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Special Issue – Indigeneity and the Anthropocene II, guest edited by Martin Premoli and David Carlson

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CALL FOR SUBMISSIONS

Transmotion will publish new scholarship focused on theoretical, experimental, postmodernist, and avant-garde writing produced by Native American and First Nations authors, as well as book reviews on relevant work in Vizenor Studies and Indigenous Studies.
The broad use of Vizenor-created theoretical terms in many different academic fields (e.g. law, literature, anthropology, sociology, museum studies, etc.) highlights the fact that Vizenor Studies represents a significant interdisciplinary conversation within the broader field of Indigenous Studies. As such, the editors of *Transmotion* will look for submissions that do any of the following:

- Look at Vizenor's work directly, as well as the work of related authors and theorists in the field
- Employ Vizenor's theory to look at other writers
- Continue Vizenor's project of bringing together traditional indigenous knowledges and Asian or European continental philosophy
- Explore the inter-relation of image and text, art and literature, in Vizenor's work
- Contribute to recent developing conversations in contemporary Native American art and literature, in relation to questions of visual sovereignty, visuality, and ethics.
- Offer innovative, surprising, unexpected and creative critique of American Indian literatures or other creative arts
- Emphasize experimental, theoretical, and avant-garde Native North American work

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Editorial

It brings us great pleasure to welcome you to this second in our guest-edited double issue of *Transmotion* on Indigeneity and the Anthropocene. And with no apology for brevity, it once again brings *me* great pleasure to usher you straight on to Martin Premoli's second wonderful introduction to this issue… Congratulations to Martin and David for a deeply absorbing double issue. As ever, our team of review editors have put together a fantastic selection of reviews, and we are grateful as always to all those who work with us behind the scenes to put the journal together and make it a valuable contribution to the field. On this occasion, we particularly welcome our new Creative Editor, Steven Sexton of the University of Nevada, Las Vegas, and reviews assistant Bethany Webster-Parmentier of Europa-Universität Flensburg.

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David Stirrup June 2022
David Carlson
Steve Sexton
James Mackay
Bryn Skibo-Birney

Introduction: Indigeneity, Survival, and the Colonial Anthropocene

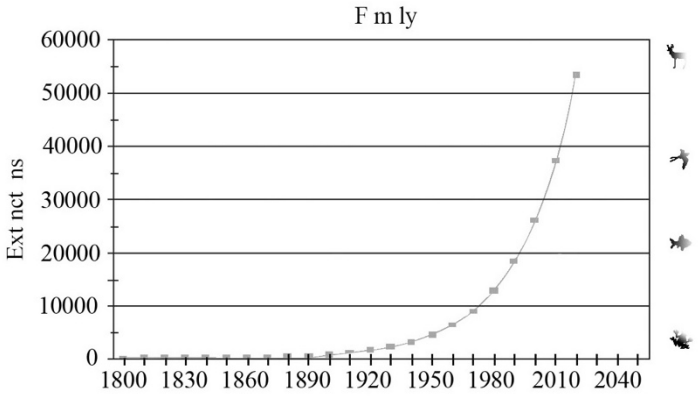
MARTIN PREMOLI

The past decade has given rise to a vast literature that explores the dynamics between climate justice and activism, environmental knowledges, and Indigenous storytelling in the colonial Anthropocene. A recent issue in the PMLA, for example, discusses how the "dialectic of Indigeneity" offers "an abiding refusal to surrender to either the limits or the logics of this ruined world" and "provides a map of untraveled routes rather than fallow destinations" (Benson Taylor 14). Moreover, in their 2017 essay, "Environmental Ethics through Changing Landscapes: Indigenous Activism and Literary Arts," Warren Cariou and Isabelle St-Amand "explore themes of environmental ethics and activism in a contemporary context in which resource extraction and industrialization are increasingly being countered by indigenized forms of thought and action" (9). And, to cite a final example, the collection *Ecocriticism and Indigenous Studies* "takes the pulse of current Indigenous artistic diversity and political expression" to examine how these forms "render ecological connections" visible for diverse audiences (Adamson and Monani 5). These various texts speak to a growing conversation amongst Indigenous scholars and allies about our increasingly urgent environmental crisis—and the capacities of artwork and cultural production for engaging with this dire issue.

