, and he expresses that he “didn’t mean it” (Dimaline 8). He states, “I looked at their round eyes, wet and watching but not nervous enough for the threat of human life” (Dimaline 8). Frenchie knows that animals and humans alike struggle for survival, and he demonstrates a lack of hope when he tells the guinea pigs that they all will be dead sooner or later. He projects his own fear onto them, even though animals seem to be faring better than humans. He sees the reaction to his outburst in eyes of the guinea pigs, but he also notices that they are not scared of him, or humans in general, because of the way they have adapted to decreased human presence and interactions. It is interesting that it takes this moment of eye contact for Frenchie to feel remorse for startling the family of guinea pigs. Van Dooren argues that a “multispecies ethics aims to take seriously a diversity of competing understandings, possibilities, and priorities; a diversity of worlds” (12). Frenchie’s observation of the guinea pigs in this passage allows the reader to understand how animals’ relationship with humans and the natural world has changed drastically after the catastrophe. Further, Frenchie’s early narration of nature and animals reclaiming the world and taking up more space and free range demonstrates their post-catastrophe recovery and world-building. Frenchie quickly realizes that his human world is not the only or even the dominant world functioning after the environmental catastrophe.

A similar moment in the novel occurs when Frenchie encounters a large moose. Frenchie is out hunting and a moose raises its head and sees him. He describes his first look at the moose: “It was like he was a hundred years old, like he had been through it all—the wars, the sickness,

the earthquakes, the schools—only to come to this?” (Dimaline 49). Frenchie recognizes how the moose represents a being much older than himself. The moose seems old, wise, and like a survivor who has weathered more than Frenchie could imagine. The Cree word for moose, “moswa,” translates to English as “forever,” “my forever partner” and this word “talks about forever, forever that it will provide for our people” (Wastesicoot). Moswa also indicates “forever he treats me with kindness whenever I visit him” (Wastesicoot). The “forever” translation connects to how Frenchie views this moose as an old and knowledgeable being. The meanings of partnership are important for how Frenchie and the moose interact.

Frenchie has the opportunity to try to kill the moose for food. In fact, he muses how it could feed his entire community for a week, and food is scarce. But Frenchie also knows that they will be on the run and recognizes that he’d “be leaving half, at least half, behind to rot” (Dimaline 49). Therefore, killing the moose for a quick meal is not worth sacrificing this nonhuman relative’s life. Frenchie states, “I lowered the rifle. He blinked once more, then crossed his legs, one over the other as if at the start of a curtsy, then turned back into the trees” (Dimaline 50). This description implies that the moose understood what occurred, and it curtsies in appreciation and recognition of Frenchie. Frenchie’s decision shows his respect and responsibility for the animals he cohabitates with during this apocalypse. He also enacts some of the lessons in respectable hunting and maintaining gratitude and balance that Wab taught him. He empathizes with the moose’s struggle in adapting to a quickly changing world. After this interaction, the moose visits Frenchie in his dream (Dimaline 52). This visit is a kind of communication, gift, or exchange between Frenchie and the moose since Frenchie decided to honor it by not taking its life under inappropriate circumstances. Any dreaming in this world is a gift, but the moose’s visit in Frenchie’s dream is extraordinary. As the Cree word for moose

implies, the moose is a partner to humans, and although it does not provide food for Frenchie in this instance, it provides an important lesson and gift for him.

The guinea pigs and the moose point out to Frenchie that this world is no longer dominated by humans. Donna Haraway's notion of the "chthulucene" coincides with the novel here because the "prefix 'chthulu' marks chthonic lines and webs, materialities and temporalities of the earth, with no guarantees, no pre-set directions, no human exceptionalism, and no escaping consequences" (67-68). Haraway also writes that "sympoiesis is about making-with, becoming-with rather than making through appropriation of everything as resource" (Haraway 68). Frenchie's interactions with the natural world and with animals helps him learn to "make-with" and "become-with" instead of working against or competing with the environment and animals in the post-apocalyptic world. Human exceptionalism is no longer possible, as the natural world shows humans the cost of their misuse of power and authority over the land, air, and waters. Frenchie does not just view animals as resources or food any longer, he learns to view them as companions and kin. Donna Haraway writes, "Kin must mean something other/more than entities tied by ancestry or genealogy, including population, family, and species" (92). Kinship does not solely indicate biological relation; it must take all webs into account, including ecological networks. Kimmerer writes, "Our toddlers speak of plants and animals as if they were people, extending to them self and intention and compassion—until we teach them not to" (57). For Frenchie, this occurs in reverse. He is taught that the nonhuman world does not possess personhood through colonial worldviews, and only after a massive environmental catastrophe does he learn to listen, observe, and understand that the nonhuman world is his relation. This leads me to the notion of companionship because nonhumans quickly become Frenchie's companions along with his human community. Donna Haraway defines companion species as "a

bigger and more heterogeneous category than companion animal, and not just because one must include such organic beings as rice, bees, tulips, and intestinal flora, all of whom make life for humans what it is—and vice versa” (15). Companion species are “bonded in significant otherness” (Haraway 58). This significant otherness does not have to other-ing, though, and Frenchie recognizes that human and nonhuman are companions and kin.

Frenchie takes times to reflect on and notice the forms of communication and language of the natural world. He notices that there has been an increase in precipitation since the north melted. Frenchie states, “The ground was cold and soggy. I could feel it through my boots. The earth barely had a chance to absorb the rainwater before the next deluge” (Dimaline 46). Although the natural world has taken over, it still struggles with the long-lasting effects of human-induced climate change. The earth cannot accept rain without being flooded with more. Frenchie empathizes with the land for this inundation. When he is out hunting and quiet in nature, he thinks to himself how the “world had suddenly gone mad. Poisoning your own drinking water, changing the air so much the earth shook and melted and crumbled, harvesting a race for medicine. How? How could this happen? Were they that much different from us? Would we be like then if we’d had a choice?” (Dimaline 48). This chain of questioning relays the culpability of dominant culture, a mostly white government, and their carelessness. But Frenchie wonders if Indigenous peoples had possessed the same structural power if they would have ruined the environment in the same way or if the world would exist in its current state of distress. This passage also implies that since Frenchie now recognizes how kinship and mutualism between the human and nonhuman world is the norm and tradition, colonial systems are wholly misguided in treating the nonhuman world as inferior to justify depleting it.

Living outdoors is comforting to Frenchie as he learns about his ancestors' past from Miig during story hours and he romanticizes precolonial or pre-industrial living. He states, "Out here stars were perforations revealing the bleached skeleton of the universe through a collection of tiny holes. . . . This was our medicine, these bones, and I opened up and took it all in" (Dimaline 9). Frenchie marvels at the stars and the remaining wilderness and draws in this natural medicine. Frenchie also says, "Us kids, we longed for the old-timey. We wore our hair in braids to show it. We made sweat lodges out of broken branches dug back into the earth" (Dimaline 22). Frenchie longs for a return to culture. He and the other young kids hold ceremony together in an earthen sweat lodge. He views his current situation as return to past ways of living closely with the natural world, instead of separated or sheltered from it.

In a stunning passage, Frenchie states, "I imagined spiderwebs in my bones and turned my palm towards the moon, watching the ballet of bones between my elbow and wrist twist to make it so. I saw webs clotted with dreams like fat flies. I wondered if the horses I'd ridden into this dawn were still caught in there like bugs, whinnying at the shift" (Dimaline 18). This beautifully written and thoughtful reflection pieces together the past, present, and future, Frenchie's own body and spirit and history, and the natural world with his internal being. The ending of the novel is only hopeful because the intertribal human community finds refuge and kinship with the powerful nonhuman world. Miig states, ". . . we can start healing the land. We have the knowledge . . . When we heal the land, we are healed also" (Dimaline 193). Through their return to and passing on of cultural and ecological knowledge, Frenchie's community recognizes that although they may not be the most culpable humans in causing the environmental disaster, they are responsible for healing the land, which will, in turn, heal them.

Conclusion

The Marrow Thieves does not present all negative and dystopic endings as some science fiction novels do. Miig is reunited with his husband. Frenchie is reunited with his father, Frenchie falls in love with Rose, and the community moves on travelling together through the troubling and powerful landscape. In this example of an Indigenous futurist sf novel, there is no escape from the legacy of colonial violence, but there are ways to combat and dismantle it, make new communities, and foster kinship. In *The Wake of Crows*, Van Dooren writes, “We inhabit the legacies of the past to shape possible futures. These inheritances take many forms, from genetic material and the broader landscapes and ecological communities that we are born into to the historical events, cultural traditions, and relationships we retell, reenact, and remember” (73). The characters in *The Marrow Thieves* tell stories of and reflect on the past in order to build their future with one another and with the nonhuman world. They retell their own catastrophic creation stories as nonhuman animals, and the environment speaks of human destruction and nature’s own re-building. Cherie Dimaline engages her young audience in order to encourage them to become activists and allies and fight for and shape their own futures with nonhuman worlds in mind.

Section II: Constructing Digital and Virtual Worlds

Chapter 3

Re-living Removal and Curating Historical Trauma: Virtual Reality Experiences in Blake Hausman's *Riding the Trail of Tears* and the Trail of Tears Exhibit at the Cherokee Heritage Center in Tahlequah, OK

In Chapter 2, I traced how human and nonhuman characters and agents struggled with recovering from various forms of trauma in order to build healthy futures. In this chapter, I will more closely study the impacts of experiencing and curating historical trauma related to the Cherokee Trail of Tears. In Blake Hausman's novel *Riding the Trail of Tears*, visitors to The Tsalagi Removal Exodus Point Park (TREPP) can venture into the past to experience a version of the Cherokee Trail of Tears for themselves. This theme park commodifies the experience for the mostly non-Native tourists, but also functions as a re-living of trauma for the Native and Cherokee employees who are the tour guides. Tallulah Wilson, whose grandfather developed the technology for the virtual reality experience, is the Cherokee protagonist of the novel. An IRL (In Real Life) virtual reality experience for Cherokee and non-Cherokee people alike is the Trail of Tears exhibit at the Cherokee Heritage Center in Tahlequah, OK. Visitors inhabit Cherokee pasts in order to attempt to understand and embody history. The novel as a text, the theme park in the novel, and the cultural center exhibit each curate historical trauma and the removal uniquely for different visitors and audiences.

Hausman's novel starts an important conversation about the ethics of technology involved in re-creations of and embodied experiences of traumatic histories and worlds for multiple audiences. *Riding The Trail of Tears* begs the question of how reality and virtual reality are distinguished and/or blurred. The Cherokee Heritage Center Trail of Tears exhibit is also a virtual reality experience that navigates visitors through a traumatic period in Cherokee history.

But how do these different notions of the “real” and “virtual” play out in different spaces such as amusement parks, books, and museums? Placing these genres in conversation with one another in the context of Indigenous futurisms allows readers to explore the complexities of trauma, survivance, and time, and visualize a path forward for Cherokee futures. VR of the Trail of Tears is not just about experiencing the past. It is about conjuring present and future consequences of Cherokee removal, including historical trauma symptoms and self-determination. In her book *Time Travels*, philosopher and feminist theorist Elizabeth Grosz writes, “Although there is a fundamental continuity between the past and present—the present being the culmination of the past, its latest layering—there is a discontinuity between present and future, for the future is not contained in . . . the present but erupts unexpectedly from it” (110). The future is not limited by the past or present; it can be changed and shifted quickly, ruptured, and shaped. These VR experiences reveal the interconnectedness of Cherokee trauma, survivance, and innovation through time. Various audiences receive, react to, and embody these VR experiences differently, though, and the experiences can range from educational to dangerous.

Cherokee Historical Trauma and Survivance

Maria Yellow Horse Brave Heart is the leading scholar of Native American historical trauma studies. Brave Heart defines historical trauma as “cumulative emotional and psychological wounding across generations, including the lifespan, which emanates from massive group trauma” (283). Every tribal nation experiences historical trauma uniquely and differently as colonists and the United States government inflicted multiple forms of genocide, removal, and assimilation upon tribes. Further, Natalie Avalos Cisneros defines Native American historical trauma as

A form of prolonged or chronic grief resulting from forms of genocide, such as, settler state policies of extermination, removal, and forced assimilation. Historical trauma resembles post-traumatic stress disorder (PTSD), however, it results in a psychic and spiritual wounding that persists over generations. Historical trauma responses include: psychic numbing, fixation to trauma, somatic symptoms, low self-esteem, self-destructive behavior, hypervigilance, and dissociation. (9)

Avalos Cisneros' addition of psychic and spiritual wounding across generations to the definition of historical trauma is imperative. Historical trauma penetrates the mind, body, spirit, and heart/psyche. Avalos Cisneros also writes that "children raised with one or more parents exhibiting trauma responses are more likely to develop historical trauma," and studies connect the "traumatic effects of colonization to the high rates of domestic violence, drug and alcohol abuse and depression within Indigenous American communities" (9). Health studies show that Native American alcohol use is actually lower or comparable to white people (Cunningham et al.). However, existing alcohol or substance abuse may be directly linked to trauma, as Cisneros concludes. According to the 2018 National Survey on Drug Use and Health, 10% of Native Americans have a substance use disorder and 7.1% of Native Americans have an alcohol use disorder (American Addiction Center). These symptoms of historical trauma often go untreated, largely due to lack of equal access to health and mental health resources.

One of the most obvious "massive group traumas," using Brave Heart's terminology, for the Cherokee people was the Trail of Tears. There were a series of removal crises before the Trail of Tears began in 1838, though. William McLoughlin traces four distinct removal crises. He notes the attempt at first removal crisis in 1811, but "Cherokee patriots . . . won" (McLoughlin 167). Then, "the second Cherokee removal crisis arose from the determination of

Jackson and the southeastern states to force further cessions of land from all of the Indians in the region” in 1817 after the Creek War of 1813-1814 (McLoughlin 206). In 1828, another removal crisis arose after Georgia’s resolutions of 1827 stated that Cherokee lands “belong to Georgia,” and “she must and will have them” (McLoughlin 412). The most serious removal crisis, which ultimately led to mass removal, was the 1830 Jackson Removal Bill. Andrew Jackson “prepared a removal bill for Congress that was designed to provide money for land cessions—ostensibly to ease the difficulty of removal for each tribe east of the Mississippi by providing money, in exchange for land, with which to start over in the west on new land to be assigned to them” (McLoughlin 428). To make matters worse, in 1831 the Supreme Court decision of *Cherokee Nation v. Georgia* ruled tribes in the U.S. as “domestic, dependent nations” (Conley 134). These bills and court decisions laid the groundwork for the Cherokee Trail of Tears.

Before the Trail, Cherokee people were taken to concentration camps where approximately 2,000 died (Conley 157). The first detachment of the Trail of Tears departed August 28, 1838 (Conley 155). There were thirteen detachments overall, the last one ending in March 1839 (Conley 156). The total estimated deaths before and along the Trail is 4,000 (Conley 157). Thus, the loss of life and homeland due to the Cherokee Trail of Tears has forever impacted Cherokee people.

Although historical trauma is complex and devastating, there is hope for healing. Brave Heart argues for framing “lifespan trauma in the collective, historical context, which empowers Indigenous survivors of both communal and individual trauma by reducing the sense of stigma and isolation” (283). This allows those who suffer to recognize their shared experience with others and allow them to open up about it more. Further, “developing functional support systems and returning the individual to a sacred path as defined by their particular tribal culture” can help

survivors heal (Brave Heart 284). Having open discussions and conducting research about historical trauma in Indigenous communities can help to destigmatize trauma. Brave Heart has found this most effective on group levels, but argues that “there is also a need to develop individual and family intervention” (287). Similarly, Avalos Cisneros argues for regeneration to combat historical trauma. She writes that “regeneration can be understood as a form of conscious re-traditionalism where one looks to the past, the lifeways of their peoples, and chooses to embody it in a new way in the present” (Avalos Cisneros 5). Creating new traditions based on traditional lifeways is a form of healing and a way of creating healthier Indigenous futures.

After the Trail of Tears, self-determination and survivance paved a path forward for navigating removal trauma for Cherokee people. Avalos Cisneros defines self-determination “as the right to be recognized as an autonomous nation with international status free from paternalistic intervention by a settler state” (1). Self-determination also “requires the negotiation of decolonization” (Avalos Cisneros 8). Prior to colonization, the Cherokee people “had no centralized political system,” and “each town was self-sufficient and self-governing” (McLoughlin 10). However, after removal, the Cherokee formed a principal Cherokee Nation under Chief John Ross to unify in Indian Country (Conley 159). Although a centralized government may be an adaptation of Western culture, the Cherokee nation saw a time of great achievement and cultural resilience, carrying on their cultural traditions and stories after rebuilding in what later became the state of Oklahoma. This endurance of culture directly correlates with Gerald Vizenor’s theory of survivance. Vizenor defines survivance: “The nature of survivance creates a sense of narrative resistance to absence, literary tragedy, nihilism, and victimry. Native survivance is an active sense of presence over historical absence, the dominance of cultural simulations, and manifest manners. Native survivance is a continuance of stories” (1).

Cherokee people focused on survival and cultural continuance to build a new life after removal. Although self-determination and survivance do not cancel out historical trauma, these practices work to guarantee better futures.

Virtual Reality

Defining virtual reality is important in order to understand the various ways it functions in the novel and museum exhibit. Some guiding questions for my exploration of the novel and heritage center exhibit include “What is virtual reality (VR)?” “Is memory a form of virtual reality?” and “How does trauma function virtually?” The term “virtual reality’ is appropriated from a specific human computer interface technique developed in the late 1980s” (Lovén 22). Therefore, virtual reality has always been connected to technology and computer technology specifically. Now, there are many definitions and modes of virtual reality, the most popular being a virtual reality game experience, usually enabled through placing an apparatus over your eyes and head. This is in line with the *Riding the Trail of Tears* theme park experience in Hausman’s novel. However, various other forms of virtual experience exist including reading or viewing a museum exhibit. These all employ different kinds of technology, from print books to multimodal texts. For a virtual experience of the Trail of Tears, one would experience not only the past, but could also experience and conjure present and future ramifications of removal.

VR is capable of allowing users to travel through time. Grosz writes, “The only access we have to the past is through a leap into virtuality, through a move into the past itself, seeing that the past is outside us and that we are in it” (103). In Grosz’s view, we can embody and penetrate the past, but the past cannot embody us. Further, Grosz argues that “memory is the present’s mode of access to the past. The past is preserved in time, while the memory image, one of its elements, can be selected according to present interests” (103). She argues that memory is

the vessel to navigate the past, but memory can be selective and manipulated to fit present motivations. While I do not fully agree that people and the past cannot mutually embody one another, I find Grosz's argument about memory important. Memory is complex. One can navigate memory that is not their own, memory that is ancestral, historical, and collective, whether or not that ancestry and history belongs to them. We achieve this through study and scholarship, through art, and through story-telling. Just how responsibly, ethically, and accurately that navigation through memory can be varies.

Slippage of time as related to Indigenous futurisms closely connects here. Andreas Huyssen recognizes that present memory and explorations of the past can impact that past itself. Huyssen writes that "today's empathetic interest in memory does have consequences for the past" (4). In remembering, there is always forgetting and erasure or intentional re-writing for competitive intentions. Further, Huyssen connects the past, memory, and trauma: "Surely, the prevalence of the concern with trauma must be due to the fact that trauma as psychic phenomenon is located on the threshold between remembering and forgetting, seeing and not seeing, transparency and occlusion, experience and its absence in repetition" (8). Trauma lays in wait, hides in the bones, in blood memory; it is always present, but sometimes seems benignly absent. Sometimes one may forget, but they are quickly and viscerally reminded. The past is always present for sufferers of trauma. But does it also have to exist in the future?

In the case of my study of the novel and exhibit, virtual reality, the past, and trauma are interconnected. However, this is not always the case with all VR. Svante Lovén writes that "VR technologies have primarily remained an exclusive tool developed for specified purposes in military training, medicine, architecture, and other specialised fields. Meanwhile, the computer game industry has continued to develop simulacra of physical, navigable space for a huge

market” (168). VR has often been used for focused career training in order to build futures. VR technologies used for amusement, largely through the computer or television, have only become more advanced in the 2000s. Virtual reality can also take participants to imagined, fantastical, and speculative worlds. It does not have to be tied to traumatic pasts, but can be adrenaline inducing and based on adventure. It can serve as an “addictive provider of thrills” (Lovén 117).

Aside from simple amusement, VR can also be used to accomplish educational and even fundraising goals. Bill Endres writes, “For museum studies, VR has long been of interest for increasing engagement with collections. Recently, however, through a 360- degree embodied encounter, VR is proving quite effective in cultivating empathy” (84). Endres references a VR video made for charity, which successfully raised money. VR can also be used in museums and texts to provoke empathy as well. VR has also been used for therapeutic purposes. Lovén writes that “the illusion is contained within primal reality as a temporary or permanent relief, a therapeutic tool” (117). Veterans have even used VR to treat their Post-Traumatic Stress Disorder (PTSD).

Despite the purpose of VR, there are some shared expectations for all virtual reality design and experiences. Virtual reality includes the “concepts of immersion and interactivity” from the technological to the literary domain (Ryan 2). Marie-Laure Ryan writes, “At its best, immersion can be an adventurous and invigorating experience” (11). There are three distinct senses of the virtual including “an optical one (the virtual as illusion), a scholastic one (the virtual as potentiality), and an informal technological one (the virtual as computer-mediated)” (Ryan 13). The novel and museum exhibit are both optical and scholastic because although they create an illusion of existing in the past, they also explore the potential of the future.

Some scholars connect virtual reality to the posthuman. Katherine Hayles argues that “the posthuman view thinks of the body as the original prosthesis we all learn to manipulate,” and “it can be seamlessly articulated with intelligent machines” (3). Therefore, virtual reality can easily manipulate the body. Hayles explains: “In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation” (3). The body alone does not exist as a separate entity to the simulation, it becomes (at least part of) the simulation. In *Riding the Trail of Tears* and the Trail of Tears cultural center exhibit, VR is utilized in various ways as detailed above. It is therapeutic, upsetting, thrilling, embodied, disembodied, immersive, and alienating. It just depends on whose VR experience we trace.

Riding the Trail of Tears

The Tsalagi Removal Exodus Point Park (TREPP) in the novel allows for multiple points of study of virtual reality. The tourists and tour guides experience the Trail of Tears in different ways through the design of the experience; popular culture representation of Cherokee and Indigenous history; historical study; and ancestral and historical memory. For the protagonist Tallulah Wilson, TREPP feels like home and like an alienating space at the same time. Her experience is juxtaposed with the tourists’ experience of the ride. I will analyze how the Trail of Tears virtual world in the novel is designed, how tourists— specifically Tallulah’s tour group 5709— experience it, how Tallulah is impacted, and, lastly, how the novel is a virtual experience for the reader as well.

The omniscient narrator of the novel tells the reader that “our digital universe is older than four years” (Hausman 14). Tallulah was the “sole cultural consultant” in its formation (Hausman 14). The narrator states, “We were programmed to believe that things digital could never fully enter the consciousness of things organic, that we could never exist outside the digital

world of the Trail of Tears” (Hausman 2). The introduction of the novel also describes the Nunnehi, immortals the size of humans; Little People who are the real immortals “cut from stories” (Hausman 5); and the Misfits who are larger than humans and “fit into stories that have been recorded” (Hausman 6). The narrator is one of the Little People who knows Tallulah well, if not in a voyeuristic way. We later learn more about the Misfits in the ride, and we assume that the Nunnehi exist in the ride as well. These orders of beings were designed to believe they could not exist outside the digital or virtual world, but they possess agency that the curators of the ride did not believe possible. The narrator explains how the virtual Trail of Tears is a different kind of homeland: “It’s my homeland. I’m probably more indigenous than you, and the digital earth is where I’m Indigenous” (13). Although the narrator’s identity is never exactly revealed, this passage demonstrates how the digital space can act as a new “homeland” for Indigenous peoples, but also how others may act out or play being Indigenous in terms of the “ride” in the novel. But the order of immortals and humans may also connect to Cherokee tradition, with Nunnehi and Little People existing IRL in the Cherokee world historically—and some say today.

The original virtual Trail of Tears experience, later transformed into TREPP, was created by Tallulah’s Grandpa Art in the 1980s, and it was a “big red Jeep Cherokee with television windows” (Hausman 32). After Art died, “the Museum of the Cherokee Indian inherited the intellectual property rights to his inventions” (Hausman 34). This is when the original Jeep Cherokee ride was developed into a mass tourist attraction.

The TREPP Simulation

There are many descriptions of the Trail of Tears ride throughout the novel. Overall, the ride is supposed to create a realistic experience, but it can be tailored to the audience at hand. There are different levels of the ride available based on the audience. For example, level one has

“minimal violence” and is child-friendly” (Hausman 59). Visitors can choose how much violence they want to witness, censoring raw, realistic detail if they wish. This is because the Trail of Tears experience at TREPP is greatly commercialized. Every detail of TREPP is designed with the consumer’s satisfaction in mind. Since Georgia is hot and humid for most of the year, “the air inside the TREPP is brisk and well-conditioned, even with all the additional bodies” (Hausman 36). Up until the ride starts, the experience is supposed to be pleasant and comfortable. The ride goes so far as to ensure that “everyone’s breasts and penises are slightly larger on the Trail of Tears. Anything to ensure customer satisfaction, regardless of historical inaccuracy” (Hausman 93). This passage is humorous, but demonstrates the goal of pleasing the consumer.

The ride “is a simulation, but the uniqueness of each causality loop is real. The ride operates within fixed parameters, but choices within these parameters yield somewhat random outcomes. Like life itself” (Hausman 71). Therefore, each tourist does not receive the exact same experience or narrative. Marie-Laure Ryan researches narrative as virtual reality and writes, “If there is an environment in which you can literally take your body with you into worlds of the imagination, it is the amusement park” (288). Although TREPP is based on Cherokee history, it ultimately feeds the imagination of customers to play out their own preconceptions about the Trail and exoticize the experience. Umberto Eco writes that Disneyland, as one example of a theme park, is “an allegory of consumer society” and “also a place of total passivity. Its visitors must agree to behave like robots” (48). While TREPP is also a striking representation of consumer society, it is not a place of passivity. Consumers choose how to act and respond in specific situations depicting the Trail.

Once situated inside the ride, a visor drops over each visitor and serves as “surround vision” (Hausman 74). The Chairsuit airwashes the customers’ bodies if they become soiled or need to be dried (Hausman 75). This is so the visitor can be both outside of their body, but also fully embodied in the Trail of Tears experience. The customer may experience something like an avatar in this Trail of Tears virtual reality experience. Katherine Hayles describes the avatar experience: “The user is and is not inside the screen” (27). Inside the Trail of Tears ride, the tourist is a participant and a non-participant. They can only experience a set number of possible situations, except for the glitch with Irma Rosenberg, but they can respond how they like. One customer even attempts a sexual assault, indicating that he believes his action is not real, but only being played out in an alternative reality. The lack of real-ness, therefore, makes some of the users perceive the VR experiences as amoral. There are no real-life consequences outside of the simulation.

To pivot to an Indigenous avatar experience in particular, the Mohawk artist Skawenatti opened her exhibit *Avatars Aliens Ancestors* in 2019. This exhibit features characters that inhabit Skawenatti’s works, like her machinimas. Skawennati states, “The reason I use cyberspace in the first place is because I wanted to make sure that Indigenous people were present in cyberspace, which to me is metaphor for the future” (“Understanding Skawennati”). These avatars are empowering for Indigenous peoples and help correct tropes that Indigenous peoples only “represent the past” (Skawennati). We will examine how Tallulah’s avatar experience plays out for her later in the chapter.

Tourists’ experiences

For the non-Native customers, the TREPP attraction commodifies and sometimes fetishizes Cherokee trauma. The experience could be an educational opportunity, but mainly fails

to help customers overcome their preconceived stereotypes. For them, it is about “winning” and surviving the game experience. Tallulah’s tour groups have an overall 80% survival rate, higher than the actual Trail of Tears survival rate, so she helps aid her groups’ ambitions of surviving along with trying to inform them along the way (Hausman 61). This is another point where the game deters from historical accuracy to satisfy the consumer. We have to question what not surviving the experience might mean for the consumers in terms of their levels of empathy and their understandings of the history.

The group begins their experience at the Meeting Grounds. Tallulah states the mandatory line, “You’re all in this together” (Hausman 45). She also states, “Remember that it’s not really 1838, that you’re participating in a historical interpretation, and that it will all be over soon” (Hausman 60). This script is intended to console the visitors before they begin the ride and rouse camaraderie among strangers so they might better help one another to survive. As they begin, Tallulah and the group discuss some historical context. Tour group “5709 readily agrees that Columbus did not discover America” (Hausman 65). They reflect on the past: “It’s just awful what they did back then,’ says Nell Johnson, with a tone of finality, as if it will never happen again” (Hausman 79). Although the group may be well-intentioned in agreeing that they do not agree with the false narratives of “discovery” of the Americas, they believe that that kind of atrocity exists only in the past, that genocide and attempts at erasure did not happen after first contact, and that these attempts are not still happening today.

Since TREPP is very popular not only nationally, but internationally, word of mouth and reviews have spread, and the visitors expect to meet certain characters in the game, to have stereotypes reinforced, and to be able to “play Indian.” The Wise Old Medicine Man is popular with tourists because “his program ensures consumer satisfaction” (Hausman 57). His voice is

“peppered with soothing music,” and he is a stereotypical wise elder figure with which visitors may be familiar (Hausman 58). The popularity of the Medicine Man and the experience of playing Indian in the TREPP experience closely connect. Since first contact and colonization of the Americas, colonizers tried to “define themselves by what they were not” (Deloria 3). Working solely by negative identity definitions, colonizers tried to separate themselves from Native American identities and cultures, but also enacted romanticized and appropriated their perceptions of Native American “instinct and freedom” (Deloria 3). Philip Deloria traces this history of playing Indian all the way back to the Boston Tea Party where colonists dressed up as Mohawk Indians (6). At TREPP, the non-Native visitors not only play Indian, they customize their experience of playing Indian based on how much violence and trauma they choose to subject themselves to and how much they enact themselves.

During group 5709’s experience, they come to the First Cabin to see a looted Cherokee home (Hausman 80). Shortly after, one of the visitors, Irma Rosenberg, goes missing and meets up with the Misfits, who have names like Indians Hat, Braves Hat, and Red Sox Hats. The narrator explains earlier in the novel that the Misfits are the ones in the game who simply fit into preconceived stories, but have little agency over their own stories. Since the Misfits have never interacted with a visitor who has gone outside of their loop, they think Irma is an omen that can save them from deletion (Hausman 198). They tell Irma, “We are not like your customers,” and “We can feel pain” (Hausman 285). They also state, “The pain is not the worst part,” but “the memories are worse than pain” (Hausman 286). For the Misfits in the game, reliving removal is not a simulation, it is their everyday reality. The memory they carry of those who died and suffered on the Trail of Tears is worse than the pain caused by the virtual reality simulation. This is a direct foil to how consumers like Irma experience the Trail.

Sometimes the goal to keep the customers comfortable slips away as they begin to witness the horror of the Trail. The tour groups always seem surprised when soldiers appear and force them forward: “It is the moment they remember that they paid to be abused. The step that starts the thousand miles” (Hausman 149). This masochistic and perverted experience of paying to experience some version of Cherokee historical trauma still shocks the customer at the first signs of horror, though they know they signed up for it. A virtual environment like the one depicted in this novel might be a conduit for the closest understanding of the sheer horror those forced on the Trail experienced. Svante Lovén writes that “digital technologies . . . engendered the dissolution of a series of ontological boundaries which, until then, had been fundamental to Western Weltanschauung: between biology and technology, essence and appearance, reality and simulation” (119). The tourists’ body and the simulation technology blend; they exist in a simulated reality of a historical past that itself is fleeting and ephemeral. However, there are no clear-cut distinctions, not even after they step out of the ride, as these experiences bleed over into the customers’ perceptions.

Iulian Vamanu writes about another virtual reality experience, *TimeTraveller*, a recent machinima series for which Skawenatti, the Mohawk artist referenced above, is the creator and producer (228). In *TimeTraveller*, “the project plays on a time-travel theme to imagine what Native life and heritage may look like in the future” of Mohawk people living in 2121 (Vamanu 228). This is certainly a form of Indigenous futurisms, Mohawk people being placed a hundred years forward into 2121, those who engage with the project “receive events through the eyes, ears, and mind of the Mohawk protagonist and can, thus, identify better with his point of view” (Vamanu 235). Too often with film, video game, and VR experiences, the Native American or Indigenous peoples are portrayed through the lens of white protagonists, whether they are friend

or foe. *TimeTraveller* entails a “shift from survival to empowerment model,” where the Mohawk are fully participating members (Vamanu 239). Whether the TREPP experience shifts from a survival to empowerment model is up for question. Although visitors experience a version of Cherokee history and interact with Cherokee characters inside the game (along with white soldiers), there seems to be a constant commodification and fetishization of Cherokee trauma and pain. The game also ends in Oklahoma, where the remaining survivors complete the Trail. There is little afterward about any form of continuance, other than the visitors having Tallulah, a Cherokee tour guide. Examining Tallulah Wilson’s experience with TREPP helps us answer this question of empowerment further.

Tallulah’s experience

Tallulah’s Grandpa Art created the virtual reality experience in a Jeep Cherokee with television screens and audio when she was twelve years old. She recalls the moment she first “rode” the Trail of Tears vividly: “Her stomach moves, and her intestines fill with unusual inertia” (33). The virtual reality experience is embodied, and this stomach-wrenching sickness is something that she relives constantly. The narrator further describes Tallulah’s first time on the Trail of Tears: “Tallulah remembers the smell of the moldy rust in her grandparents’ basement. She remembers her grandfather opening the passenger door of the big red Jeep Cherokee with television windows” (Hausman 145). The sensory descriptions relay how strong, how visceral, this memory is for Tallulah. Grandpa Art is described as “the renowned craftsman and cultural emissary of the Cherokee Nation, the man her own father disowned before Tallulah was born” (Hausman 145). The estranged relationship between Tallulah’s father and grandfather is explored in more detail later in the novel. Tallulah had a clear admiration for her grandpa and a difficult relationship with her father. Working for TREPP may make Tallulah feel close to her

grandfather again. The narrator alludes to Art's existence inside the ride itself when they say, "If Grandpa Art is somehow alive in here, a ghost in the machine, he must be listening closely to Tallulah's response" (Hausman 145). Grandpa Art lives on through his invention, and Tallulah may hope to connect with her family through the ride.

Tallulah is the face of TREPP. She was the cultural consultant and has been compensated well by the owners of TREPP. She receives excellent benefits and became a homeowner at twenty-seven (Hausman 15). When she steps foot into work every day she is "back home, inside the Trail of Tears" (Hausman 35). As the narrator calls the ride their homeland where they are Indigenous, the Trail of Tears experience may be home for Tallulah because of the time she has dedicated to it, the familiarity and memory of her grandfather, and/or the connection to the history of her tribe. Although Tallulah enjoys the lifestyle her job provides, experiencing the ride can be far from pleasant. This digital landscape may also be home because of the possibility of connection to ancestors and understanding and embodying their experiences, but it can—and is—for Tallulah, a constant reenactment of historical trauma. The narrator states that "Tallulah is a professional victim. She leads by example" (Hausman 172). Serving as a professional victim could be seen as undermining the survivance of Tallulah's existence, or it could be interpreted as suggesting that perpetually reliving historical trauma at the expense of contemporary reality is unhealthy. Often as Tallulah guides tour groups through the Trail, her "stomach grinds while telling her tourists that it will all be over soon/ For her, it never ends" (60). The anxiety and fear in her stomach, similar to the first time she rode the Trail in her grandpa's Jeep, recurs frequently.

While we know that VR may be used as a therapeutic experience, in this novel, it is also a traumatic experience in and of itself that extends the historical violence it re-enacts. Ashley

Barnett goes so far to argue that Tallulah is “living as a present-day mixed-blood Cherokee who has internalized the clichés of her people’s genocide” (239). While I do not agree with all of Barnett’s claims, I do argue that Tallulah may be repeating and recapitulating some stereotypes through her tour guiding and even revising her own internalized experience of her people’s history and trauma. Many customers in Tallulah’s tour group on this day do not virtually survive. In fact, she has not watched so many tourists die since tour group 3915 (Hausman 187). She questions, “Why do I feel so little for these dead and dying tourists? Of course, it’s all a simulation, but something is missing and it’s terrifying. She begins to wonder if it’s more than just her need for a vacation. She wonders if she is becoming less human” (Hausman 266). The mention of the game’s possibly dehumanizing Tallulah, whether it is desensitization to violence or acceptance of repetition, is one that seems to concern her. The outpouring of emotion to come is a direct juxtaposition to her indifference for the virtual deaths of her group.

Tallulah often dreams about her father who the reader learns was an alcoholic and died in a car accident. She has a lot of unresolved emotions regarding his death and her tumultuous relationship with him. When she thinks about her father, “she remembers the rankness of her father’s breath, the sweat trickling down his nose as he yelled” (Hausman 133). She remembers him as a violent man who was often under the influence of alcohol. This abuse of alcohol may very well be connected to historical and intergenerational trauma. When she sees a bear in the game, she speaks to it, believing it is her father, and becomes frustrated that the bear won’t respond. Tallulah states, “Is that what you’ve come to tell me? That I suck!! That I’m a poseur and a hack, a tourist bullshit artist who sold her fucking soul to Coca-Cola for my air-conditioning, who’s so fucked up she can’t even have a real vision? I can’t even have a fucking vision in a computer game filled with big fucking visions. Oh God!” (Hausman 324). Then, she

cries for the first time inside the Trail of Tears (326). She fears her father, and possibly grandfather, consider her a cultural sell-out for this commodification of their tribe's history. She is ashamed she cannot reach her loved ones who physically no longer walk the earth and that she cannot even resolve these internal conflicts through an alternate reality. Just as she releases this fear and hurt, the bear "spoke...It was her father's grunt" (Hausman 327). Tallulah "felt the bear's gentle hands on her shoulder, brushing her mangled hair away from her exhausted cheeks" (Hausman 327). The bear, representing her father, tells her "Don't blame yourself," and "I love you so much. That's why you have to let me go" (Hausman 328). He seems to imply that Tallulah should not blame herself for the ride, its consequences, and perhaps even for his death. After this interaction, she wakes by a river and then disengages from the ride. This experience, unlike experiencing all the trauma on the Trail, is actually therapeutic and healing. Although she has recurring dreams or nightmares and feels unable to interact with her father, grandfather, and other ancestors through visions outside of the game, she confronts these fears and inadequacies the day tour group 5709 visits.