Part I of this special issue pursued and expanded on several of the insights highlighted above. Our contributors examined the disruptive and empowering potential of Indigenous storytelling in the movement toward—and realization of—global climate justice. In this special issue's second installment, we continue this line of

exploration. To introduce this special issue's most pressing concerns, I'd like once more to turn to the poetry of Chamorro poet, scholar, and activist, Craig Santos Perez. As before, I will be focusing on one of his poems from his collection *Habitat Threshold*, which introduces questions of catastrophe, entanglement, kinship, survival, and healing—questions that are attended to by the essays that populate this second issue.

This poem, reproduced below, depicts the increasing frequency of species extinction in the colonial Anthropocene. This extinction event, known as the Holocene extinction, figures as the most recent mass extinction event of our earth's history. Scientists and scholars have suggested that mass extinction events share three common characteristics. Firstly, they are necessarily global in scope, and thus not determined or constrained by regional parameters or borders. Secondly, they occur when extinction rates rise significantly above background levels of extinction; or, in other words, they occur when the loss of species rapidly outpaces the rate of speciation. And finally, within a geological temporal framework, they occur across a geologically "short" period of time (the "event" might last for thousands of years, appearing to be quite slow from a human perspective). What's unique about the Holocene extinction, however, is that our present crisis is the first to have a human origin point. "Right now," Elizabeth Kolbert writes in her study on the topic, "we are deciding, without quite meaning to, which evolutionary pathways will remain open and which will forever be closed. No other creature has ever managed this, and it will, unfortunately, be our most enduring legacy" (88).[1]



Perez visually represents and complicates this "legacy" through several creative innovations. The graph's title offers us a useful starting point. Rather than use a more conventionally "scientific" word for his poemodel (such as "Species," for instance), Perez opts for a more intimate and familiar choice: "F m ly" (family). By referring to these non-human animals as family, Perez emphasizes the kin relations that generate and sustain life: "These are relationships of co-evolution and ecological dependency. […] These relationships produce the possibility of both life and any given way of life" (van Dooren 4). In other words, his poemodel recalls the importance of recognizing our co-dependence and profound intimacy with our non-human kin. In recognizing our rich entwinement with the web of life, Perez's graph also battles the perception that non-human animals are isolated "objects" for scientific analysis; and he destabilizes the tendency to understand species loss from a narrow, detached, statistical framework. The viewpoint presented by Perez's graph thus resonates with Sophie Chao and Dion Enari's observation that climate imaginaries from Indigenous communities in the Pacific "have always recognised the interdependencies of human and other-than-human beings" and it pushes us toward the "recognition that other beings, too, have rich and meaningful lifeworlds" (35, 38). This is a crucial recognition for surviving the Anthropocene, a time when the biocultural webs of life are being damaged and undone on a scale that has never been witnessed.

By dropping letters from the title, Perez's poem also gestures toward the broader losses in knowledge and understanding that accompany species extinction.[2] As Ursula Heise explains, animal extinction often functions as a "proxy" for the profound, surprising, and often intangible disappearances that accompany the loss of a species (23). This is due, in part, to the fact that species occupy crucial positions in our cultural and imaginative structures—when they disappear, the vital imaginative structures built around them are unraveled and eroded. Think, for instance, of the ways in which the death of coral reefs triggers anxieties over the disappearance of nature's beauty, of possible medical discoveries, and of crucial habitats for a stunning range of marine life.[3] Recognizing this allows us to more fully register the unexpected effects of species loss, and in turn, develop appropriate strategies for species preservation. Moreover, by dropping letters from these important reference points, we are pushed to more deeply and carefully engage with the information that is being presented to us—our gaze must linger on the graph in order to decipher and interpret its meaning.[4] Through this slowed down, dialectical interaction, fresh insights and understandings about the climate crisis can surface. Graphs like this one, Heather Houser explains, thus illustrate how new ways of thinking become possible when art speaks back to forms of epistemological mastery" (1-2). And without new ways of thinking, new relations may not be possible.

Perez's poemodel thus calls to mind Sophie Chao and Dion Enari's description of climate imaginaries, which are "spaces of possibility" and "ontological, epistemological and methodological openings for (re)imagining and (re)connecting with increasingly vulnerable places, species, and relations" (34). Climate imaginaries issue necessary calls for collective action that are driven by ethical, material, and political prerogatives, while simultaneously offering profound visions for inhabiting the world otherwise. In doing so, they demand a decolonial approach to the Anthropocene

and emphasize the absolute importance of recognizing Indigenous cosmologies, philosophies, and environmental knowledges.