After this experience ends and almost all of her customers have (digitally) died, Tallulah quits her job, cuts her hair, and realizes that she wants to move away with her boyfriend. When she cuts her hair, her "head doesn't hang so heavy anymore" (361). The novel ends with Tallulah in the shower having sex with her boyfriend. The last lines of the novel are, "Endless water, underground, moving somewhere. Maybe it all flows back to where it began. Do you know where it comes from? Do you know where it goes?" (370). The ending lines of the novel invoke the circular and cyclical nature of time. They also signal a break in a cycle of trauma. Instead of continuously living in the trauma of removal—and experiencing the side effects like her father did from dwelling in it IRL—Tallulah decides that she has had enough.

Experiencing versions of the historical past through advanced technology will never represent exact realities. The “techies” behind the scenes of the attraction in Blake Hausman’s *Riding the Trail of Tears* are able to manipulate and shape the past in any way they believe is best for their consumers. For the tour guides, and for Cherokee employees like Tallulah, the constant return to the past gives her anxiety and makes her physically ill. At the end of the novel, Tallulah disconnects from the daily trauma of re-living the Trail of Tears, cuts her hair in mourning, and moves on to express agency over her future instead of dwelling in the simulation of the past that her grandfather Art constructed. Hausman expresses the possibility of digital and virtual technologies in relation to Indigenous art forms and experiences, but he also urges readers to consider the responsibility, risk, and questions of ethics that comes with the use of technology that seeks to navigate trauma.

Reader’s Experience

The act of reading about the Trail of Tears, and reading about others experiencing the Trail of Tears in a VR game/ride, can also be considered a VR experience. As readers, we secondhandedly experience the TREPP ride and witness the different reactions of characters of the novel. Svante Lovén recognizes fiction, and science fiction (sf) in particular, as a form of VR. Lovén writes, “Sf’s potential as social and cultural critique has been increasingly recognised during the last few decades, and to postmodern critics of the field, the term has come to denote not only a literary mode, but a certain kind of epistemological stance which is not limited to fictional narrative” (19). Katherine Hayles argues that in literary texts, “production, signification, consumption, bodily experience, and representation—is in constant feedback and feedforward loops with the others” (28). In literary texts, there are “human bodies and textual bodies at play” (Hayles 42).

Reading about the Trail of Tears and this VR experience of the Trail and all the issues associated with that act allows readers to question how one, Cherokee or non-Cherokee, Native or non-Native, might most ethically experience and learn about history, specifically about historical trauma. Barnett writes that “Hausman allows his readers to culturally, historically, socially, and literarily examine presentations of indigenous history with a critical perception bent toward decolonization” (239). We also must question as readers whether or not this ride is a decolonial journey as well as whether or not reading the novel is a decolonial journey.

The Cherokee Heritage Center Trail of Tears Exhibit, Tahlequah, OK

The Cherokee Heritage Center in Tahlequah, Oklahoma, was established in 1963 “by the Board of Trustees of the Cherokee National Historical Society to preserve and promote the Cherokee culture while sponsoring dynamic educational programs, reconstructed historic villages, engaging exhibits, and scholarly research stimulating interest in the enduring legacy of the Cherokee people” (*Cherokee Heritage Center*). According the Cherokee Heritage Center website, it “is the repository for the Cherokee National Archives” and “is also home to the Cherokee Family Research Center, assisting Oklahoma Cherokee descendants to reconnect with their lineage.” It is on the National Register of Historic Places as it is located on the grounds of the famous Cherokee Female Seminary, c. 1851, one of the first institutions of higher learning for women west of the Mississippi. The site is designated by the National Park Service as the interpretive site for the western terminus of the Trail Of Tears for the Cherokees and other tribes forcibly removed to Oklahoma during the 1800’s.” The Cherokee Heritage Center (CHC) is a palimpsest of Cherokee history, built on the grounds of the Cherokee Female Seminary, the interpretative site of the ending location of the Trail of Tears, where not only history, but also Cherokee presents and futures, are explored, researched, and represented.

The Trail of Tears exhibit is the only permanent exhibit inside the CHC, but there are various outdoor exhibits on the beautifully forested forty-four acre campus. Adams Corner Rural Village is one of the outdoor exhibits, and it is a “collection of seven buildings representing Cherokee life in the 1890s before Oklahoma statehood” (*Cherokee Heritage Center*). Adams Corner represents a “turbulent time . . . the 1860s with the Civil War as experienced by the Cherokee Nation” (*Cherokee Heritage Center*). Diligwa, a 1710 Cherokee Village, is another outdoor exhibit described by the CHC websites as “the most authentic Cherokee experience in the world based on life in the early 1700s.” Many people in Tahlequah visit the CHC campus to go on walks, ride bikes, and have picnics because it serves as a community space for families and friends to gather.

Along with the indoor and outdoor exhibits, the programming of the CHC is extensive. The genealogical and family research center allows Cherokee descendants and tribal members to research their ancestry, entering the center through the “Removal” gallery of the Trail of Tears exhibit, a sobering spatial metaphor. The gift shop allows visitors to “choose from an extensive collection of original paintings, sculptures, to Cherokee apparel, books, [and] authentic souvenirs” (*Cherokee Heritage Center*). CHC offers various programming opportunities like cultural classes in basketry, pottery, and loom weaving; outreach and education days; and a humanities course in language and culture. The center also serves as a site for field trips.

In addition to the Trail of Tears exhibit, the CHC has a temporary rotating exhibit space that often features Indigenous and Cherokee art. The Heritage Center also hosts art shows and craft vendors regularly. The annual Trail of Tears Art Show features art in a variety of mediums by Indigenous artists and is competitive, offering cash prizes to winners. Despite the name of the art show, artists are not limited to submitting artwork based on or inspired by that moment in

Cherokee history. Dr. Charles Gourd, former Executive Director of the CHC, stated in an interview with *Tahlequah Daily Press*, “While the Trail of Tears was a very tragic event in our history, it's not our defining moment. But nearly every other Indian tribe and people in the country have been removed from somewhere. So we have made it a concerted effort to get the word into the artist community that this is their opportunity to participate in an intertribal show” (Crawford). Further, Gourd states, “Native art occurs when the artist is Native, whatever the medium” (Crawford). Gourd importantly highlights that the artwork does not have to depict what some may consider traditional Native American or Cherokee specific content and themes; Native American art is any art composed by a Native American person.

The Trail of Tears Art Show honors Cherokee and other American Indian artists and culture while also educating the non-Native public. In his interview with *Tahlequah Daily Press*, Dr. Gourd stated, “Most Tahlequah residents understand the culture and lifestyle of modern-day Native Americans. But some folks still think of teepees and headdresses. The show helps change public perceptions” (Crawford). Gourd elaborated, “I don't want the American public to have a perception that all Indians are locked into the 18th century” (Crawford). Celebrating contemporary Indigenous artists paves the way for Indigenous futures.

As the Trail of Tears Art Show focuses on self-representation, the CHC as a whole enacts this crucial value. Mary Lawlor writes that tribal museums function “as the most formal vehicle of tribal self-display” (18). Tribal museums offer

visitors opportunities to contemplate and learn about the histories and the revered objects of tribal pasts. The historical narratives evoked by the displays reach back to precolonial daily life and extend forward through more recent pasts to the present, exposing in the process not only cultural information that tribal curatorial staffs want visitors to know,

but the sources of material deprivation and cultural marginalization common to reservation society as well. (Lawlor 18)

Similarly, Dean Rader writes that the National Museum of American Indian “insinuates itself as a site of acclimation, accomplishment, and, most importantly, Native authorship” (209).

Representation of Indigenous peoples and cultures in museums have a problematic and dehumanizing history, from displaying looted items and Indigenous corpses and skeletons to circulating extinction narratives, but when tribes represent themselves, it is powerful self-authorship.

Collaboration in the museum space can also be rewarding or riddled with conflict. The Trail of Tears exhibit was created in partnership with the National Park Service (NPS) in 2001 and has since been updated a few times with minor changes. The CHC website describes this collaboration: “working in conjunction with the National Park Services, the Cherokee Heritage Center is proud to permanently house this exhibit which explores the forced removal of our ancestors from their indigenous territory to the “Indian Territory,’ present day Oklahoma.” The National Park Service has a fraught relationship with Native Americans communities. Isaac Kantor writes that “Native American rights in national parks present a dilemma. These lands were wrongfully taken, and recognition of rights owing to treaties and the existence of significant cultural and religious sites or traditional use is the most equitable recourse” (42). The NPS has tried to repair this difficult history in recent years. The NPS website states, “NPS pursues open, collaborative relationships with American Indians, Alaska Natives, and Native Hawaiians to support cultural and traditional places and practices and enhance NPS’s understanding of the history and traditional management of places and resources that are now within national parks.” This statement is a positive one, but focuses only on how Native

Americans can benefit NPS and increase its knowledge instead of being mutually beneficial. The only equitable transaction between the NPS and tribal communities would be to restore and give back tribal lands. In 2020, the NPS named Dorothy FireCloud (Rosebud Sioux) as their Native American Affairs Liaison and this position delivers important Native American input to the Park Service (National Parks Traveler). Although we know little about how the development of the exhibit went, it is promising that the NPS wanted to contribute to representing the Trail of Tears in 2001. Robin Boast writes that “museums’ positions of power are far more unstable than often represented” (60). Based on funding and partnerships and power struggles, museums may try to speak and curate truth, but ultimately be stumped by overseers. However, it is also clear to Boast that “museum professionals are absolutely sincere in their desire to find an inclusive narrative to allow the source community a real partnership” (66). This may be written about dominant culture representing non-Western or white cultures, but it is also representative of the relationship between the Cherokee tribe and NPS as they dictated their own tribal history while in collaboration with the NPS funding and aid.

Like the simulation in *Riding the Trail of Tears*, the Trail of Tears exhibit at the CHC also employs VR and can be considered a VR experience itself. Slavko Milekic considers museums VR spaces and identifies two common goals for designers of virtual environments: “1. to support user interactions that contribute to information transfer and retention; and 2. to make the quality of virtually presented information meet or exceed a real-life experience” (369). The curation and design must allow the visitor to feel like they are walking through history, be affective, and make a strong enough impression that visitors remember and transfer information they encounter. The Trail of Tears exhibit features six galleries as listed and described by the CHC website: “Pre-Removal: Cherokee life before the Trail of Tears; Court Battles: Events and legal

issues leading up to forced removal; Prisoners With No Crime: Imprisoned in Stockades before the Trail; Many Tribes, Many Trails: The USA's forced removal of other indigenous tribes; Removal: Geographical route of and events along the Trail of Tears; Starting Over: Rebuilding our Nation from scratch: our ability to adapt, thrive and excel." Signs encourage visitors to gently touch any non-encased objects. This is important permission for some to process the information in the exhibit. Milekic theorizes tangialities in museum settings. He defines tangialities as "all sensory modalities . . . not reduced to those related only to the sense of touch, haptic, cutaneous, tactile" (Milekic 371). All senses should be engaged in a museum exhibit. To specifically help with haptic information, Milekic encourages museums to "allow handling of rare, fine, fragile, or dangerous objects" and "improve access to cultural heritage information for visually impaired and blind individuals" (382-383). This helps people with disabilities process information.

Museums are always speaking to multiple audiences, especially cultural museums. Robin Boast writes that "the goal of the new museology was, and largely still is, the transformation of social practices through the transformation of the museum from a display of singular expert accounts to a site of different educational engagements" (58). In regards to virtual heritage projects, and museums as virtual projects, Champion and Dave write that "our knowledge of a place is also deepened by not being passive receivers but by our activities as shaped by that place, and our identification with or against that place" (336). Therefore, at the CHC, whether visitors are Cherokee, Native American, or neither, all visitors are engaged educationally in a different way. People with different identities will experience the Trail of Tears exhibit in various ways; it may resonate deeply with Cherokee tribal members, it may teach non-Native visitors about Cherokee history, and it may inform Cherokee visitors more about their own

ancestors. The galleries move visitors through time chronologically, and I will describe and explain the galleries' representation of Cherokee trauma and survivance in the same order.

The first gallery sets the scene of conflict within the tribe and between the Cherokee people and the U.S. government. Gallery 1, Pre-Removal: Cherokee life before the Trail of Tears, tells of the "Gathering Storm" of treaties between the Cherokee and U.S. government. Each wall panel, like the one labeled "The Gathering Storm," has exhibit labels in Cherokee syllabary and in English. The walls are dark green, and one panel features forested hills with the title "The Treaty Trail." This exhibit label states, "The Cherokee believed that each treaty would be the last, yet another always appeared. By 1835, these treaties took away every inch of Cherokee land east of the Mississippi River." Beside this quote there are touchable maps of diminishing Cherokee territory in the southeast and portraits of figures like Andrew Jackson, whom the panel relays favors Cherokee removal. Another wall panel titled "Bitter Divisions" informs visitors of the conflict between Chief John Ross and the Treaty Party against a navy blue background. This gallery utilizes dark colors, a dark ceiling, and dim lighting to relay the difficult decisions and exploitation that led to removal. It is carpeted so visitors are not focused on the sound of their own steps, but on the displays around them. Visitors also read about the Treaty of New Echota alongside an encased reproduction of the treaty. It describes how Jackson acted maliciously to get twenty Cherokee signatures on the treaty and tells of Ross' immediate protest that none of the signatories had the authority to sign. A passage from sign 71 reads, "With each Cherokee signature, lives were at stake? Would you have signed?" This question posed directly to the visitor prompts a reflection on the decision made by the Cherokees who were seen as traitors at the time. Should they have signed and agreed to leave their homelands, or should they have fought, risking their lives? There is no easy answer.

The multimedia elements of this first gallery help create affect for visitors. While a panel entitled “Playing by the Rules” shares how some Cherokee families assimilated and practiced white values and ways of life like engaging in white agriculture and farming, building and attending Christian churches, owning for-profit businesses, modeling dominant culture government; the Cherokee may have adapted “white ways,” but they still maintained their culture. It was a both/and, not either/or situation for those who were seen as assimilators as it was for members of the Treaty Party. The panel features Cherokee hymn books, for example, in the Cherokee syllabary for which Sequoyah developed the alphabet. A video projection in the first gallery plays recorded Cherokee stories about traditional values while it shows the silhouettes of a grandfather and grandchild in a cove of wooden trees. This installation is called “The Storyteller,” and the visitor can press buttons for Cherokee language or English language audio. The inclusion of the Cherokee language is a strong reminder of survivance and continuance of language and culture. Andrea Witcomb writes that multimedia installations in museums represent the “affective possibilities of objects” that are “able to engage emotions and in the process produce a different kind of knowledge—one that embodies in a very material way, shared experiences, empathy and memory” (36). Although all museums have some form of multimedia installations, the most basic being a mix of text and objects or images, these recordings and the portrayal of multi-generational Cherokee families carrying on storytelling amidst white efforts at assimilation and removal are powerful tools in conveying emotion and memory. The projection of the silhouettes of a grandparent and grandchild rather than a detailed representation also allows Cherokee visitors to envision themselves in that space. Cameron and Robinson states that “digital technologies and information systems offer the potential to promote inclusive practices to a large degree through new discursive, relational possibilities” (172). In the

museum space, installations like Cherokee stories being played in the Cherokee language are extremely inclusive.

The second gallery, Court Battles: Events and legal issues leading up to forced removal, tells of “The Waiting Game” as Cherokee families struggled to make the best decisions possible for themselves in the wake of the Treaty of New Echota. The walls of this gallery are painted a tan/orange color, most likely representing the color of the earth in the southeast. One exhibit label states, “The Cherokee struggled with a hard decision: whether to comply with the Treaty of New Echota and move west or whether to resist. The majority stayed put, believing that justice would prevail, and that they would be allowed to remain in their homeland.” This optimism that justice would prevail is labeled as “A False Hope” the same panel. This gallery demonstrates what a typical “middle-class” Cherokee family would own and how their dwellings would look with fireplaces, pottery, and furniture. Some items on display include glass and silver decanters and a large wood china cabinet. It paints the scene of pre-removal normalcy and displays what Cherokee people were forced to give up.

While the first two galleries coax the visitor into learning about the matters of pre-removal and Cherokee culture, the third gallery interrupts that tone and serves to unsettle the visitor. Gallery 3, Prisoners With No Crime, is a harsh shift in curation from the first two galleries with two silhouettes of soldiers pointing guns and bayonets at both sides of the visitor upon entrance. The floors are wood, not carpeted, so the room feels colder, and the visitor is aware of every move they make as the floor creaks beneath them. The atmosphere of the gallery reflects the “Rude Awakening” for Cherokee people as troops looted their home and harmed, injured, and even sexually assaulted some tribal members. The focus of the gallery is on captivity and Cherokees being imprisoned in stockades before they started on the Trail. Wooden

panels with spiked tops line this gallery, and a stockade or “collection fort” is portrayed in a large illustration on the wall with a small dimension model underneath. Quotes from first-hand accounts of these stockades line the walls. Rebecca Neugin, a half-blood Cherokee who was three years old at the time stated, “They drove us out of our house to join other prisoners in a stockade.” The gallery tells visitors that most were held there for one week to one month and as many as eight hundred Cherokee people were crammed into one small stockade at once. Others recollected the “bad sanitary conditions, lack of privacy, foul drinking water, widespread sickness” and soldiers molesting Cherokee women. Another firsthand account speaks of “A Cherokee who was deaf and mute . . . shot to death for turning right when a soldier said to go left.” Few accounts from Cherokees recall how some soldiers were “decent,” but others were cruel or abusive. Another exhibit label rightly names these stockades as concentration camps.

There are few objects on display in this gallery except for replicas of what Cherokees may have been able to salvage and bring to the stockades from their homes, but a rifle that belonged to Daniel Ross is encased in a display. The placard states that Ross was eleven years old during removal and that he used the rifle to hunt for food and protect his family on the Trail. Amidst the very harsh and unfortunate reality presented in this gallery, this rifle is one object reflective of survival and family unity. Mary Lawlor writes that “objects on display serve as material links to these various pasts and as precarious evidence of the connections between then and now” (18). Objects such as the rifle represent for Cherokee people that survival and continuance is possible through the most traumatic of times. Although it refers to nineteenth century removal, this image may connect to present-day discrimination, continued dominant culture erasure narratives, and intratribal conflict and the ability to survive through it and carry on.

Before the Trail of Tears exhibit moves directly into Cherokee removal and the Trail of Tears experience, the CHC dedicates a gallery to intertribal removal to acknowledge that the Cherokee were not the only peoples forcefully removed from their homelands. The fourth gallery is called Many Tribes, Many Trails. The “Many Trails” large wall map installation shows the trails of the Choctaw, Chickasaw, Seminole, and Muscogee (Creek). Videos from a member of each of these tribes describes what removal was like for their ancestors. Although the technology is now dated, it is still powerful to hear from each of these tribal members and for visitors to understand that each removed tribe faced unique struggles and specific traumas. Lawlor describes the “importance of difference as a feature of identity and the central roles that tribal museums play in publicly representing the historical and cultural experiences that demarcate difference” (19). This gallery works to inform visitors that the Cherokee Trail of Tears was distinct from other removals of Native American tribes.

The fifth gallery is the Removal gallery. Its focus is on “the geographical route and events along the Trail of Tears” (*Cherokee Heritage Center*). It is the darkest gallery of the exhibit in appearance and tone. It is dimly lit with sage green walls and dark greenish brown carpet. The sound of gusts of winter wind play through the audio system. There is also another audio panel called “Echoes of the Trail” where visitors can play either or both Cherokee and English recordings of accounts of the Trail similar to the story recordings in the first gallery. It is also the largest gallery of the exhibit, about the size of two or three previous galleries. This harrowing gallery is given the most space for visitors to take time to learn and reflect. White statues are situated throughout the middle of gallery. They have shadowed faces and tattered carved clothing and are placed in clusters next to other statues or off alone. Some quotes from firsthand accounts appear on wooden podiums beside the statues. All statues face the far side of

the gallery so that when you enter the gallery, their backs are facing you, and they appear to be walking forward in procession. An elder huddles over a child in one cluster of statues. Another statue depicts a woman lying on the ground with an expression of agony, holding an infant wrapped in fabric.