The essays that follow offer inspiring engagements with Indigenous climate imaginaries. We begin with Conrad Scott's "'Changing Landscapes': Ecocritical Dystopianism in Contemporary Indigenous SF Literature." In this essay, Scott develops the term "ecocritical dystopia." In Scott's formulation, ecocritical dystopias diverge from more traditional dystopian fiction through their unique engagement with setting. Rather than imagine a future (even a near future) crisis to come, ecocritical dystopias are anchored in the real world, bringing us closer to crises that are already unfolding. As Scott puts it, "we are, after all, connected to stories through our relationships (however tenuous) with the real-world landscapes altered within the narratives." Scott develops this sub-genre of dystopian fiction through an analysis of Harold Johnson's *Corvus* (2015) and Louise Erdrich's *Future Home of the Living God* (2017), arguing that these texts depict societies extrapolated directly from the present, reminding us of the threat of environmental collapse.

Svetlana Seibel's "'Fleshy Stories': Towards Restorative Narrative Practices in Salmon Literature" introduces an archive of fiction from the Pacific Northwest focused on salmon—one of the most significant cultural symbols of the region. These "salmon stories" are organized around the "cultural and ecological significance of the fish for Indigenous nations," and they highlight the pervasive reach of the Anthropocene, which has materialized in numerous consequences for human-salmon interdependencies and kinship. Inspired by Todd and Davis's observation that "fleshy philosophies and fleshy bodies are precisely the stakes of the Anthropocene," Seibel examines how salmon stories create textualities of care aimed not only at criticizing the colonial economies, but at narratively restoring the threatened lifeworlds of both the

people and the fish." Seibel reaches this conclusion through a powerful reading of Diane Jacobson's *My Life with the Salmon* and Theresa May's *Salmon is Everything*.

"Healing the Impaired Land: Water, Traditional Knowledge, and the Anthropocene in the Poetry of Gwen Westerman" by Joanna Ziarkowska reads the work of Sisseton Wahpeton Oyate poet Gwen Westerman from the perspective of environmental humanities and disability studies. The essay draws on Sunaura Taylor's understanding that the use of "impaired" as a modifier demonstrates the extent to which Western preoccupation with and privileging of ableism—able bodies which are productive under capitalism—has saturated thinking about damaged environments. Through Westerman's poetry, Ziarkowska locates Indigenous survival in the preservation of traditions and attention to/care for the land that is polluted, altered, and in pain. She argues that, in Westerman's work, "'impairment' is an invitation to care and a construction (or rather the preservation) of a relationship with the land and its human, non-human and inanimate beings."

Emma Barnes situates her essay, "Women, Water and Wisdom: Mana Wahine in Mary Kawena Pukui's Hawaiian Mo'olelo" within recent conversations surrounding how the Anthropocene inaccurately unifies humans in their environmentally destructive behaviors and in their experiences of climate change, and overlooks the fact that the unequal effects of climate change disproportionately alter the lives of Indigenous peoples. Barnes provides a literary analysis of two short stories published consecutively by native Hawaiian writer Mary Kawena Pukui in her collection *Hawai'i Island Legends: Pīkoi, Pele and Others*. Barnes situates two narratives—"The Pounded Water of Kekela" and "Woman-of-the-Fire and Woman-of-the-Water"—as climate change fiction, and argues that they depict how drought and famine disproportionately affect Native women due to their cultural and social roles. Through her analysis, Barnes highlights "the resilience of native Hawaiian women in responding to a changing

environment, and to demonstrate the sacrifices Indigenous women make in their role as cultural bearers."

"The Crisis in Metaphors: Climate Vocabularies in Adivasi Literatures" by Ananya Mishra examines the role of Adivasi voices in climate change discourse and literary studies. While Adivasis are the perpetual subaltern in postcolonial studies, their voices offer a necessary critique of the global industrial complex, one that echoes calls for sovereignty issued by other Indigenous communities globally. Mishra unpacks this claim through an examination of Adivasi songs emerging from the particular geography of southern Odisha. In particular, she focuses on the usage of metaphors within early climate change discourse: "Indigenous literatures hold early warnings of the climate crisis in metaphors we do not yet center in climate discourse." These metaphors, Mishra suggests, serve as archives of interpretations of the climate crisis as already confronted by Indigenous communities within India.

Our final article, "Educating for Indigenous Futurities: Applying Collective Continuance Theory in Teacher Preparation Education" by Stephany RunningHawk Johnson and Michelle Jacob positions climate change conversations within the classroom. Drawing on their experiences as Indigenous university teachers, and from the experiences of their students who are training to become elementary and secondary classroom educators, RunningHawk Johnson and Jacob demonstrate how K-12 classrooms are vital sites for anti-colonial and Indigenous critiques of the settler-nation, neoliberalism, and globalization, all of which undermine Indigenous futurities while simultaneously fueling climate change. Their goal, they explain, is to "frame education as part of the larger project in which we can better understand our ancestral Indigenous teachings for the purpose of deepening our Indigenous identities and knowledges." This entails calling upon Indigenous peoples to work as teachers and leaders within educational contexts, and urging non-Indigenous allies to educate

themselves on how they might best ensure Indigenous resurgence, futurity, and "collective continuance."