This gallery is haunting. Disturbing images are necessary for audience affect sometimes. Viv Golding writes, “I suggest that poetics in the affective museum work like radical feminist pedagogy, through unsettlement” (96). Further, Golding defines poetics in this context: “Poetics here demands physical, emotional and intellectual labour, from design, content and programming, and from visitors. It importantly moves us to reflect on the ethics of colonial encounters, the stories we tell about self and others, and to relate this to our lived experiences today and in the global future” (104). The Removal gallery strongly demands emotional and intellectual labor from visitors. An “affective museum works with poetics to assist visitors to look through that which was hidden and rendered opaque in traditional linear displays” (Golding 104). This brings us back to the importance of self-representation in tribal museums and cultural centers. The Trail of Tears exhibit is powerful because it radically interrupts how other museum spaces represent Cherokee removal simply by telling the history and stories from a Cherokee perspective in highly interactive ways.

The left wall of the Removal gallery is dedicated to labels and images describing the Trail. A thick bead pattern developed by Mary Foreman lines the lower length of the wall. The 16,000 beads represent the number of Cherokees in the “Old Nation” at the time of removal. The wall panel states that death estimates of the Trail range from 2,000-4,000. The 2,000 rough black beads represent the conservative estimate of death, and the 2,000 rough red beads represent additional deaths estimated by physician Elijah Butler. The 12,000 smooth white beads represent

those who survived. The black and red beads are enmeshed and surrounded by the white beads, representing that those who physically died during the Trail were carried on spiritually by the survivors. The left wall depicts the harsh conditions for those on the Trail, from sickness to winter weather to the utter sadness and despair. It depicts the Trail chronologically and as a timeline of written descriptions and images. The first exhibit label tells visitors that the first detachment left in June 1838 and the last departure was March 1839. The usual detachment was 50 wagons and 1,000 people, including Cherokees, enslaved Africans, and white spouses. These labels also discuss the difficulty in collecting personal narratives after the Trail because “most who survived were so stricken by their losses that they rarely spoke of the ordeal once it was over.” The gallery features a portrait of Annie Fields Ballard who was one survivor of the Trail. This gallery honors survivors and those who died along the Trail evenly. The left wall ends describing the last detachment’s arrival to the territory that would later become Oklahoma. A painting of the Illinois River is displayed, and the text states, “Yet, even as the survivors mourned the death of their loved ones, they had no choice but to step into a new life in a new land.” This sets up post-removal territory in what is now present-day Oklahoma as a new homeland for Cherokee people. It does not, however, tie things up nicely in a bow after the weight of loss that has been displayed by this solemn gallery.

I find Mary Lawlor’s examination of the Navajo Museum applicable to my analysis of the CHC in terms of representation of trauma. Lawlor writes that the exhibitions at the Navajo museum “demonstrated how loss can be said to function as a component of collective, public identity formation” (72). The Trail of Tears was certainly a moment of loss and trauma for Cherokee peoples that forever shaped collective community identity and this is especially seen through the Removal gallery. Part of the Navajo Museum is curated “as if to repeat the anguish

of their ancestors and to internalize their losses” (Lawlor 73). The CHC Trail of Tears exhibit does affectively repeat anguish for Cherokee audiences and refuses to neatly sum up moments of trauma because trauma passes on through generations. Lawlor writes that “this active remembrance in effect refuses closure to the history of colonization,” and “closure . . . would . . . mean completion of the long colonial project to not only dominate but to maintain hegemony” (73). As Lawlor witnesses refusal at closure for Diné people in the Navajo Museum, I also see a refusal to commit to tidy closure at the end of the Removal gallery at the CHC or even at the end of the Trail of Tears exhibit overall. Colonization still courses through every United States structure and system, and to represent an end to it would not be justified.

Although the Removal gallery does not claim that all was well after this dark moment in history, or that Cherokee people are immune to its impacts today, the last gallery portrays survivance and cultural continuance after one of the most traumatic times in Cherokee history. The sixth and final gallery is called Starting Over: Rebuilding our Nation from Scratch, which demonstrates the Cherokee “ability to adapt, thrive and excel” (*Cherokee Heritage Center*). As the visitor steps into the final gallery from the Removal gallery, it is a little brighter and lighter. The room is framed with wood beams like a structure in the process of being built. This gallery focuses on the development and adaptation of Cherokee religion, education, the press, government, and art in Tahlequah. There are text descriptions and photos of different homes, whether they were log homes or mansions. The capital building of Tahlequah is pictured, and the exhibit label describes how it became the capital of the reunited Cherokee nation. Another wall panel dedicated to religion states that “many Cherokee families maintained a flexible balance, practicing both traditional beliefs and Christianity.” In terms of education, the gallery shares that in 1841 the Cherokee nation opened the first free, compulsory co-educational public school

system in the U.S., and the literacy level of the Cherokee was higher than that of the white population of Texas and Arkansas. Tahlequah Elementary School and Cherokee Female Seminary opened in 1851. Among educational success, Cherokee press and journalism also took off, *The Cherokee Advocate* was created and *Cherokee Phoenix*—begun in 1828 by Elias Boudinot back in New Echota, Cherokee Nation in what is now Georgia—was (appropriately) reborn. As far as government, most remained loyal to Chief John Ross upon reaching Tahlequah, and the leaders of the Treaty Party were executed. By 1846, one central Cherokee government under John Ross was solidified. After a very traumatic removal, the Cherokee nation rebuilt.

The last cove of the sixth gallery before the visitor exits the Trail of Tears exhibit tells of the “Sacred Fire.” A video available in Cherokee and English shares how “The Stories Live On.” The video begins with a mother telling her daughter of “that wind, when we were driven here.” This video and audio most likely recorded in the late 1990s also demonstrates the importance of passing on narratives of the Trail to young generations so they can understand the weight of that moment, but also recognize how their people survived and rebuilt a new homeland. A flag of the Cherokee seal is displayed along with an ending Acknowledgments plaque for everyone involved with development and donation to the exhibit. The visitor then exits the U-shaped exhibit back into the temporary exhibit where they were able to enter the first gallery.

There are now plans for a new CHC museum that would include more permanent exhibits and art displays. With a larger space, the CHC would follow up on contemporary Cherokee culture to add to the conversation taking place at the end of the 2001 Trail of Tears exhibit. The Trail of Tears exhibit, though curated twenty years ago now, strongly represents the overwhelming trauma as well as the resistance and survivance of the Cherokee people facing the Trail of Tears. The multimedia exhibit is an affective space for Cherokee and non-Cherokee,

Native and non-Native audiences alike and all visitors can become educated from a walk through the exhibit.

Conclusion

Riding the Trail of Tears and the Cherokee Heritage Center curate trauma and survivance very differently. TREPP utilizes amusement to market and profit from Cherokee trauma.

Tallulah faces great re-traumatization at times as well as sheer numbness. The reader experiences the thrill of the ride, a kind of lawless and sadistic space, but also confronts the implications of questionable ethics of curating Cherokee trauma in that mode. The only kind of survivance one sees in the novel is that of Tallulah breaking from a cycle of trauma by deciding to leave the job that has given her a stable financial life and the reminder that Blake Hausman, a Cherokee author, is exploring this history through fiction. The novel, and the VR simulation of the Trail, is experimental, and intentionally so. The reader is left questioning whether they would ever participate in such a simulation, if an amusement like TREPP would ever be approved and created in real life, and how different audiences would react to it. There are, however, still racist mascots, still people playing Indian, still traumatizing histories and memories that creep in to haunt Indigenous peoples every day. TREPP is a kind of VR hyperbole of all of these issues.

The Trail of Tears exhibit much more carefully curates trauma, affect, and survivance. Although a couple of galleries are intentionally unsettling and upsetting, there is thoughtful follow-up to these difficult narratives through examples of cultural continuance and Cherokee success. The Heritage Center as a whole is also a space where Cherokee people can gather, conduct study of their own family ancestry, and celebrate Indigenous art. To answer to my earlier questions, it is possible to experience some version of “real” lived pasts, virtual reality serving as one possibility. Why do some want to virtually revisit Cherokee pasts? To answer

questions, to feel something on their own terms, and/or to learn to create better Cherokee futures. Cherokee histories are already woven into the present and future, but trauma does not have to exist at the forefront.

Chapter 4

Creating Collaborative Digital Poetic Worlds in the Video Poetry of Heid Erdrich and Kathy Jetñil-Kijiner

As readers, users, and visitors of Hausman's novel and the Trail of Tears exhibit can dictate and make meaning from their virtual experiences, so, too, can viewers of video poetry. This final chapter also circles back to the first two chapters of this project because of the urgency of environmental issues present in the selected video poems. Video poetry is unique because of the blending of orality, animation, photographs, videos, and music. Authors and activists Heid Erdrich (Turtle Mountain Band Ojibwe) and Kathy Jetñil-Kijiner (Marshall Islander) share their video poetry through online platforms, their own websites, and on YouTube and Vimeo, allowing for an audience of Indigenous and non-Indigenous peoples alike to view, comment, and share these video poems that broach both historical and contemporary Indigenous issues like environmental pollution and devastation; the impact of nuclear testing and climate change on Indigenous communities; language loss; mistreatment of Indigenous women; and the power of traditional ecological knowledge (TEK) among many other issues. These video poems create new digital worlds by carving out new spaces for Indigenous artists to share their work and generate conversations, and this builds new viewers and audiences who view, interact with, and participate in meaning-making. In these digital forums, futures are collaboratively created by many participants. The activism embodied in these poems and the broad platform the internet affords are powerful catalysts for the changes humanity needs to make in order to ensure a future for itself and the planet.

Erdrich collaborates with other Indigenous artists like Johnathan Thunder and Trevino Brings Plenty to animate and voice her various poemeos (as she calls them). Heid Erdrich's newest collection of poetry is entitled *Curator of Ephemera at the New Museum for Archaic*

Media (2017). Erdrich composed this multimodal poetry collection to include images of mix-tape lists, QR codes to her video poems, and ekphrastic poems for which the original art pieces exist only in her mind. Erdrich chose to guide readers to her online “poemeos” through this “archaic” medium of the QR code. Erdrich’s video poem “Pre-Occupied” addresses a multiplicity of audiences in order to examine forms of occupation and activism of both dominant culture and Indigenous cultures. The uses of music, sound, video, and images along with Erdrich’s own reading of the poem recover Indigenous histories hidden by dominant culture’s “occupation.” “Pre-Occupied” serves as an act of resistance and recovery for Native audiences while informing and educating non-Native audiences about protest culture.

Jetñil-Kijiner produces her own performative and filmic video poems and posts them on her WordPress blog and website. She also collaborates with other Indigenous poets and filmmakers. Jetñil-Kijiner collaborated with the Greenlandic poet Aka Niviâna to film the video poem “Rise” for 350.org. They met and wrote the poem “Rise” the day before filming and recorded their powerful poem on a melting glacier together in Greenland. Both Jetñil-Kijiner and Niviâna voice their concerns for and experiences with climate change to their native homelands. Other video poems of Jetñil-Kijiner’s like “Fishbone Hair” address the history of nuclear testing and its impacts on the climate of the Pacific Islands and health of Marshall Islanders. Jetñil-Kijiner is well-known for performing “Dear Matafele Peinam” at the 2014 United Nations Summit, another venue in which her poetry and activism were closely connected.

Native American and Indigenous poetry and performance has always played a crucial role in activist movements. Poetry and storytelling has been utilized to pass on traditions, to rally hope for survivance, and to make non-Native audiences aware of injustices that Indigenous peoples face. From John Trudell to Chrystos to Joy Harjo, and many before and after them,

poetry has ignited and recounted activist movements like the American Indian Movement (AIM), #IdleNoMore, and #NoDAPL Standing Rock Resistance. Erdrich and Jetñil-Kijiner also seek to represent crucial Indigenous issues, but in a burgeoning format. Their video poems exhibit expression of both digital activism and visual sovereignty, which are important facets of Indigenous futurist digital world-building. I will examine how these videos are composed and produced, what messages they send to Native and non-Native audiences, how they serve as and inspire activism, and how they are circulated and curated in the online environment as they create digital Indigenous poetic worlds.

Defining Collaborative Digital Poetic Worlds

In my own theorization, collaborative digital poetic worlds signify digital or online spaces where poetry and poetic works are featured and diverse audiences are drawn to create meaning. Collaboration is created and sustained on multiple levels. Multimodal or multimedia techniques represent a combination of multiple genres. For video poetry, composers utilize written and spoken poetry, film, photography, music and sound, and animation to produce a text. Multiple professionals (poets, writers, producers, animators, musicians, editors) collaborate to create the video poem, and the audience's ability to share and comment on the video poem represents another layer of collaboration. In an Indigenous and Indigenous futurist context specifically, collaborative digital poetic worlds signify an urgent critical representation and critique of contemporary issues in digital spaces ranging from climate change and environmental impacts on Indigenous lands to the plight of missing and murdered Indigenous women. Taking poetry from the paper page to the webpage shapes a new world in which to interact with poetry and its themes. These digital poetic worlds are based more upon negotiation and reception; the user/viewer has agency in how and where they receive and view the video poem, what

experiences and knowledge they bring to their viewing, and how they respond afterward, adding more layers to the interaction of the digital and physical environments.

It is also important to define the term *digital* before beginning my discussion of Erdrich's and Jetñil-Kijiner's video poems. Indigenous scholars like Angela Haas argue that this term dates back farther than the beginning of the internet and World Wide Web. Haas writes, "digital' refers to our fingers, our digits, one of the primary ways (along with our ears and eyes) through which we make sense of the world and with which we write into the world. All writing is digital" (84). According to Haas, the term digital is inextricably linked to embodied physical tasks, and she uses the primary example of wampum. Redefining this term also helps scholars and artists claim the internet as a space that belongs to and has always belonged to Indigenous peoples just like other technologies. Haas argues that wampum, as one example, "situates American Indians as techno-savvy, as it demonstrates how American Indians have a long-standing intellectual tradition of multimediated, digital rhetoric theories and practices—or theories and practices of communicating via the encoding of information with our fingers and toes using a variety of media" (94).

Before we can declare the digital world an empowering Indigenous space, though, it is crucial to acknowledge both the digital divide and the dangers that linger for Indigenous peoples online. Katharine Brodock notes "three manifestations of the digital divide," and those include "unequal access, unequal skills, and censorship" (71). Many rural Indigenous communities still struggle to gain internet access. *NPR* reports, according to data collected from the American Community Survey and the Census Bureau, that only fifty-three percent of Native Americans living on "American Indian reservations or tribal lands . . . have access to high-speed internet service" (Wang). Lack of computer devices at home also lead to unequal technological skills. On

a global scale, government and private company censorship also contributes to the digital divide. One example Brodock uses is China's blocking of Twitter and Facebook because these sites possess the "ability to facilitate communication and coordination outside of government control" (82). Indigenous peoples also face widespread harassment online, and the internet can be used as a tool to organize sex trafficking, which affects Indigenous women in staggering numbers.

With all of the faults and inequality ingrained in the digital world, many artists, activists, and scholars still argue that it is necessary for Indigenous peoples to claim this space. Natanya Ann Pulley recognizes the continual issues with interference and monitoring of Native activity on the web, but ultimately makes the argument that Native Americans should embrace the digital world and use it to politically mobilize. Pulley writes:

Native people acquire a political pulse online that in the past was sequestered on the reservation—and beaten down there, as was the American Indian Movement at Pine Ridge. Though surveillance of politically engaged Native gatherings continues even online, varying levels of involvement in Native American politics are at least guaranteed a voice through status updates, shared memes, and notices of events, petitions, and new movements. (100)

Native communities can connect online, organize activism, and share art. We also cannot underestimate the ability to represent oneself and one's community individually and collectively. Bronwyn Lumby recognizes the impact and opportunity of digital activism as associated with social media specifically. She argues that "Facebook is not a disembodied space or an imagined social sphere that has no real substance as a community. It is real in that it is composed of communities generated by real bodies that compose, interact, wrangle and communicate with one another" (Lumby 69). In fact, Lumby also contends that Facebook is "a vehicle for self-

representation that offers new ‘cyber-skin’, a mode of Indigenous identity that moves between the spaces of computer-generated identities as an embodied subject actively creating an identity” (69). Some consider the internet a disembodied space, but Lumby counters that argument by using the metaphor of cyber-skin. This also connects to Haas’s argument about the digital serving first and foremost an embodied experience. Lumby argues that this embodiment transcends the digital world as well. Studies about digital sites and apps creating chemical and physical reactions in the body, like the Instagram heart icon causing the actual release of dopamine in users upon receiving “likes” on posts, only further this argument of digital embodiment and cyber-skins.

This leads me to the concept of visual sovereignty which is also a tenet of Indigenous world-making (and activism) in online spaces. Joanna Hearne defines visual sovereignty as “an expansive framework that creates a critical space to privilege a range of Indigenous aesthetic strategies and access to traditionality in a political world” (15). Hearne also argues that “thinking about the ways that Native films foreground imaginative visions of Indigenous futures—even as they look back at historical events and archival texts premised on Indian demise—facilitates an overt acknowledgement of the world-making qualities of visual media and articulates the political stakes of public culture images of Indians” (19). Hearne highlights the complex road to visual sovereignty that often involves either a correction and then representation or simultaneous correction of popular cultural images and self or collective representation.

Michelle Raheja’s concept of the virtual reservation also demonstrates how dominant culture and Indigenous narratives conflict. Raheja states, “Film and other forms of new media operate as a space of the virtual reservation, a space where Native American filmmakers put the long, vexed history of Indigenous representations into dialogue with epistemic Indigenous

knowledges” (147). Raheja’s virtual reservation also aligns with some of my thoughts on collaborative digital world-making. Raheja argues that “visual sovereignty recognizes the complexities of creating media for multiple audiences, critiquing filmic representations of Native Americans, at the same time that it participates in some of the conventions that have produced these representations” (200). Raheja reasons that while Native artists may work against dominant culture, they often must create and compose in dominant culture forums or through dominant methods or conventions. The hybridity of video poetry, however, creates a new form of art and space to converse about Indigenous art and issues. Heid Erdrich and Kathy Jetñil-Kijiner utilize photography, animation, sound, music, and spoken word to share to curate video poems in online spaces. This creates a new digital poetic world. Both Erdrich and Jetñil-Kijiner use what may be labeled as traditionally dominant culture methods like film, photography, and animation, but upon a closer investigation, viewers can understand how these artists decolonize and re-claim these genres while also creating something entirely new.

Heid Erdrich’s “Pre-Occupied”

Heid Erdrich has published five collections of poetry along with writing and editing other texts such as cook books and anthologies of Native American women writers. Erdrich has begun to collaboratively compose video poems that layer images, video, and sound in order to share stories of Indigenous people that have long been misrepresented and misinterpreted from Western viewpoints. Erdrich’s video poems prove that the internet can serve a productive space to share Native narratives with the understanding that multiple audiences (Native and non-Native) will view and interact with these innovatively structured stories. Erdrich’s video poem “Pre-Occupied” from her poetry collection *Curator of Ephemera at the New Museum for Archaic Media* addresses a multiplicity of audiences in order to examine forms of occupation and

activism of both dominant culture and Indigenous cultures. The uses of music, sound, video, and images, along with Erdrich's own reading of the poem, recover Indigenous histories hidden by dominant culture's "occupation." "Pre-Occupied" serves to inform and educate non-Native audiences about protest culture, while serving as an act of resistance and recovery for Native audiences. She addresses this multiplicity of audiences and simultaneously sends different messages.

Accessibility and visibility are the first hurdles for Indigenous artists and internet users to overcome. Erdrich publishes her video poems on her website and through YouTube and Vimeo, which are both free and open access, allowing anyone who has access to the internet to view and share. Heid Erdrich published "Pre-Occupied" on YouTube March 29, 2013. As of early 2021, the video poem has 7,045 views, 50 likes, and 3 dislikes. This is a bit under the average YouTube views for a highly visible video, but Erdrich's work is a niche area on the internet. The views are most likely users like me, someone who studies and reads Native American literature, is familiar with Erdrich's work, has seen Erdrich read and perform at an event, or even knows Erdrich personally or professionally. Gaining over 6,000 views on YouTube is still no simple feat, and I predict that her work will gain more visibility and activity online in coming years since she is pioneer of this unique art and literary genre.

Native scholars have recognized the potential of the internet to share and re-shape narratives. In her article "Digital Storytelling Aesthetics," Candice Hopkins argues that "new technology doesn't threaten [Indigenous] storytelling" (342). In fact, Hopkins discusses the idea that the "internet was recognized for its ability to bring people together and communicate across large geographical divides" (343). The online forum certainly allows individuals from across the globe to start conversations. In regards to "Pre-Occupied" specifically, the forum of YouTube

allows those familiar with Erdrich's work to commune online and participate in conversations, Erdrich to potentially respond to comments and questions, and for new users and audiences to discover her work.

Digital storytelling projects are often collaborative in nature as Erdrich's work demonstrates. Judy Iseke and Sylvia Moore argue that "indigenous storytelling provides opportunities for indigenous peoples to control the images and structures through self-representations along with the misrepresentations of indigenous peoples in dominant society" (20). Iseke and Moore also convey that Indigenous digital storytelling can "speak to local aesthetics and local needs while anticipating larger audiences" (20). Art produced by Native peoples for Native peoples is highly necessary in order to contribute to self-representations and celebrate Native cultures. Art composed by Native peoples and distributed digitally, however, will always reach outside audiences. This responsibility of being aware of insider and outsider audiences may best be viewed as an opportunity for artists like Erdrich to educate people and expand the visibility of Indigenous issues.

Erdrich writes and directs her video poems, but enlists other Native artists and producers to add music, sound, and animation. On her website, Erdrich labels herself producer, co-director, and writer of her video poem "Pre-Occupied." She also notes that she receives artistic aid from two other Indigenous artists. R. Vincent Moniz Jr. is the co-director, and Jonathan Thunder is the art director and animator. In the introduction to their book *Global Indigenous Media*, Pamela Wilson and Michelle Stewart argue that "control of media representation and of cultural self-definition asserts and signifies cultural and political sovereignty itself" (5). Erdrich and her cohort of Native American artists exercise cultural and visual sovereignty by composing video poems that circulate online and revise the accepted history of dominant culture.

In the text above the embedded video poem “Pre-Occupied” on her website, Erdrich provides a brief synopsis of the video poem. She explains that the poem was originally written for the website *99 Poems for the 99%*. She includes a play on these percentages in the poem itself. The 99% is the dominant culture audience. Erdrich describes “Pre-Occupied” as a “collaborative collage” that produces “a visual landscape of associations and references that match the tremendous irony of how the word ‘occupy’ can be meant.” The video poem was released in 2013, but both the written poem and a QR code leading the reader to the video poem appears as part of *Curator of Ephemera at the New Museum for Archaic Media*. This collection contains ekphrastic poetry, QR codes that allow readers to use their phones to quickly access video poems, and images such as old mix-tapes and song lists. Much of the content focuses on old and new media and technology and the connection between technology and media to appropriation and misunderstanding of Indigenous culture by non-Native peoples.

The beginning of “Pre-Occupied” subverts typical popular culture expectations that are reproduced through mainstream media. The video poem begins with superhero theme music visually featuring a blue sky and stars dotting the background. The title “Pre-Occupied” and the banner “A film by Heid Erdrich” is inserted in place of the superhero figure that a viewer may be expecting next. The voice of Langston Hughes recites the first few lines of his poem “I’ve Known Rivers.” Then, Erdrich’s voice begins to read her poem, repeating “river” three times. The inclusion of Hughes’s voice creates an intertextual connection of shared oppression between African Americans and Native Americans and the significance of the Mississippi River. Susan Bernardin argues that the image of the river “localizes this scene, whose identification as the Mississippi River is deferred in the poem, but also gestures toward the deep racial and national histories invoked by that river’s name. These waterfalls on the upper Mississippi River, part of

storied Dakota memory, were repurposed for hydroelectric power to fuel Twin Cities industrial development” (43). From the beginning of the video, Erdrich reworks cliché filmic focus on white male protagonist presence and inserts an African American voice followed by her own.

As the video poem continues Erdrich states, “I never never never / etched your spiral icon in limestone / or for that matter pitched a tent on cement.” Birch bark homes appear on a Riverwalk; then they become pitched tents as a newspaper headline about Occupy Wall Street appears (Figures 1&2) and animated male figures fall from skyscrapers.



Figure 1: Birch bark home 0:41 “Pre-Occupied”



Figure 2: Pitched tents referring to Occupy Wall Street 0:43 “Pre-Occupied”

Erdrich replaces birch bark homes with tents to represent Indian removal, but also Indigenous protest, then references a well-known protest, Occupy Wall Street. The text “Pitched a Tent on Cement” is inverted and appears upside down to display the transition. This scene demonstrates two forms of occupation: occupation of Native lands and occupation of Wall Street in a protest against income disparity. The slogan for Occupy Wall Street was “We are the 99%,” referring to disparity between the majority of Americans and the 1% of wealthy Americans. Erdrich re-works the notion of 99% to also represent dominant culture. Native American cultures become threatened and “replaced” with mainstream representation of culture and protests and issues of the dominant white culture. Erdrich also gestures toward Lenape removal from Manahata for Wall Street to be built. Reflecting on the history of Manhattan, Mishuana Goeman writes that “the violent history of colonialism and Wall Street is forgotten, and in its place the state becomes naturalized as a center of wealth distribution” (203). However, Erdrich forces viewers to reconsider original land rights, while showing the Occupy protest as another complex layer of occupation.

The way in which Erdrich and her collaborators utilize animation is novel. In her chapter “Indigenous Animation: Educational Programming, Narrative Inventions, and Children’s Cultures,” Joanna Hearne argues that animation films “redeploy both traditional Indigenous oral narratives and Western image-making technologies not as separate or oppositional binaries but rather as coterminous, mutually embedded, politicized modes of address” (90). An animated feature allows for storytelling on multiple levels including visuals and oral storytelling. Channette Romero studies Indigenous women’s animation in order to gauge how Indigenous women artists use what might be considered the colonizer’s tools. Romero argues that “Indigenous women’s innovations in the animation genre work to bolster

tribal political, cultural, and spiritual sovereignty” (57). She also notes that “One of the most striking characteristics of Indigenous women’s animation is the prevalence of flat two-dimensional animation that is markedly at odds with settler animation’s privileging of hyperrealist three-dimensional images that attempt to reflect ‘reality’” (63). In Erdrich’s video, *Thunder* utilizes some of this flat two-dimensional animation in similar ways to create a unique visual and most likely as an act of resisting traditional animation. Romero argues that “Pre-Occupied” “shows how Indigenous animation could potentially raise viewers’ political consciousness in the service of real world Indigenous activism” (80). Erdrich’s two-dimensional animation could be a pointed choice and refusal to use the colonizer’s tool of three-dimensional animation. Indigenous realities are separate from Western realities, and the alternative form of animation showcases this.

Erdrich shares different historical narratives of occupation of Native lands and removal of Native peoples from their lands to the protest on Wall Street as similar forms of occupation performed and sustained by dominant culture. As Erdrich presents forms of dominant culture “occupation” later in the video poem, “pre-occupied” comes to also signify pre-contact (the time before Europeans invaded and occupied Indigenous lands in the Americas). There are various kinds of occupation, but when white bodies occupy, the media represents them as peaceful and any violence they engage in becomes justified. Susan Bernardin argues that Erdrich “makes visible this understory of settler origins in the United States and its territorial occupation” (41). Further, Erdrich also indicates other forms of occupation and colonization which have been erased and dismissed.

Erdrich includes remixed images of herself in the video poem in order to represent herself as an Indigenous woman in place of stereotypes that circulate through mainstream media and to

express her agency to represent herself on her own terms. Multiple images of blank screens pop up, acknowledging the digital space of the poem and the opportunity to publish whatever one creates on the web. Erdrich’s image with a marionette-like mouth (Figure 3) moving along with her voice reading the poem appears alongside repurposed images of 20th century housewives making dinner and tending to children as she reads the lines “my screen is lit with invitations / bake a casserole—send pizza—make soup for the 99%.”

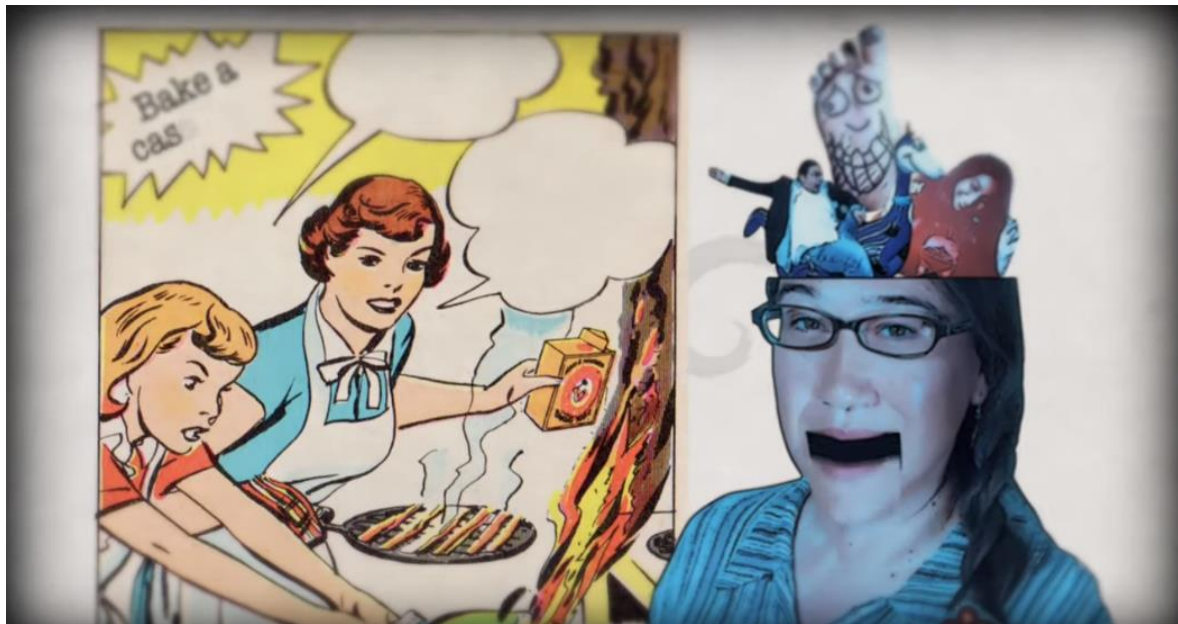


Figure 3: Erdrich’s re-mixed image 1:07 of “Pre-Occupied”

Erdrich then rejects these traditional roles of white women (of the 99%) as aesthetically-pleasing caregivers as she inserts her own image, a remixed photo of an Ojibwe woman rejecting the ability to be manipulated like a marionette. Erdrich states “Sorry somehow I haven’t time / Flow flow flow both ways in time / There’s a river to consider after all.” For Erdrich, there are more pressing concerns—like Indigenous land and water rights—than domestic duties that serve the patriarchy. These images also distinguish key differences between Indigenous women and white women. Viewers may at first believe that Erdrich utilizes images of housewives to note oppression of all women, but she quickly rejects those dominant culture images as familiar to

her. This is a key moment for audiences of the video poem to distinguish between the foregrounded history of white women in movements like women's suffrage and the histories of Indigenous women who were largely excluded.

In their article "The Remediation of the Personal Photograph and the Politics of Self-Representation in Digital Storytelling," Sonja Vivienne and Jean Burgess discuss digital representations of the self, mainly on social media, and argue that the personal photograph allows users "agency and ownership over their online self-representations by selecting, curating, and deploying personal images" (284). The choice involved in publishing one's own image in a digital space can serve as an act of agency. According to Vivienne and Burgess, there are five tropes of the personal photograph involved in digital storytelling including "family photographs, manipulated images, stock images, artistic abstractions, and re-enactments" (284). Erdrich utilizes multiple forms of the personal photograph, mainly manipulated images, artistic abstractions, and re-enactments. These all work to subvert stereotypical images of Native women and reinstate self-representations. Ultimately, the use of the personal photograph can lead to a path of "digital citizenship" (Vivienne, Burgess 291). Indigenous digital citizenship would entail the control of representation and recirculation of Indigenous images and issues and also remedying issues like the digital divide.

Another, even more complex, personal image of Erdrich appears in the video poem in order to challenge stereotypical images of Native American women as braided, buckskin-wearing sexual objects. Heid Erdrich's sister, Angela Erdrich, painted a portrait of Heid sitting in a chair with bookshelves behind her wearing an animal skin outfit, with a headband and braids, holding cans of "maize." Heid Erdrich incorporates her sister's artwork, and, when the portrait appears, animated turkeys also pop up on both sides of Erdrich's body. Some scholars argue that

this portrait references the Land O'Lakes butter girl who has a connection to Ojibwe history. Land O'Lakes is a Minneapolis/ St. Paul company and in the 1950s a Red Lake Ojibwe artist, Arthur Hanson, updated the butter maiden's image (Ganteaume). This image has long been debated as a stereotypical Plains Indian representation that the company tried to remedy by enlisting an Ojibwe artist to update. Susan Bernardin argues that Erdrich "redirects this enduring emblem of sexual, economic, and environmental commodification" by setting stacks of books in the background and utilizing a strong tone of refusal to "play" Indian (47).



Figure 5: Portrait of Heid Erdrich 1:36 of "Pre-Occupied"

Popular culture is an important point of discussion throughout Erdrich's work, and she includes an especially interesting "non-stereotypical" representation of a Native American man from a cartoon in the video poem. The "notes" Erdrich reads at the end of "Pre-Occupied" inform the reader that in the "1942 cartoon *Electric Earthquake*, an indigenous (but not stereotypically 'Indian') Mad Scientist is thwarted, of course, by Superman." Superman is a figure Erdrich refers to throughout the poem and video poem, but this mad scientist is

undoubtedly problematic. Erdrich states that the Indigenous mad scientist “has lost his signifiers (no braids, no blankets).” He “flashes a maniac grin / he is not *not* your TV Indian.” As Erdrich reads these lines, clips of the cartoon show a scientist in a lab coat with slick dark hair laughing maniacally. Although the usual signifiers of an Indian man, long braids and a blanket resting on the shoulders, are absent, the scientist is still represented negatively as a nonsensical villain. He may not appear as a stereotypical Native man, but he is still a “TV Indian” because he is the common empty shell of an Indigenous character. To further the problems with Superman comic and cartoon depictions of Indigenous people and issues, in a 1942 cartoon, Clark Kent states that there is nothing he can do to help with the “possibly” valid Indigenous land claim. Erdrich includes clips of this scene in the video poem and satirizes Superman’s heroism. In their book *Indian Country: Telling a Story in the Digital Age*, Victoria LaPoe and Benjamin LaPoe II state, “The most common way non-Natives learn about Native culture is through mass media, and, unfortunately, mass media often focus on stereotypical images” (3). The television as one medium of mass media has perpetuated stereotypical images of indigenous peoples for decades. The internet can reinforce or counteract mass media representations. Erdrich utilizes the space of the internet to point out the problematic stereotypes of Indigenous people represented in mainstream media and replace them with Indigenous-authored representations and images. Erdrich reads her “notes” section at the end, which would usually be left for the reader/viewer to browse through on their own, so the viewer does not miss any contextual information on this subject.

Another powerful image that conveys the passage of time from first contact through genocide and removal to contemporary Indigenous issues is a visual mapping of North America. Yellowed antique maps of the Americas overlap, then the outline of the United States with

“100%” enclosed in it transfers into “1%” as pinpoints on the map show where Indigenous populations now live within those original borders. Erdrich states, “A bit pre-occupied, we original 100% who are also 1% more or less.” The notes at the end of the poem also tells the reader that the 2010 census revealed that Indigenous peoples made up less than 1% of the population. Erdrich leaps from pre-contact lands and populations to now diminutive contemporary populations of Indigenous peoples as her voice echoes and resounds and the map images shift to an animated city-scape. This data informs non-Native audiences of the extreme displacement of Native populations and presents Native audiences with a visualization of “occupation” of their lands they may already be all too familiar.

Erdrich explains contributing factors to continuously decreasing Indigenous populations and loss and exploitation of Native lands. Erdrich reads, “Simply distracted by sulfide emissions tar sands pipelines foster / care polar bears hydro-fracking.” Environmental concerns are closely linked with Indigenous issues because Indigenous lands are targeted by capitalism for their value in natural resources and not respected for their spiritual, economic, and traditional value to Indigenous peoples. The notes at the end of the poem again spells out these factors more clearly for unaware audiences. It states, “As the Occupy movement took hold, indigenous groups continued to struggle to protect our homelands from imminent threats such as the tar sands in Canada and its Keystone pipeline . . . This era of alternative energy has become the new land grab, the new water grab.” Erdrich refers to stolen Native lands and pollution of the environment, especially water, which began upon first contact and still remain contemporary issues, unfortunately. Erdrich lists a few specific examples such as the Keystone pipeline, which drew large media attention.

Erdrich continues to highlight contrasts between Indigenous protest culture and mainstream protest culture and conveys the privileges of dominant culture protest. Images of birch bark homes over city sidewalks appear in the video once again as Erdrich states, “Occupy Occupy Worked for the 99 / Occupy Re-occupy Alcatraz and Wounded Knee.” Earlier, the Occupy Wall Street movement was compared to Indigenous protests through images of New York City and newspaper articles and the birch bark homes covering city streets. Now, Erdrich utilizes the birch bark homes as she discusses a “re-occupation” of Alcatraz and Wounded Knee. Photographs of both of these Native protests flash over the screen. Erdrich seems to question if occupation protests work for “the 99%” why can’t they be effective for “the 1%” without dominant culture inciting violence toward their brown bodies? During the occupation of Wounded Knee, multiple Native American activists were shot and killed, and a couple of U.S. marshals were also wounded. The occupation of Alcatraz ended because Native American protesters were forcibly removed by the U.S. government. Both of these occupations attracted global media attention, enhancing visibility of Native American protest and issues, but this attention also sought to justify violence toward Native American people and represent them as unruly and dangerous. Regardless, the occupation of Alcatraz and Wounded Knee mark impactful Native protests in the history of the United States, while also demonstrating that protests performed by people of color in the United States are always seen as threatening and protests by white people are regarded as peaceful. This mentality of white vs. brown and black protests remained during the Standing Rock protest where police and military violence ensued. Police used tear gas, pepper spray, tasers, and other weapons against protesters; one woman was shot in the eye and another nearly lost her arm (Wong, Levin).