Together, the contributions featured in this special issue remind us that "stories frame our beliefs, understandings, and relationships with each other and the world around us […] our lives are interwoven stories […] we live in an ocean of stories" (Kabutaulaka 47). And through their engagement with Indigenous storytelling, these essays posit new, vital directions for imagining Indigenous climate justice in the Anthropocene. Rather than foreground narratives of declension or demise in the context of anthropogenic climate change, these essays underscore the importance of telling stories that center self-determination, struggle, and solidarity. They emphasize, in other words, the importance of maintaining that better worlds are not only necessary, but possible. And in doing so, they open space for thinking and feeling our way through—and potentially beyond—the colonial Anthropocene.

Notes

[1] While humanity must reckon with its role in our present biodiversity crisis, we must also recognize that extinction is not simply an issue caused by an undifferentiated humanity, but it is a consequence of the expansion of capitalist social relations through European colonialism and imperialism, which drove what had previously been regional environmental catastrophes to a planetary scale.

[2] This strategy of dropping letters is re-deployed for both labels on the Y-axis: the one on the right reads "Ext nct ns" and the one on the left shows several creatures fading away.

[3] These anxieties take center stage in the documentary *Chasing Coral* by Jeff Orlowski. In its attempts at coral conservation, the film catalogues the many repercussions that accompany coral bleaching. For instance, one scientist describes coral reefs as the nurseries of the ocean—without them, up to twenty-five percent of marine life could vanish. This mass-death would then lead to food shortages on a global scale.

[4] This slowed engagement with the graph also allows for numerous affective responses to arise, such as shock, anger, grief, disgust, or fear.

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"Changing Landscapes": Ecocritical Dystopianism in Contemporary Indigenous SF Literature

CONRAD SCOTT

In a time when modern settler-invader colonialism continually pushes a hyper-extractive demand for fossil fuels, minerals, and water at the expense of landscapes, ecologies, and traditional land use, what are often matriarchically-driven Indigenous sovereignties offer different ecological models, from Standing Rock to Wet'suwet'en and beyond.[1] These movements work to ensure that the land and water is healthy for those living now and in the future—both for Indigenous peoples and otherwise.[2] Invasive, ecocidal modern human activities are particularly troubling given a 99% scientific consensus around anthropogenic climate change (Watts) or other human-exacerbated environmental problems like ocean acidification (Resnick). Our actions raise the question of what kind of environmental spaces will be left behind. What will a specific place look like after it has been changed by modern social processes; will affected landscapes ever fully return to previous states? Environmental disruptions cannot be averted by the very means by which they are being perpetuated, and hyper-extractive processes, energy policies, and industrial practices do not preserve the spaces and places of the world as they are organized into modes of greater efficiency. Such an approach will result in a future of devastating change to places we value, and acutely accentuate social and ecological disparities. Speculative narratives about the future, however, are key elements in imagining both the detriments to such "business

as usual" models and the potentialities of more environmentally-conscious societies emerging instead—especially ones modelling Indigenous teachings.[3]

In their 2017 "Environmental Ethics Through Changing Landscapes: Indigenous Activism and Literary Arts," an introduction to the *Canadian Review of Comparative Literature*'s special issue on Environmental Ethics and Activism in Indigenous Literature and Film, Warren Cariou and Isabelle St-Amand point to the fact that some "Indigenous… futurescapes are envisioned with intricate connections to pasts characterized by major upheavals and to presents shaped by" (14) what I call elsewhere "a sense of ongoing crisis" (Scott as qtd. in Cariou and St-Amand 14; Scott, "(Indigenous)" 77). A strong example of this is with the Residential Schools reborn in Métis writer Cherie Dimaline's 2017 novel *The Marrow Thieves*—which is also a novel of excessive urban populations and the dreamlessness of modern living exacerbated by climate change processes and the destructive, continued cultural and environmental devastations perpetuated by the self-serving desperation of the authoritarian, colonial state. But a work like Dimaline's *Marrow Thieves* is also one of hope for the future. Cariou and St-Amand articulate this drive to "create, envision, and dream Indigenous futures" (14) in terms of Vizenorian survivance; they remind us that, "[i]n many ways, grim, disturbing, and seemingly hopeless realities have inspired Indigenous narrative artists to investigate, make sense of, and create hope out of disruption and destruction" (Cariou and St-Amand 14). Despite the alteration of traditional living spaces, for instance, that accompanies environmental changes like those seen with increased storm frequency and intensity (Atleo 9), accelerating sea-level rise, and rampant desertification or other biome shifts, many contemporary Indigenous science fiction (sf) works imagine community adaptation and resilience into speculated futures, and thus resonate with what I coin "ecocritical dystopianism."[4] By grounding the social changes of a narrative written about the future in the environmental changes to an

understanding of place, writers of the ecocritical dystopia are more tangibly connecting imagined future events with the concerns of those living in the present, in the real world. Near-future events or processes are therefore no longer upcoming or even imminent, but instead feel immanent and ongoing. This subgeneric approach is particularly useful to Indigenous sf writers, who often harness the sense of a crisis that has not ended instead of "an upcoming one" (Scott, "(Indigenous)" 77) as fallout from the continued catastrophe following European Contact. Importantly, while the ecocritical dystopianism of Indigenous sf writers is deeply rooted in a connection to traditional place and society that has been adversely affected and will continue to change into the future, ecocritical dystopianism also encompasses the possibility for utopian irruptions, and thus fosters Indigenous hope for the future. To help illustrate the ecocritical dystopia in practice through the lens of contemporary Indigenous sf writing, further into this paper I will discuss the case studies of Harold Johnson's 2015 novel *Corvus* and Louise Erdrich's 2017 novel *Future Home of the Living God*.[5]

The "Ecocritical Dystopia": Changing Lands and Environments

The terminology of ecocritical dystopianism encapsulates my argument that a subgeneric inflection has developed in recent sf writing about the future that features dystopian themes and elements. In part, the wording pays homage to the "critical dystopia," for which Tom Moylan highlights the social drivers of "the hard times of the 1980s and 1990s" (182).[6] But critical dystopian works, as Ildney Cavalcanti argues, "depict fictional realities that are, to different degrees, *discontinuous* with the contemporary 'real' (although such realities are drawn *in relation* to, and as a critique of, the world as we know it)" ("Articulating" 12-13, my emphasis). As I explain elsewhere through a discussion about the real-world, tangible, lived, and ongoing effects of climate change, the critical dystopia is not a term that does the same work

because, while it certainly reflects how we might *feel* about what is a complex and often distressing problem, it does not focus on geographical and social changes related to an extrapolation of environmental shifts between the present and the future (Scott, "'Everything'" 409). Critical dystopian sf narratives involve a use of what we might call representative or symbolic places as critiques of a social moment, and therefore are not direct extensions of the real-world into the near-future. A strong recent example of this is the fictional Gibson in Anishinaabe writer Waubgeshig Rice's *Moon of the Crusted Snow* (2018), which is said to be a "small northern cit[y]" (Rice 20) in Ontario, Canada, "about three hundred kilometres to the southwest" (75) of the "semi-fictional" (Guynes) Gaawaandagkoong First Nation (Rice 139). Though the novel also names Toronto (75), a real-world locale, the fictionality of Gibson[7] is employed to stand in for *any* urbanized place in the region that might succumb to "chaos" (74) during the societal collapse occurring south of the Anishinaabe community of Gaawaandagkoong—rather than Rice making the choice of having a near-future crisis altering how we might understand the nature of a specific place recognizable in the present of the real-world. Ecocritical dystopianism, that is, instead demonstrates that contemporary dystopian fiction is employing ideas of places and geographies differently than in critical dystopias, or even in earlier dystopian works.

Settings connected with the real world are obviously present in earlier sf literature, and it is tempting to retroactively apply an ecocritical dystopian reading to some of them rather than to focus the genre on the present moment in sf writing. But while the example of E.M. Forster's 1909 novella "The Machine Stops" involves a futuristic society living beneath what are, in the narrative, the former places of the world, like Wessex and Brisbane, the focus is not on the environmental alterations to the landscape, but on the social alterations to the underground society. The difference with more recent, ecocritical dystopian fiction is that society's adaptations to the near-