After Erdrich reads her “notes” at the end of the poem, the credits roll as debris floats through the brown, brackish water of a river also shown at the beginning of the video poem. This pollution is represented as a perpetual cycle. As the credits play and Erdrich acknowledges her collaboration with various Native American artists, Margaret Noodin, Ojibwe poet and scholar, sings John Lennon’s hit “Imagine” in the Ojibwe language Anishinaabemowin. This is another intentional act of inserting a Native American voice in place of a white male artist, in this case Lennon. This song is internationally popular, and most audience members watching the video poem will be familiar with its melody. Different audiences have different experiences and emotions associated with the song, but the choice of “Imagine” leads to a shared moment as the sound of the song is still recognizable even as it is sung in the Ojibwe language

Ultimately, “Pre-Occupied” does not only trace instances of activism cross-culturally, it serves as a powerful example of digital activism as a piece of art itself. This video poem occupies the internet and the viewer. It contests stereotypes of Indigenous peoples and honors activist efforts while creating its own unique form of activism in its own digital space and world. Erdrich expresses agency over the space in which she shares her work, but leaves room for others to make meaning and contribute to her art, creating Indigenous futures collaboratively through the change wrought by this activist poetry’s reaching a worldwide audience.

Kathy Jetñil-Kijiner’s “Fishbone Hair” and “Rise: From One Island to Another”

According to her website, Kathy Jetñil-Kijiner is a poet and performance artist from the Marshall Islands. She became well-known across the globe after her 2014 poetry performance at the United Nations Climate Summit. She has published one collection of poetry, *Iep Jāltok: Poems from a Marshallese Daughter*, and many online video poems and performance poetry videos through her WordPress blog and now her own website.

Jetñil-Kijiner's roles as poet and activist intermingle. One of her modes of activism is her poetry, and her poetry is pointedly political by raising awareness about her homeland. Her website informs users that she is also the founder of a non-profit "dedicated to empowering Marshallese youth to seek solutions to climate change and other environmental impacts threatening their home island." Jetñil-Kijiner states that her "poetry mainly focuses on raising awareness surrounding the issues and threats faced by [her] people. Nuclear testing conducted in our islands, militarism, the rising sea level as a result of climate change, forced migration, adaptation and racism in America." Jetñil-Kijiner carefully curates her own definitions of herself and her work on her own digital platform.

Jetñil-Kijiner's poetry is deeply rooted in the Pacific Islands. Climate change has impacted the islands of the Pacific and produced some of the first climate change refugees around the globe. With climate change refugees comes language loss and diaspora as well. In her article about the impact of climate change on Sulawesi (an Indonesian island west of Borneo that has experienced several tsunamis caused by earthquakes induced by climate change), Anastasia Riehl writes that "while approximately 7,000 languages are spoken in the world today, only about half are expected to survive this century," and a large contributing factor to language loss is climate change's pushing of Indigenous peoples from their homelands. Riehl studies the linguistic diversity of Sulawesi and notes that "moving from one bay or valley to another often means entering a different linguistic community. The people living at the mouth of the long, narrow bay, where the tsunami's waves first began to gather force, speak a different language than the people living at the base of the bay, where those 20 foot waves stormed inland." First, colonization displaces Indigenous peoples, and then climate change creates more refugees. The impacts of both colonization and climate change effect Pacific Islanders in countless ways.

In the Marshall Islands specifically, nuclear testing and climate change are two major issues that are also closely linked. Jetñil-Kijiner responds to these topics in her poetry. Ahlgren et al. write that “in the post-WWII period, the US tested most of its high mega tonnage nuclear weapons in the Marshall Islands, resulting in population relocation and ensuing dependence on imported foods” (70). Nuclear testing produces environmental devastation and widespread health issues. As Ahlgren et al. concur, relocation becomes unavoidable, and food sovereignty and safety begin to decline. In 2012, “the National Oceanic and Atmospheric Administration released Global Sea Level Rise Scenarios for the United States National Climate Assessment, which predicts with 90% confidence that the global mean sea level will rise between 0.2m (8 inches) and 2.0m (6.6 feet) by 2100.4” for the Marshall Islands (Ahlgren et al. 70). Emissions contribute to sea level rise and “for Northern Marshall Islands the projected sea level rise by 2090 will be 15-47cm (7.1-18.5 inches) for a low emissions scenario and 22-62cm (8.7-24.4 inches) for a high emissions scenario” (Ahlgren et al. 70). The long term impacts of colonization have direct links to climate change and the health of the Pacific Islands and its peoples.

Jetñil-Kijiner takes a unique approach to discussing the impacts of colonization and climate change on her homeland, the Marshall Islands. There are many forms of art that draw attention to climate change concerns. Christopher Volpe writes that the “longstanding relationships between science, art, and nature are shifting” (614). One of the reasons the relationship between science and art are shifting is due to technology and media advancements. One of Volpe’s examples of “fruitful integration of art and arctic science” is the Extreme Ice Survey (EIS)” which “is a long-term photography program” (617). Volpe writes, “Since 2007, this team of researchers has been giving ‘visual voice’ to the changing ecosystem. Twenty-seven Nikon cameras brood over thousands of miles of glaciers in Antarctica, Greenland, Iceland,

Alaska, Austria, and the Rocky Mountains” (617-618). This photography project is one way to give a voice to the environment. Poetry is another powerful tool to the otherwise seemingly voiceless environment. Sam Illingworth and Kirsten Jack examined about a study regarding poetry and climate change. They write:

By working with elderly community groups, Miller and Brockie (2015) demonstrated how analysing poetry can help to enhance understanding of unique experiences during a disaster, and also highlighted the potential to engage a wider audience of policymakers. Poetry has the potential to give people a voice, and to allow for meaningful dialogue to be developed between relatively disparate groups of people. Might it also be a tool for discussing issues relating to climate change; creating an environment in which experts and non-experts can generate meaningful dialogue, through which the needs of the non-experts can be better expressed? (121)

The study found that many of the poems the elderly participants wrote demonstrated that their most pressing concern was not climate change, but also that they did not fully understand the complexities or science behind climate change or the global impact (Illingworth, Jack 126).

It is an interesting approach to gauge the understanding, or lack thereof, of issues like climate change by having a study group write poetry. In this project, I am fascinated by the impact that reading and viewing poetry and video poetry has on various audiences. Jetñil-Kijiner utilizes visuals, photographic/filmic images, and written and spoken poetry to convey the devastating effects of climate change and environmental destruction on the Marshall Islands. I will analyze how the video poems “Fishbone Hair” and “Rise: From One Island to Another” represent the changing world for Marshall Islanders and natives of Greenland from Jetñil-

Kijiner's collaborator Aka Niviâna's perspective, while also demonstrating that the circulation of these videos take place in and constitute their own digital poetic worlds.

Fishbone Hair

"Fishbone Hair" was published on YouTube February 29, 2016. It was uploaded by CMI Media Club. On her WordPress Blog, Jetñil-Kijiner introduces the video poem by writing, "This is a poem I wrote and dedicated to my 10 year old niece, Bianca Lanki, who passed away from leukemia. It is a mourning piece for her, but also discusses the connections between our legacies of nuclear testing and our current issues with cancer." This dedication and brief introduction unfolds the multiple layers of trauma caused by nuclear testing on the Marshall Islands. The video currently has 5,277 views, 51 likes, and 3 dislikes. It is unclear if those three users chose the dislike button because they disapproved of or did not enjoy the video poem or if they disliked the impact of nuclear testing on the Marshall Islands and were moved by Jetñil-Kijiner's message. This is one of the gray areas of YouTube as users utilize tools differently and there is not as uniform a function of the "Like/Dislike" and Comments section as some would assume. There is one comment from a user that simply says "RIP," referring to her late niece.

The video begins with a black background and scrolling white text that explains the purpose of the poem (Figures 6-7).

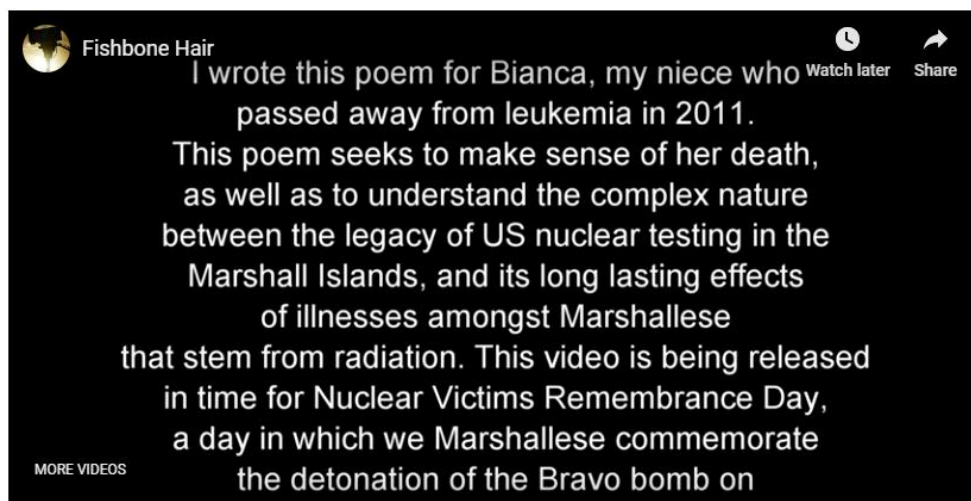


Figure 6: Video poem introductory text 0:13 “Fishbone Hair”

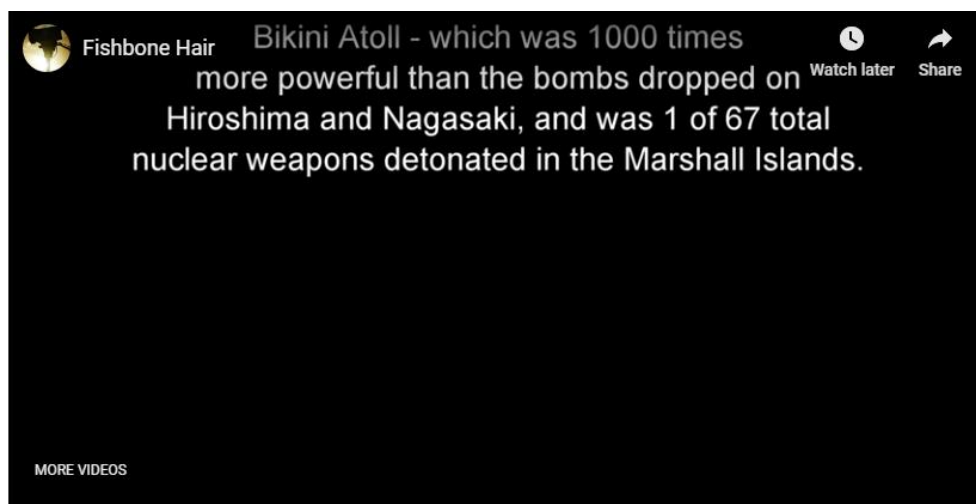


Figure 7: Video poem introductory text 0:27 “Fishbone Hair”

I find this opening text similar to Heid Erdrich’s “Notes” section of “Pre-Occupied” in the way it clearly explains context for the viewer and achieves a firm activist stance by representing the bomb on Bikini Atoll, posting the video in honor of Nuclear Victims Remembrance Day, while also relaying a personal loss representative of collective traumatic history. Many viewers may not be aware of the history of nuclear testing on the Marshall Islands, and Jetñil-Kijiner uses specific statistics to convey the sheer power of the bomb and destruction it caused, even in comparison to what the United States may proclaim as the most powerful atomic bombs, those

dropped on Hiroshima and Nagasaki. There is no sound or music, and Jetñil-Kijiner does not read this text aloud. The viewer is confronted with the silent, serious, and somber mood of the video poem immediately.

The composition of the rest of the video poem includes film of Jetñil-Kijiner standing in front of a black background performing her poem, black and white family photographs of her niece Bianca, film of nuclear explosions, and other related subject matter photographs like fish bones. Jetñil-Kijiner faces the camera directly and reads her poem. Her performance of the poem instead of visuals like animation demonstrates how deeply personal the narrative of the poem is. One of the first few lines of the poem strikes a saddening image of “rolls and rolls of hair.” Jetñil-Kijiner refers to her niece’s hair in Ziploc bags as it fell out from her cancer treatment. She pauses after reading this line and then questions why her sister hid Bianca’s hair away.

One of the most powerful images in the video poem is a photograph of an X-ray (Figure 8). As two x-ray images fade in, transition, and fade out, Jetñil-Kijiner reads, “There had been a war / raging inside Bianca’s six year old bones / white cells staked their flag / they conquered the territory of her tiny body.” These metaphors are complex. Cancer colonizes Bianca’s body just as the colonization of the Marshall Islands and the nuclear testing still impact inhabitants of the islands. Bianca embodies the trauma of the islands and bombing sites.



Figure 8: Second X-ray 1:14 “Fishbone Hair”

Jetñil-Kijiner also alludes to the United States government’s attempt to cover up the negative health effects of the nuclear testing when she describes fishermen ignoring the explosions and returning home. She speaks about how the fishermen were told that the fish were not impacted by the testing and that the seafood was fine to eat. Jetñil-Kijiner transitions from videos and images of fish and fish bones to human bones and marrow to demonstrate how consuming radiation through seafood led to cancer and other fatal health issues. Michele Keown argues that “Jetnil-Kijiner’s work exposes the long-term legacies of nuclear testing from the Cold War era to the present day, by exploring the intergenerational medical and socio-economic problems experienced by Marshall Islanders both within the archipelago and further afield in Hawai‘i and the continental United States” (930). “Fishbone Hair” specifically discusses her niece’s leukemia, but the viewer could also consider the socio-economic impacts through the lens of the fishermen in the video poem as well.

Bianca's embodiment of the radiation and environmental and health-related trauma, though heart-breaking, also demonstrates the power of the body as a vessel of stories and knowledge. Matt Matsuda uncovers how contemporary genetics are actually a much older form of Indigenous knowledge. Matsuda writes, "What is today called genetics is an old knowledge, carried through pedigrees, genealogies, and aristocracies and dynastic states around the world and across millennia. Pacific Islanders famously knew this through their own bloodlines, as well as through sophisticated practices of animal husbandry and horticultural variation" (53). I integrate this study of genetics into my discussion of the poem because I see Jetñil-Kijiner wrestling with these meanings of relation and generation. Bianca is her niece by blood. Bianca is also an ancestor of the waters of the islands, but by consuming its resources and food and breathing in the air she becomes ill, thus embodying the natural world's contamination.

"Fishbone Hair" was written to mourn a young girl's death, but through mourning Jetñil-Kijiner also reaches a celebration of Bianca's life and honors the battle of Bianca's mind, body, and spirit which contended with her cancer brought on through colonization and careless nuclear testing. Jetñil-Kijiner writes her niece's legacy into the future, into print poem, and into the digital world where others can hear her story, become knowledgeable about nuclear testing, ask questions, honor Bianca, and maybe even take action to advocate for survivors of this injustice.

So much of the screen time of the video poem features Jetñil-Kijiner's camera-facing body to demonstrate her own embodied storytelling. Bianca lives through her aunt's memory and her stories, the hidden devastation of Bikini Atoll dwells and festers within Jetñil-Kijiner's body, and her physical and digital activism permeate through the screen. Jetñil-Kijiner shares a Chamorro story about women "hacking off their/long and black as the night sky hair" by

weaving their hair “into a massive magical net” to stop a monster and save their island (Figure 9).



Figure 9: Jetñil-Kijiner discussing the Chamorro legend 2:40 “Fishbone Hair”

The screenshot above shows Jetñil-Kijiner telling the story of the giant “monster” fish as white text from the poem appears on the screen. The words appear one-by-one as she reads the poem. This story shares how hair removed from the body can save a whole island. Making a direct connection to the bags of Bianca’s hair, Jetñil-Kijiner states that Bianca’s “rootless fishbone hair” can now catch ash, star, and the moon. Bianca is heroic like the women who created a net with their own hair to save the island.

Hessa Alghadeer argues that “through merging poetic text with digital image, we are likely to begin negotiating the semiotic possibilities that lie behind the act of interpreting text-image, essentially responding to the question, ‘what do we see when looking at a portrait of ourselves?’” (91). For Marshall Islander audiences, Jetñil-Kijiner may certainly be asking this question of what they see when interrogating the impacts of the United States government in their islands and when honoring both survivance and loss. For other audiences, Jetñil-Kijiner

also seems to be asking why and how these injustices could ever occur, why they keep occurring, what it will take for people to speak out, and when for the perpetrators will take ownership and repair the tragic consequences.

Rise: From One Island to Another

In the video poem “Rise: From One Island to Another” Jetñil-Kijiner and co-writer Aka Niviâna draw attention to the impact of climate change on two different Indigenous homelands across the globe. Described as a “poetic expedition” by 350.org, “Rise: From One Island to Another” is a visually stunning text that draws connections between “realities of melting glaciers and rising sea levels.” Kathy Jetñil-Kijiner and Aka Niviâna met, wrote, and edited the poem “Rise” the day before beginning filming and producing the video. Aka Niviâna is from Kalaallit Nunaat (Greenland). The rest of the production team as described on the 350.org website includes Dan Lin, Nick Stone, Rob Lau, and Oz Go. All those involved in this video poem collaborate to create a transnational dialogue about climate change. “Rise: From One Island to Another” was uploaded by Mainspring Media on Vimeo on September 12, 2018. Vimeo is designed differently than YouTube and does not have a “dislike” button. Currently in early 2021, the video has 48.4K views, 241 likes, and 21 comments. It has been published widely on other websites and on social media as well. This video poem has achieved more visibility and views than “Pre-Occupied” or other video poems of Jetñil-Kijiner’s like “Fishbone Hair.” I will include some of the comments from the comment section later in my discussion of the video’s reach to different audiences.

Before I delve into the video poem itself, it is important to discuss the curation of the 350.org webpage further and its purpose and goals. The webpage describes the video poem as “an invitation to take a few minutes to watch this film, unplug from your daily distractions,

immerse yourself in the beauty of our shared home, and let the poetry heal.” I appreciate the sentiment of being able to relax and enjoy the beauty of poetry, but find that this invitation may skirt around the cultural and political context. It is possible that the designers of the page want to entice viewers instead of including a statement about the politics of the poem, but the last few words about the power of poetry to heal is important. The webpage also has videos about the process of making the video poem from the technical and safety aspects of trekking across glaciers to a description of the ethos of the project.

Kathy Jetñil-Kijiner explains how she usually grounds her poems in legends in the webpage section about the process and legend behind the poem. For “Rise,” Jetñil-Kijiner researched “Ao Aorōk In Iōkwe,” which is a legend “from Ujae that was transcribed by Heynes Jeik. The legend features sisters from Ujae who loved and respected each other very much.” She found this legend appropriate because the poem and performance is about a kind of sisterhood between Niviâna and herself and their shared plea for their homelands. Niviâna and Jetñil-Kijiner refer to each other as “sister of ice and snow” and “sister of ocean and sand” throughout the poem. All of the explanatory and transparent information about the making and meaning of the poem and video poem and the descriptions of the collaborative team work lend to an accessible work of art for viewers. Poetry has often historically been considered an inaccessible form of literature. This structure refuses an elitist or exclusive air. It is clear that this video poem is for anyone and everyone who will listen, with a special nod to Indigenous Marshall Islanders and Greenlanders by displaying the beauty, but also decaying land and seascapes, and urging viewers to join the fight against the contributing factors to climate change.