future, physical changes in environmental conditions and landscapes are a main factor in the plot. The problems encountered in the ecocritical dystopia are *of* the real world for a reason, and no longer adhere to the Jamesonian explanation of "a 'near-future' novel [that] tells the story of an imminent disaster… waiting to come to pass in our own near future, which is fast-forwarded in the time of the novel" (*Seeds* 56). Instead, the ecocritical dystopia resonates with what Joshua Gunn and David E. Beard call *immanence*, with its "collapsing linear temporality onto a prolonged experience of the present" (Gunn and Beard 272). That is, the effect of the ecocritical dystopia is to bring us closer to the crises involved, rather than to underline an idea that catastrophe will happen sometime in the future: we are, after all, connected to these stories through our relationships (however tenuous) with the real-world landscapes altered within the narratives. Such sf writing relates to what Gerry Canavan outlines as "the reality principle that adheres to our real conditions of existence" when he describes Suvinian "cognitive estrangement" ("Suvin" xviii); instead of a narrative juxtaposing how we understand our geographical reality with a place and time that involves "science fictional difference" (xviii), like a story set on Jupiter, ecocritical dystopian texts fold the inherent "difference" into a connection with the present day. The ecocritical dystopia channels the reality principle of the dystopian now in formulating its ensuing future societies, environments, living concerns, and physical places.[8]

Ecocritical dystopianism parses our disharmony with our lived environments as an extrapolation of the present into the future. Since its modes of place-based environmental crises create a node for exploring political pressures, cultural shifts, and resource and infrastructure needs, among other categories, ecocritical dystopianism offers a conflation of the near or even further future with the time of the present. In this time of "global weirding" (Canavan and Hageman), with what Claire L. Evans calls a "need [for] an Anthropocene fiction," we are more acutely able to see the inequalities

reminiscent in colonial thinking: Rob Nixon opines that "the dominant mode of Anthropocene storytelling is its failure to articulate the great acceleration to the great divergence… It is time to remold the Anthropocene as a shared story about unshared resources" (Nixon).[9] The self-reflexivity of recent sf writing,[10] which includes Indigenous sf, indeed invokes such Anthropocenic issues,[11] and the ecocritical dystopia demonstrates that, at least sometime after the first critical dystopias, sf has been engaging with elements of realism in a very concentrated manner that entangles environmental concerns with socio-cultural processes. This generic form presents societies extrapolated directly and tangibly forward from the present, and insists that environmental imbalances are the root of social dystopia.

Indigenous sf writing often imagines modern human society as out of sync with the natural world, which echoes how Shelley Streeby argues that "people of color and Indigenous people use science fiction and other speculative genres to remember the past and imagine futures that help us think critically about the present" (5). One such example is with the extension of knowledge from the book found in Chickasaw writer Linda Hogan's *Solar Storms* (1994), which has "diagrams of plants" with "[a]rrows point[ing] to parts of them that were useful for healing, a root, a leaf" (256) and "symbols for sun and moon which depicted the best times of day to gather the plants" (257). The discovery of such a repository of experiential ecological understandings promises to extend cultural legacies, and echoes a call in many Indigenous sf narratives for a reconnection with the land. But in some of these narratives, traditional and modern Indigenous engagements with the land are complicated by alarming ecological degradation as current social processes increasingly drive future changes. *Solar Storms*, for instance, features a massive flooding as a "result of… damming" (334), and, "with the terrain so changed, the maps" from the book "would have been no use" (348); reengaging with what was once known about the landscape becomes

impossible. In another example, Laguna Pueblo writer Leslie Marmon Silko's *Almanac of the Dead* (1991) presents "prophecies [that] said gradually all traces of Europeans in America would disappear and, at last, the people would retake the land" (631-32). These prophecies offer an end to the ongoing impacts of colonialism, but also warn "that Mother Earth would punish those who defiled and despoiled her. Fierce, hot winds would drive away the rain clouds; irrigation wells would go dry; all the plants and animals would disappear. Only a few humans would survive" (632). Even in these prophecies, the damage wrought by human activities is drastic and potentially difficult to return from: survivance does not seem to be a guarantee.[12] Yet, while texts like Silko's, with its apocalyptic stone snakes, celebrate a return to where the non-Indigenous element is removed from what is now called North America, the genre is also divided. Spokane-Coeur d'Alene writer Sherman Alexie's "Distances" (1993) indicates a resurrection of older cultural elements from which no one really benefits—as does Dogrib (Tłı̨chǫ) writer Richard Van Camp's expanding "Wheetago War" narrative, if we read the overarching antagonist simply as the environmental return of a punitive, elder god aspect. But in a text like Thomas King's novel *The Back of the Turtle* (2014), which contains ecocritical dystopian elements, in coastal British Columbia, Fort McMurray, and Lethbridge, the very near-future permutations of current real-world environmental issues emerge, and water shapes the cultural and survival landscapes of local and regional communities. Despite some critical dystopian moments elsewhere in the text,[13] this proximity to the real-world is noteworthy because it suggests a sense of urgency not only in relation to the environmental catastrophes that occur, but in terms of the healing necessary. That is, the end of *Turtle* suggests that a world can be built anew, and thus a cultural return can occur—which are lessons applicable to those living in the real world and imagining forward into the future.

In similar ecocritical dystopias resulting from social and environmental imbalances, a focus on geographical remnants recognizable today allows Indigenous sf writers to further speculate about the nature of living spaces. Social dynamics affect and are affected by the alterations to places within such works, and the ecocritical dystopian body of fiction underscores how concerning the future is—not only within these imagined narratives, but also for those in the real-world present who have relationships with a sense of place. But ecocritical dystopianism also engages, in this context, with what Grace Dillon (Anishinaabe), the scholar of Indigenous speculative and science fictions, has coined "Indigenous futurisms": ecocritical dystopian Indigenous sf work is also involved in thinking forward in a manner that hopes for better futures. Both Erdrich's *Future Home* and Johnson's *Corvus*, though ecocritical dystopian narratives, ultimately imagine hopeful possibilities for communities learning to reengage with their environmental landscapes.

Ecocritical Dystopianism in *Future Home* and *Corvus*

Like Dimaline's *Marrow Thieves*, both Erdrich's *Future Home of the Living God* and Johnson's *Corvus* are indigenous sf novels that feature future climate change processes extrapolated forward from the present moment.[14] The first novel is partly set in a future Minneapolis, in an America where not only human offspring but the rest of the natural world seem to be devolving as part of a global weirding related to climate change, and a theocratic, authoritarian regime enforces bodily control over women still able to bear "regular" or "original" (Erdrich 245) human babies to term. But the protagonist's Ojibwe family also begins to reassert control over their traditional lands and to rethink human engagement with them. By imagining changes into the future, both *Future Home* and *Corvus* therefore comment upon how our modern society engages in disconnected ways with the land—such as with Johnson's parody of social attention

given to receding glaciers, where British Columbia mines "the last of the Columbia ice fields" to transport to Vancouver so "'it won't go to waste'" while others consume fossil fuels and spew greenhouse gases as they drive up to see "the last of the great glacier" disappearing "'because of climate change'" (Johnson 178). This is a narrative of sweeping social alterations as weather patterns and regional climates shift—producing a society of people aspiring to live in "sky cities," since "[a]t forty thousand feet there are no storms" (11). However, in both *Corvus* and *Future Home*, while climate changes occur from the time of the present, it is the accompanying social changes related to the resulting environmental and place-based alterations that indicate ecocritical dystopian elements.

Erdrich's *Future Home* is an interesting example of a text where the background of environmental changes is only briefly hinted at, but is also extrapolated in dramatic and tangible ways even unto the genetic re-ordering of flora and fauna—an alteration that begins to affect human progeny and, because of these changes, rapidly destabilizes "Western" society. Though the connection in the narrative is tenuous, the environmental disruptions are very likely tied to anthropogenic climate change, since "the fallout of events" is linked to the "first winter without snow, among other things," as well as the interrelated "political idiocies and wars and natural disasters" (Erdrich 9). In fact, this disappearance of winter weather emerges as the final focus of the novel, which is mostly organized through journalistic entries that a pregnant mother, Cedar Hawk Songmaker, aka Mary Potts (3), writes to her future "son" (265) amidst the irrupting flurry of biological alterations. The journal's final contribution is in February (265)—a somewhat unspecific marker that not only indicates a partial loss of a sense of time as nearly *all* other entries, starting on August 7th (3) of the previous year, contain a month and a date, but also helps articulate most clearly the last of three entries given after her son's birth on December 25th (264). This February contemplation considers

"the way it was before," when "the lake froze" (265), and before "the snow came one last time" when Cedar "was eight years old" (266); after, "the cold *didn't* burn your lungs" (266; my emphasis), "freeze the snot in your nose," "frost your eyelashes," or "hurt," and the "[n]ext winter, it rained" (266). But this change is also notably resonant with a specific sense of place extrapolated into the near future, as the very last line of the novel asks the son where he will be "the last time it snows on earth" (267)—reminding us that future changes will not be consistent globally.