The composition of the poem allows viewers to embody and inhabit the poem and the locations shown in various ways. The video poem features instrumental music that crescendos at

more urgent moments of the poem, lending to emotions of empathy and connectedness to the plights of Niviâna and Jetñil-Kijiner for their homelands. Film transitions from the Marshall Islands to Greenland throughout the video, drawing connections among the communities and natural environments shown (Figures 10 & 11).



Figure 10: Aelon Kein Ad Marshall Islands 05:17 “Rise”



Figure 11: Kalaakit Nunaat Greenland 01:42 “Rise”

Viewers may feel themselves wading in the waves of the Pacific, witness the frigid Greenlandic air on their cheeks, smell the salty air, and see a glacier slowly receding as it melts. It is a multi-sensory experience. Bill Endres writes about how neuroscientists have recognized far beyond five senses, roughly twenty-two to thirty-three, and argues that these senses “play significant roles” and “do not work in isolation” when reviewing a manuscript (85). Further, “viewing digital images generates knowledge about the body in relations to the monitor, keyboard, and mouse” (Endres 85-86). Therefore, viewers of the video poem (the manuscript or text, in this case) are layering their senses of their physical environment—phone screen, computer, i-pad—and their digital environments—enraptured within the world of the video poem—as they embody multiple spaces at once. In many ways, viewers are engaged in a world within a world and amply aware of both.

Both Jetñil-Kijiner and Niviâna narrate the poem, switching back and forth between and during stanzas, sometimes speaking together. Both of their homelands are visually honored and they also give each other gifts; Jetñil-Kijiner presents shells and Niviâna presents rocks (Figure 12). While both women share gifts, they also share stories and legends. The poem is another gift Jetñil-Kijiner and Niviâna shares with their audience. The audience/viewer brings their own contributions of willingness to listen, their own knowledge and experiences, and their ultimate feedback after watching and listening.



Figure 12: Gifts of shells and rocks 03:53 “Rise”

Niviâna shares the story of a woman who is guardian of the sea. She states, “When we disrespect them / she gives us what we deserve, a lesson in respect. / Do we deserve the melting ice? / the hungry polar bears coming to our islands.” Niviâna states that the guardian of the sea reacts when humans disrespect the sea, but questions if those who advocate for the water and if other innocents like animals deserve the ramifications. Niviâna and Jetñil-Kijiner implore the audience: “Let me show you/airports underwater/bulldozed reefs, blasted sands.” Elizabeth DeLoughrey argues that Jetñil-Kijiner’s poetry “articulates the imperative to both witness and testify to a dynamic, changing Earth” (1). “Rise” expresses this same imperative and both Jetñil-Kijiner and Niviâna implore viewers to acknowledge the devastating impacts of climate change.

Hessa Alghadeer argues that “the remarkable aspect of collage poetry is its fusion of the verbal and visual and the abstract and concrete materiality of the text itself. In this sense, it juxtaposes a selection of words, phrases . . . and animations to evoke expressive meanings” (94). The verbal and visual expressions in “Rise” combine with the film of the changing lands and seas of the Marshall Islands and Greenland to create a multimodal literary text open for

interpretation from and collaboration with the audience in meaning-making. Jetñil-Kijiner and Niviâna standing side by side on a melting glacier and voicing the poem together is an empowering representation (Figure 13). They state, “may the same unshakable foundation / connect us, / make us stronger.”



Figure 13: Jetñil-Kijiner (left) and Niviâna (right) 04:09 “Rise”

Together, they state, “Let’s watch as Miami, New York, / Shanghai, Amsterdam, London, / Rio de Janeiro, and Osaka / try to breathe underwater.” They name these major cities to tell the audience that these beloved and highly populated cities will also be swallowed by the seas. Elizabeth DeLoughrey argues that Jetñil-Kijiner’s poem “Tell Them” “is a narrative of the ways in which culture is produced through women’s labor, their material and literary craft, as well as an imperative to a global audience to continue the story” (196). “Rise” also conveys the labor of Indigenous women as caretakers of the natural world transnationally, and the storytelling power of Jetñil-Kijiner and Niviâna. Jetñil-Kijiner and Niviâna reminds audiences that they cannot ignore climate change any longer as they read, “You think you have decades / before your homes

fall beneath tides? / We have years. / We have months.” As women who have witnessed the devastation of climate change very intimately in their own homelands, Jetñil-Kijiner and Niviâna tell viewers who do not feel as directly impacted that time is running out and everyone needs to take responsibility to remedy the issues.

It is also important to discuss the glacier as an agent, and not just a location or setting, in the video poem. In her book *Do Glaciers Listen?* Julie Cruikshank describes glaciers as “both animate (endowed with life) and as animating (giving life to) landscapes they inhabit” (3). Glaciers have often “inspired aesthetic forms passed on orally” in places like the Pacific Northwest (Cruikshank 5). So, what are the consequences when humans and corporations enact violent choices to harm glaciers? When Indigenous elders share glacier stories, the glaciers “appear to be sentient” (Cruikshank 69). Glaciers “are shape-shifters of magnificent power” and “signify transitional spaces” (Cruikshank 69). The glacier serves as a meeting place between Jetñil-Kijiner and Niviâna in the video poem. The glacier itself is transforming, but in a saddening way because it is melting, losing its animation and agency. Elders have “ritualized respect relations with [glaciers] and go to great lengths not to disturb them” (Cruikshank 69). When these glaciers are disturbed, they cannot give life to their surrounding environment any longer. This loss is profound.

When the video poem ends, white text over a black background states, “It’s time to rise” and then transitions to text stating, “Join the movement for a fossil free world. gofossilfree.org.” This text directly tells viewers one way to help: advocate for alternative energy and cut down on or cut out fossil fuel use individually. The website listed is another resource where viewers can go to learn more about and join the movement. The comments section of this video poem is very active. I argue that the conversations in the comment section contribute to the meaning and

urgency of the video poem because it reflects its reception and expresses what viewers felt and thought while and after watching. One comment thanks the artists for the video poem and expresses the viewer's willingness to listen learn and "Accept this truth" (Figure 14). Another comment suggests that the viewer has heard about climate change, but actually seeing images of the negative impacts is more powerful (Figure 15). This viewer also relays their emotional response by sharing that the video poem made them cry. Other viewers also responded in their own Indigenous languages which mirrors the transnational Indigenous conversation that occurs in the video poem.

Thank you. I listen and as always, I accept this truth. Thank you.

Figure 14: Comment from "Rise" on Vimeo

I 'know' all about this stuff. But this is the sort of thing that makes the present-day reality of climate change feel just that bit more real. Bitter-sweet beautiful. It made me cry.

Figure 15: Comment from "Rise" on Vimeo

These comments, among many others, are interesting to study because they both convey that viewers experienced a transformation or affirmation in their views and knowledge about climate change. The viewers demonstrate a willingness to listen, witness, and learn about rising seas, melting glaciers, and how these events deeply and complexly impact Indigenous communities on a global scale. The activist message at the heart of the poem strike readers visually, logically, and emotionally. The second comment pictured (Figure 15) also suggests that receiving a message through a multimodal art piece, in comparison to science-based news articles and images, may be more striking and visceral.

“Fishbone Hair” and “Rise: From One Island to Another” are both collaborative video poems in different ways from writing, production, and online viewing and commenting. “Rise: From One Island to Another” allows us to see the power of video poems through users’ comments and reactions since it has achieved more views and responses due to its production funded by 350.org. Jetñil-Kijiner’s video poetry, with a largely environmental focus, creates undeniable evidence about the power of multimodal poetry to engage and transform viewers. The same can be said about traditional print poetry, but readership and viewership only expands in the digital poetic world Jetñil-Kijiner collaboratively creates and participates in. Like with Erdrich’s work, this activist poetry—accessible to all on the World Wide Web—produces futures collaboratively with viewers.

Conclusion

Heid Erdrich and Kathy Jetñil-Kijiner, along with their many talented collaborators, are at the forefront of Indigenous futurist digital poetics. I predict that we will witness more hybrid and multimedia genres of Indigenous art and literature produced and posted in the digital world— and digital poetic world specifically—in the next decade. These collaborative digital poetic worlds allow more Indigenous and non-Indigenous users and viewers to encounter different texts and engage in conversations online. Indigenous communities translate their sovereignty to digital spaces and manifest a digital future presence. Collaborative digital poetics are forms of activism and inspire activism. Most importantly, collaborative digital poetic worlds are embodied, empowering, and educational and they create possible futures in the world we all live in IRL.

Conclusion: Where Worlds Collide

“The exchange between plants and people has shaped the evolutionary history of both. Farms, orchards, and vineyards are stocked with species we have domesticated. Our appetite for their fruits leads us to till, prune, irrigate, fertilize, and weed on their behalf. Perhaps they have domesticated us.”

-Robin Wall Kimmerer *Braiding Sweetgrass* (124)

“I exist outside the Western grid of time-space, in a space where my encounters with my Native brothers and sisters strengthens our connection to the cosmos. It is the air-spirit of the first world alive and kicking. The Internet knows this and celebrates it. Sometimes it takes advantage of it, yes. But of all of our contemporary modes of being, the Internet best respects the inability to qualify space and time, better than any schedule or watch.”

-Natanya Ann Pulley “Indigetechs” (99)

Humans and nonhumans craft Indigenous worlds together. This can be seen in traditional stories, practices, and art from the past to the present. Moving forward into Indigenous futures, and as Indigenous futurist works like Cherie Dimaline’s and Jennifer Foerster’s already suggest, reciprocity and balance are crucial in order to tackle issues like climate disaster. Just as Indigenous peoples strive to nurture nonhuman and natural environments like Robin Wall Kimmerer so beautifully articulates, Indigenous artists and users now find themselves responsible for building and claiming their own space in digital and virtual environments.

While I have explored YA speculative fiction, Anthropocene poetry, experimental fiction, a heritage center exhibit, and video poems, there are many other genres being utilized and created by Indigenous artists. According to Grace Dillon’s daughter, Beth LaPensée, Dillon encourages Indigenous authors and artists to employ their own interpretations of Indigenous futurisms (LaPensée). LaPensée is a scholar and video game creator. She has designed games like *Honour Water* and *Where Rivers Were Trails* that are educational and celebratory of

Anishinaabe culture. Her animation design is also usually 2D and comparable to the animation that Heid Erdich employs. Her social impact game *Survivance* “recognizes that tradition and technology are not opposing but connected—that we can represent, renew, and expand traditions using technology and media such as film, comic books, and video games” (264). Technology does not just include new multimedia tools and forums, though. As Angela Haas considers wampum as hypertext and defines “digital” as use of the fingers, Indigenous peoples have always used all available forms of technology to create and innovate. Therefore, as new technologies are developed, they should be considered forums of opportunity, not untraditional or counterproductive. What is most important for Indigenous innovation in virtual and digital worlds is accessibility and interactivity.

This is where the interspecies and digital and virtual worlds I have discussed significantly collide and intersect. Recording, reproducing, and experimenting with traditional knowledge is a form of futurisms that employs both TEK and digital or virtual worlds. LaPensée’s *Honour Water* is one example along with Kathy Jetñil-Kijiner’s ecological and climate-based video poems. These creators utilize traditional environmental knowledge and seek to educate broad audiences through interaction. In fact, all of the works I have discussed combine traditional knowledge, cultural continuance, and a sense of virtuality in some way whether they take readers on literary journeys, on a virtual amusement experience, through a multimedia work on an electronic screen, or through a museum exhibit. Some scholars and artists even utilize digital and virtual methodologies in order to preserve traditional Indigenous knowledge. Iseke and Moore collect community knowledge through digital recordings and film. Before they begin recording elders, they complete informed consent, offer them tobacco, and capture their voices sharing “Aboriginal, scientific, and local ecological knowledge” (26). These recordings are then passed

on to schools so young Indigenous students have access to this knowledge so that it is passed on. Education is an important form of Indigenous futurisms. Various forms of education for Indigenous youth and adults alike will pave futures for generations to come. We need to shatter the digital divide. Oral history projects need broad funding and resources. Preserving, distributing, and enacting traditional knowledge, in all modes, will continue to build Indigenous worlds and futures.

Works Cited

- 350.org. "Rise: From One Island to Another." *350.org*,
<https://350.org/rise-from-one-island-to-another/>. Accessed 5 Feb. 2020.
- Ahlgren, Ingrid, Seiji Yamada and Allen Wong. "Rising Oceans, Climate Change, Food Aid, and Human Rights in the Marshall Islands." *Health and Human Rights*, Vol. 16, No. 1, Climate Justice and the Right to Health (June 2014), pp. 69-80.
- Alghadeer, Hessa. "Digital Landscapes: Rethinking Poetry Interpretation in Multimodal Texts." *Journal of Arts and Humanities*, Vol. 3, No.2, 2014, pp. 87-96.
- Allen, Paula Gunn. *The Sacred Hoop: Recovering the Feminine in American Indian Traditions*. Beacon Press, 1986.
- American Addiction Center. "Alcohol and Drug Abuse Among Native Americans." Reviewed by Michael Kaliszewski. 19 February 2020. <https://americanaddictioncenters.org/rehab-guide/addiction-statistics/native-americans>. Accessed 27 January 2021.
- Atteberry, Stina. "Indigenous Posthumans: Cyberpunk Surgeries and Biotech Boarding Schools in *File Under Miscellaneous* and SyFy's *Helix*." *Extrapolation*, vol. 57, nos 1–2 (2016), pp. 96-115.
- Avalos Cisneros, Natalie. "Indigenous Visions of Self-Determination: Healing and Historical Trauma in Native America." *Global Societies Journal*, vol. 2, 2014, pp. 1-14.
- Barnett, Ashley. "Blake M. Hausman. *Riding the Trail of Tear*. Lincoln: University of Nebraska Press, 2011." *American Indian Quarterly*, vol. 39, no. 2, 2015, pp. 238-241.
- Baudemann, Kristina. "Indigenous Futurisms in North American Indigenous Art The Transforming Visions of Ryan Singer, Daniel McCoy, Topaz Jones, Marla Allison, and Debra Yepa-Pappan." *Extrapolation*, vol. 57, nos 1–2, 2016, pp. 117-150.
- Baxley, Tracy and Genyne Henry Boston. *(In)Visible Presence: Feminist Counter-Narratives of*

- Young Adult Literature by Women of Color*. Sense Publishers, 2008.
- Bernardin, Susan. "There's a River to Consider: Heid E. Erdrich's 'Pre-Occupied.'" *Studies in American Indian Literatures*, vol. 29, no. 1, 2017, pp. 38-55.
- Boast, Robin. "Neocolonial Collaboration: Museum as Contact Zone Revisited." *Museum Anthropology*, vol. 34, no. 1, 2011, pp. 56-70.
- Bould, Mark. "The Ships Landed Long Ago: AfroFuturisms and Black SF." *Science Fiction Studies*, vol. 34, no. 2, 2007, pp. 182.
- Brave Heart, Maria Yellow Horse, et al. "Historical Trauma Among Indigenous Peoples of the Americas: Concepts, Research, and Clinical Considerations." *Journal of Psychoactive Drugs*, vol. 43, no. 4, 2011, pp. 282-290.
- Brodock, Katharine. "Economic and Social Factors: The Digital (Activism) Divide." *Digital Activism Decoded: The New Mechanics of Change*, ed. Mary Joyce, Idebate Press, 2010.
- Cameron, Fiona and Helena Robinson. "Digital Knowledgescapes: Cultural, Theoretical, Practical, and Usage Issues Facing Museum Collection Databases in a Digital Epoch." *Theorizing Digital Cultural Heritage: A Critical Discourse*, edited by Fiona Cameron and Sarah Kenderdine, MIT Press, 2007, pp.165-191.
- Chakrabarty, Dipesh. "The Climate of History: Four Theses." *Critical Inquiry*, vol. 35, no. 2, 2009, pp. 197-222. *JSTOR*, www.jstor.org/stable/10.1086/596640.
- Champion, Erik and Bharat Dave. "Dialing Up the Past." *Theorizing Digital Cultural Heritage: A Critical Discourse*, edited by Fiona Cameron and Sarah Kenderdine, MIT Press, 2007, pp. 333-347.
- Cheah, Pheng. "What is a World? World Literature as World-Making Activity." *Daedalus*, vol. 137, no. 3, 2008, pp. 26-38.

- Cherokee Heritage Center*. Cherokee Heritage Center Website, 2016,
<http://www.cherokeeheritage.org/>. Accessed 1 September 2019.
- Clark, Adele and Donna Haraway. *Making Kin Not Population*. Prickly Paradigm Press, 2018.
- Conley, Robert. *The Cherokee Nation: A History*. University of New Mexico Press, 2005.
- Crawford, Grant. "Trail of Tears Art Show Bigger, Better Than Ever." *Tahlequah Daily Press*, 6 April, 2019, https://www.tahlequahdailypress.com/news/local_news/trail-of-tears-art-show-bigger-better-than-ever/article_317d8ea6-5467-5a8e-8c53-05e2a2485ff2.html. Accessed 8 October 2020.
- Cruikshank, Julie. *Do Glaciers Listen? Local Knowledge, Colonial Encounters, and Social Imagination*. UBC Press, 2005.
- Cunningham, James K., et al. "Alcohol use among Native Americans compared to whites: Examining the veracity of the 'Native American elevated alcohol consumption' belief." *Drug Alcohol Depend.* 1 March 2016, 160:65-75. doi: 10.1016/j.drugalcdep.2015.12.015.
- Daley, Linda. "Alex Wright's Fiction as World-Making." *Contemporary Women's Writing*, vol. 10, no. 1, 2016, pp. 8-23.
- Davis, Heather and Zoe Todd. "On the Importance of a Date, or Decolonizing the Anthropocene." *ACME*, vol. 16, no. 4, 2017, pp. 761-780.
- Deloria, Philip J. *Playing Indian*. Yale UP, 1998.
- Deloria, Jr., Vine. *Red Earth White Lies: Native Americans and the Myth of Scientific Fact*. Fulcrum, 1997.
- DeLoughrey, Elizabeth. *Allegories of the Anthropocene*. Duke UP, 2019.
- Dery, Mark. *Flame Wars: The Discourse of Cyberculture*. Duke UP, 1994.
- Diaz, Shelley. "Cherie Dimaline on Erasure, the Power of Story, and 'The Marrow Thieves.'"

- School Library Journal*, 2 November 2017, <https://www.slj.com/?detailStory=cherie-dimaline-erasure-power-story-marrow-thieves>. Accessed 26 August 2020.
- Dietrich, René. "Seeing a World Unmade, and Making a World (Out) of Remains: The Post-Apocalyptic Re-Visions of W.S. Merwin and Carolyn Forché." *Cultural Ways of Worldmaking: Media and Narratives*, Edited by Vera Nunning et al, pp. 329-354, De Gruyter, 2010.
- Dillon, Grace. Dillon, Grace. "Indigenous Scientific Literacies in Nalo Hopkinson's Ceremonial Worlds." *Journal of the Fantastic in the Arts*, vol. 18, no. 1, 2007, pp. 23-41.
- . "Introduction: Indigenous Futurisms, *Bimaashi Biidaas Mose, Flying and Walking towards You*." *Extrapolation*, vol. 57, nos 1–2, 2016, pp. 1-6.
- . "Introduction." *Walking the Clouds: An Anthology of Indigenous Science Fiction*. Edited by Grace Dillon. University of Arizona Press, 2012.
- Eco, Umberto. *Travels in Hyperreality*. Harcourt Books, 1986.
- Endres, Bill. *Digitizing Medieval Manuscripts*. Arc Humanities Press, 2019.
- Erdrich, Heid. "Pre-Occupied." *Curator of Ephemera at the New Museum for Archaic Media*, Michigan State UP, 2017, pp. 22-24.
- . "Pre-Occupied." *Heiderdrich.com*, 2018, <http://heiderdrich.com/video/pre-occupied/>.
- Farrier, David. *Anthropocene Poetics: Deep Time, Sacrifice Zones, and Extinction*. U of Minnesota P, 2019.
- . *Footprints: In Search of Future Fossils*. Farrar, 2020.
- Foerster, Jennifer Elisa. *Bright Raft in the Afterweather*. U of Arizona Press, 2018.
- . "Five Questions with Poet Jennifer Elise Foerster." *UA Press*, 28 March 2018,

<https://uapress.arizona.edu/2018/03/five-questions-with-poet-jennifer-elise-foerster>.

Accessed 9 August 2020.

Forte, Maurizio. "Ecological Cybernetics, Virtual Reality, and Virtual Heritage." *Theorizing Digital Cultural Heritage: A Critical Discourse*, edited by Fiona Cameron and Sarah Kenderdine, MIT Press, 2007, pp. 389-407.

Foster, Thomas, et al. "Studying the Past for the Future: Managing Modern Biodiversity from Historic and Prehistoric Data." *Human Organization*, vol. 69, no. 2, 2010, pp. 149-157.

Gan, Elaine, et al. "Introduction: Haunted Landscapes of the Anthropocene." *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene*. Edited by Elaine Gan, Anna Tsing, Heather Swanson and Nils Bubandt, U of Minnesota P, 2017, pp. 1-14.

Ganteaume, Cecile. "Americans: Major New Exhibition Asks, Why Do Images of American Indians Permeate American Life." *American Indian Magazine*, Fall 2017, <https://www.americanindianmagazine.org/story/americans-major-new-exhibition-asks-why-do-images-american-indians-permeate-american-life>. Accessed 6 February 2020.

Ghosh, Amitav. *The Great Derangement: Climate Change and the Unthinkable*. University of Chicago Press, 2016.

Goeman, Mishuana. "(Re)Mapping Indigenous Presence on the Land in Native Women's Literature." *American Quarterly*, vol. 60, no. 2, 2008, pp. 295-302.

Golding, Viv. "Museums, Poetics, and Affect." *Feminist Review*, vol. 104, no. 1, 2013, pp. 80-99.

Grantham, Bill. *Creation Myths and Legends of the Creek Indians*. UP of Florida, 2002.

- Green, Michael. *The Politics of Indian Removal: Creek Government and Society in Crisis*. University Nebraska Press, 1985.
- Grosz, Elizabeth. *Time Travels: Feminism, Nature, Power*. Duke UP, 2005.
- Grusin, Richard. "Introduction: Anthropocene Feminism: An Experiment in Collaborative Theorizing." *Anthropocene Feminism*. Ed. Richard Grusin, U of Minnesota P, 2017.
- Haas, Angela. "Wampum as Hypertext: An American Indian Intellectual Tradition of Multimedia Theory and Practice." *Studies in American Indian Literatures*, vol. 19, no. 4, winter 2007, pp. 77-100.
- Haraway, Donna. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin." *Environmental Humanities*, vol. 6, no. 1, 2015, pp. 159-169.
- . *The Companion Species Manifesto*. Prickly Paradigm, 2003.
- Hausman, Blake. *Riding the Trail of Tears*. University of Nebraska Press, 2011.
- Haveman, Christopher. *Bending Their Way Onward: Creek Indian Removal in Documents*. UNP - Nebraska, 2018. ProQuest Ebook Central, <https://ebookcentral-proquest-com.ezproxy.lib.ou.edu/lib/ou/detail.action?docID=5214852>.
- . *Rivers of Sand: Creek Indian Emigration, Relocation, and Ethnic Cleansing in the American South*, U of Nebraska P, 2016. ProQuest Ebook Central, <https://ebookcentral-proquest-com.ezproxy.lib.ou.edu/lib/ou/detail.action?docID=4228697>.
- Hayles, Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. University of Chicago Press, 1999.
- Healy, Jack and Adam Liptak. "Landmark Supreme Court Ruling Affirms Native American

- Rights in Oklahoma.” *The New York Times*, 9 July, 2020,
<https://www.nytimes.com/2020/07/09/us/supreme-court-oklahoma-mcgirt-creek-nation.html>. Accessed 12 Oct. 2020.
- Hearne, Joanna. “Indigenous Animation: Educational Programming, Narrative Inventions, and Children’s Cultures.” *Global Indigenous Media: Cultures, Poetics, and Politics*, ed. Wilson, Pamela and Michelle Stewart, pp. 89-108,287-305, Duke UP, 2008.
- . *Native Recognition: Indigenous Cinema and the Western*. SUNY Press, 2012.
- . “Native to the Device: Thoughts on Digital Indigenous Studies.” *Studies in American Indian Literatures*, Volume 29, Number 1, Spring 2017, pp. 3-26.
- Higgins, David. “Survivance in Indigenous Science Fictions: Vizenor, Silko, Glancy, and the Rejection of Imperial Victimry.” *Extrapolation*, vol. 57, nos 1–2 (2016), pp. 52-72.
- Hopkins, Candice. Making Things Our Own: The Indigenous Aesthetic in Digital Storytelling.” *Leonardo*, vol. 39, no. 4, 2006, pp. 341–344.
- Hopkinson, Nalo. “Introduction.” *So Long Been Dreaming: Postcolonial Science Fiction and Fantasy*, edited by Nalo Hopkinson and Uppinder Mehan, Arsenal Pulp Press, 2004, pp.7-9.
- Horton, Jessica. “Indigenous Artists Against the Anthropocene.” *ArtJournal*, 2017, pp. 48-69.
- Howe, Leanne. “Tribalography: The Power of Native Stories.” *Journal of Dramatic Theory and Criticism*, vol. 18, no.1, 1999, pp. 117-125.
- Huyssen, Andreas. *Present Pasts: Urban Palimpsests and the Politics of Memory*. Stanford UP, 2003.
- Illingworth, Sam and Kirsten Jack. “Rhyme and Reason-Using Poetry to Talk to Underserved

- Audiences about Environmental Change.” *Climate Risk Management*, vol. 19, no. 1, 2018, pp. 120-129.
- Iseke, Judy and Sylvia Moore. “Community-based Indigenous Digital Storytelling with Elders and Youth.” *American Indian Culture and Research Journal*, vol. 35, no. 4, 2011, pp. 19-38.
- James, Lynette. “Children of Change, Not Doom: Indigenous Futurist Heroines in YA.” *Extrapolation*, vol. 57, nos 1–2, 2016, pp. 151-176.
- Jetñil-Kijiner. “About.” *Kathyjetnilkijiner.com*, 2020,
<http://www.kathyjetnilkijiner.com/author-bio/>. Accessed 5 Feb. 2020.
- . “Fishbone Hair.” Uploaded by CMI Media Club, 29 Feb. 2016,
https://www.youtube.com/watch?time_continue=18&v=YnnjHqSNGEo&feature=emb_logo. Accessed 5 Feb. 2020.
- . “Kathy Jetñil Kijiner.” *WordPress*, <https://jkijiner.wordpress.com/video-poems/>. Accessed 5 Feb. 2020.
- . “Rise: From One Island to Another.” Uploaded by Mainspring Media, 12 Sept. 2018,
<https://vimeo.com/289482525>. Accessed 5 Feb. 2020.
- Johns-Putra, Adeline. *Climate Change and the Contemporary Novel*. Cambridge UP, 2019.
- . “The Rest Is Silence: Postmodern and Postcolonial Possibilities in Climate Change Fiction.” *Studies in the Novel*, Volume 50, Number 1, Spring 2018, pp. 26-42.
- Kantor, Isaac. “Ethnic Cleansing and America’s Creation of National Parks.” *Public Land and Resources Law Review*, vol. 28, 2007, pp. 40-64.
- Kent, Lauren. “European Colonizers Killed So Many Native Americans that it changed the

- Global Climate.” *CNN*, 2 Feb., 2019. <https://www.cnn.com/2019/02/01/world/european-colonization-climate-change-trnd/index.html>.
- Keown, Michelle. “Children of Israel: US Military Imperialism and Marshallese Migration in the Poetry of Kathy Jetnil-Kijiner.” *interventions*, vol. 19, no. 7, 2017, pp. 930–947, <https://doi.org/10.1080/1369801X.2017.1403944>.
- KickingWoman, Kolby. “Supreme Court Ruling ‘Reaffirmed’ Sovereignty.” *Indian Country Today*, 9 July, 2020, <https://indiancountrytoday.com/news/supreme-court-ruling-reaffirmed-sovereignty-4KQXSMEtIUW4lpBGSw6pzA>. Accessed 12 Oct. 2020.
- Kimmerer, Robin Wall. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants*. Milkweed, 2013.
- Kohn, Eduardo. *How Forests Think: Toward an Anthropology Beyond The Human*. U of California P, 2013.
- Kortegast, Carrie and Jonathan Davis. “Theorizing the Self: Digital Storytelling, Applying Theory, and Multimodal Learning.” *College Teaching*, vol. 65, no. 3, 2017, pp. 106-114.
- Kumar, Priya and Amit Baishya. "Introduction." *Planetary Solidarities: Postcolonial Theory in the Era of the Anthropocene and the Nonhuman*, Ed. Priya Kumar and Amit R. Baishya, Postcolonial Studies, (forthcoming 2021).
- Kwaymullina, Ambelin. “Walking Many Worlds: Aboriginal Storytelling and Writing for the Young.” *The Wheeler Centre*, June 20, 2014, <https://www.wheelercentre.com/notes/e221876968a8>.
- LaPensée, Elizabeth. “Interview with Elizabeth LaPensée on Indigenous Futures, Video Games, and Art as Resistance.” *Darrenlonefight.com*, 23 October 2019,

- <https://www.darrenlonefight.com/news/2019/10/23/interview-with-elizabeth-lapense-on-indigenous-futures-video-games-and-art-as-resistance>. Accessed 12 February 2021.
- . "Survivance as an Indigenously Determined Game." *AlterNative*, vol. 10, no. 3, 2014, pp. 263-275.
- LaPoe, Victoria L. and Benjamin Rex LaPoe II. *Indian Country: Telling a Story in a Digital Age*. Michigan State UP, 2017.
- Lawlor, Mary. *Public Native America: Tribal Self-Representations in Casinos, Museums, and Pow Wows*. Rutgers UP, 2006.
- Lewis, Simon and Mark Maslin. "Defining the Anthropocene." *Nature*, vol. 519, no. 1, 2015, pp. 171-180.
- Lovén, Svante. *Also Make the Heavens: Virtual Realities in Science Fiction*. Uppsala University Press, 2010.
- Lyons, Scott Richard. *X-Marks: Native Signatures of Assent*. University of Minnesota Press, 2010.
- Malm, Andreas and Alf Hornburg. "The Geology of Mankind." *The Anthropocene Review*, vol. 1, no. 1, 2014, pp. 62-69.
- Matsuda, Matt. "Genetic Drift: Pacific Pasts and Futures." *Pacific Futures: Past and Present*. Ed. Warwick Anderson, Miranda Johnson, and Barbara Brookes, U of Hawai'i P, 2018.
- McCloughlin, William. *Cherokee Renascence in the New Republic*. Princeton UP, 1986.
- Medak-Saltzman, Danika. "Coming to You from the Indigenous Future: Native Women, Speculative Film Shorts, and the Art of the Possible." *Studies in American Indian Literatures*, vol. 29, no. 1, 2017, pp. 139-171.
- Milekic, Slavko. "Toward Tangible Virtualities: Tangialities." *Theorizing Digital Cultural*

- Heritage: A Critical Discourse*, edited by Fiona Cameron and Sarah Kenderdine, MIT Press, 2007, pp.369-388.
- Murphy, Graham. “For Love of Country Apocalyptic Survivance in Ambelin Kwaymullina’s Tribe Series.” *Extrapolation*, vol. 57, nos 1–2, 2016, pp. 177-196.
- National Park Service. “Working with Native Americans.” *National Park Service*. 2 June 2016. <https://www.nps.gov/history/tribes/#:~:text=NPS%20pursues%20open%2C%20collaborative%20relationships,are%20now%20within%20national%20parks>. Accessed 2 February 2021.
- National Parks Traveler. “National Park Service Native American Affairs Liaison Named.” *National Parks Traveler*. 10 September 2020. <https://www.nationalparkstraveler.org/2020/09/national-park-service-native-american-affairs-liaison-named>. Accessed 2 February 2021.
- “Native and Indigenous Communities and Mental Health.” *Mental Health America*, 2020, <https://www.mhanational.org/issues/native-and-indigenous-communities-and-mental-health>. Accessed 8 Sept. 2020.
- Neumann, Birgit and Martin Zierold. “Media as Ways of Worldmaking: Media Specific Structures and Intermedial Dynamics.” *Cultural Ways of Worldmaking: Media and Narratives*, Edited by Vera Nunning et al, pp. 103-118, De Gruyter, 2010.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard UP, 2011.
- NOAA. “What is Glacial Isostatic Adjustment?” *National Oceanic and Atmospheric Administration*, 2019, <https://oceanservice.noaa.gov/facts/glacial-adjustment.html>. Accessed 9 Sept 2020.
- Pulley, Natanya Ann. “Indigetechs: The Original Time-Space Traveling Native Americans and

- Our Modern World Hyper-Pow-Wow.” *Western Humanities Review*,
- Rader, Dean. *Engaged Resistance*. U of Texas P, 2011.
- Raheja, Michelle. *Reservation Reelism: Redfacing, Visual Sovereignty, and Representation of Native Americans in Film*. U of Nebraska P, 2010.
- Reider, John. *Colonialism and the Emergence of Science Fiction*. Wesleyan UP, 2008.
- Richmond, Kia Jane. *Mental Illness in Young Adult Literature: Exploring Real Struggles Through Fictional Characters*. ABC-CLIO, 2018, ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/ou/detail.action?docID=5597794>.
- Riehl, Anastasia. “The Impact of Climate Change on Language Loss.” *The Conversation*, 26 November, 2018. <https://theconversation.com/the-impact-of-climate-change-on-language-loss-105475>. Accessed 9 August 2020.
- Romero, Chanette. *Activism and the American Novel: Religion and Resistance in Fiction by Women of Color*. U of V Press, 2012.
- Ryan, Marie-Laure. *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media*. Johns Hopkins UP, 2001.
- Scott, Conrad. “(Indigenous) Place and Time as Formal Strategy: Healing Immanent Crisis in the Dystopias of Eden Robinson and Richard Van Camp.” *Extrapolation*, vol. 57, nos 1–2, 2016, pp. 73-93.
- Short, Kathy. “Story as World-Making.” *Language Arts*, vol. 90, no. 1, 2012, pp. 9-17.
- Spivak, Gayatri. “Planetary.” *Paragraph*, vol. 38, no. 2, 2015, pp. 290-292.
- Suhr-Systema, Mandy. “Jeannette Armstrong’s *Slash* and the Indigenous Reinvention of Young Adult Literature.” *Studies in American Indian Literatures*, vol. 28, no.4, 2016, pp. 25-52.

- Survin, Darko. *Metamorphoses of Science Fiction*. Yale UP, 1979.
- Todd, Zoe. "Indigenizing the Anthropocene." *Art in the Anthropocene*, ed. Heather Davis and Etienner Turpin. Open Humanities Press, 2015.
- Trexler, Adam. *Anthropocene Fictions: The Novel in a Time of Climate Change*. University of Virginia Press, 2015.
- Tribunella, Eric. *Melancholia and Maturation: The Use of Trauma in American Children's Literature*. University of Tennessee Press, 2010.
- "Understanding Skawennati, the artist behind 'Avatars Aliens Ancestors.'" *CultureCanada*, 20 Dec. 2019, <https://culturecanada.co.uk/news/2019/12/20/understanding-skawennati-the-artist-behind-avatars-aliens-ancestors>. Accessed 28 Feb. 2021.
- Vamanu, Iulian. "New Mediations of Native Cultural Heritage: The Case of the TimeTraveller Machinima Project." *Annual Review of Cultural Heritage Informatics*, 2016, pp. 228-244.
- Van Dooren, Thom. *The Wake of Crows: Living and Dying in Shared Worlds*. Columbia UP, 2019.
- Vinyeta, Kirsten and Kathy Lynn. "Exploring the Role of Traditional Ecological Knowledge in Climate Change Initiatives." *USDA*, 2013, pp. 1-39.
- Vivienne, Sonja and Jean Burgess. "The Remediation of the Personal Photograph and the Politics of Self-Representation in Digital Storytelling." *Journal of Material Culture*, vol. 18, no. 3, 2013, pp. 279-298.
- Vizenor, Gerald. *Native Liberty: Natural Reason and Cultural Survivance*. University of Nebraska Press, 2009.
- Volpe, Christopher. "Art and Climate Change: Contemporary Artists Respond to Global Crisis."

- Zygon*, vol. 53, no. 2, 2018, pp. 613-623.
- Wang, Hansi Lo. "Native Americans on Tribal Lands are 'The Least Connected' to High-Speed Internet." *NPR*, npr.org, Dec. 6, 2018, <https://www.npr.org/2018/12/06/673364305/native-americans-on-tribal-land-are-the-least-connected-to-high-speed-internet>.
- Wastesicoot, Jeff. "Indigenous Moose Teachings Webinar." *Indigenous Climate Action*, 21 Oct. 2020. <https://www.facebook.com/events/1864234377064417/> . Accessed 21 Oct. 2020.
- Weaver, Roslyn. "'Smudged, Distorted, and Hidden:' Apocalypse as Protest in Indigenous Speculative Fiction." *Science Fiction, Imperialism and the Third World: Essay on Postcolonial Literature and Film*, edited by Ericka Hoagland and Reema Sarwal , 2010, pp. 99-114.
- Wildcat, Daniel. *Red Alert: Saving the Planet with Indigenous Knowledge*. Fulcrum, 2009.
- Wilson, Pamela and Michelle Stewart. "Introduction." *Global Indigenous Media: Cultures, Poetics, and Politics*. Duke UP, 2008.
- Williams, Daniel. "Coetzee's Stones: *Dusklands* and the Nonhuman Witness." *Safundi*, DOI: 10.1080/17533171.2018.1472829.
- Witcomb, Andrea. "The Materiality of Virtual Technologies: A New Approach to Thinking about the Impact of Multimedia in Museums." *Theorizing Digital Cultural Heritage: A Critical Discourse*, edited by Fiona Cameron and Sarah Kenderdine, MIT Press, 2007, pp.35-48.
- Whyte, Kyle Powys. "Our Ancestors' Dystopia Now: Indigenous Conservation and the Anthropocene." *Routledge Companion to the Environmental Humanities*. Edited by Ursula Heise, Jon Christensen, and Michelle Niemann, pp. 1-10.

Womack, Ytasha. *Afrofuturism: The World of Black Sci-Fi and Fantasy Culture*. Lawrence Hill Books, 2013.

Wong, Julia Carrie and Sam Levin. "Standing Rock Protesters Hold Out Against Extraordinary Police Violence." *The Guardian*, 29 Nov. 2016, <https://www.theguardian.com/us-news/2016/nov/29/standing-rock-protest-north-dakota-shutdown-evacuation>. Accessed 27 February 2021.

Yusoff, Kathryn. *A Billion Black Anthropocenes or None*. U of Minnesota P, 2018.