Cedar's narrative of locale and region altering through climate, ecology, and biology is focused on what is now called Minneapolis and Minnesota (260),[15] though specific streets are renamed "overnight" under a theocratic, "joint entity," decentralized governmental amalgamation of the "United States Postal Service" and "the National Guard" that, "within some states" (94), maps "everything" by "'Bible verses'" (101). Ostensibly, this is a novel of what happens as Western society breaks down in the area and is reorganized through the control of an extreme faction somewhat à la Margaret Atwood's *The Handmaid's Tale* (1985).[16] But it is *also* a novel in which the "original treaty grounds" (Erdrich 227) of traditional Ojibwe land are reclaimed. Previously, as Cedar's step father-figure Eddy puts it, "like almost every other reservation, [theirs] was lost through incremental treaties and then sold off in large part when the Dawes Act of 1862 removed land from communal ownership" (213). The enterprising Eddy awakens from his previous nihilistic stupor and says he "'think[s] about seventy percent of [his] depression was [his] seventeenth-century warrior trying to get out'" (227). But, in organizing the reclamation of land, Eddy explains they are "not taking back … all [their] ancient stomping grounds," and are instead focusing on "the land within the original boundaries of [the] original treaty" (214).[17] Their efforts are, in fact, more geared toward what the community can accomplish, as Eddy "wants to make the reservation one huge, intensively worked,

highly productive farm" (226). After all, as Eddy puts it, Indigenous people "'have been adapting since before 1492 so [they will] keep adapting'" (28). This statement is the fundamental heart of the novel.

Though "church billboards" read "*End-time at Last! Are You Ready to Rapture?*" (13) early in the narrative, with the tribal renewal, altered use of the land, and efforts at adaptation, this ecocritical dystopia also uncovers the embedded utopian hope of the subgenre. The sign from which the novel takes its name[18] "is planted" "[i]n one enormous, empty field" that is "bare… fallow and weedy, stretching to a pale horizon" (13), and marks where ground-breaking will occur for one of the authoritarian, uber-religious pregnancy detention complexes called "'Future Home Reception Centers'" (90). The welcoming tone accompanying the advertisement of these centers, where, in a coup-state television broadcast, the cyberpunkesque Mother figure promises "chefs… waiting for" pregnant "Womb Volunteers to gestate… embryos" (90), is undercut by the reality of what are really just jails repurposed to house pregnant mothers and extract children from them as many times as possible. That is, as Cedar notes, "[a] sign above the entrance says Stillwater Birthing Center, but it is only a painted piece of canvas that covers Minnesota Correctional Facility Stillwater" (249)—a factor further adding to how a sense of place is altered in Erdrich's ecocritical dystopia. Tragically, and ironically, these centres result in the stifling of life, and the one where Cedar ends up is most probably where she dies alongside the many deceased mothers whose pictures come to adorn "the wall of martyrs" (254) in "the dining room" (253) and who are buried in the "vast field filling with tiny white crosses… for both mother and baby" (259). However, despite focusing on the dystopian fallout in this post-democratic America, the end of this novel of Indigenous Futurism shows both compassion for "the Big Knives, the white people" (227), who have "'all removed themselves'" to go "'back to the Cities'" (214), and celebrates a resurgence of "what

came before," even as it acknowledges what has been lost and can never be regained. As Dillon asserts, "[i]t might go without saying that all forms of Indigenous futurisms are narratives of *biskaabiiyang*, an Anishinaabemowin word connoting the process of 'returning to ourselves'" (10). Fittingly, the real "future home," past the text of Erdrich's narrative, is that which Eddy and his people are rebuilding on their traditional lands.

The rebuilding of traditional community and learning to live with the land and its ecologies is also important in Johnson's *Corvus*. Lessons about this are primarily delivered through the overarching textual fragments that both bookend the novel and progress the Trickster Raven's voice and agency in the narrative: with the first fragment before Chapter 1, which is told *about* Raven, there is a contemplation about his loneliness, a historicization of what humans have done to the "boreal" (7) forest, and a decision to re-engage with human culture. But the novel also demonstrates its ecocritical dystopian credentials immediately with environmental changes such as desertification and erratic, intensified weather, and specifically the changes to place that occur for real-world locales like Kenilworth, Illinois, Gladwyne, Pennsylvania (11), and La Ronge, Saskatchewan (16). With the latter, "too much nitrogen, too much heat," and "not enough species that ate algae" could mean that Lac La Ronge "would become a stinking green slough" (20) in the further future. In fact, there are socio-environmental alterations to several geographically-recognizable places in the near-future of the novel—including with how people in San Diego do not "come out in summer" but instead remain "huddled in air-conditioned spaces" while waiting "for a cool breeze off the Pacific," and "places like Phoenix and Houston" have become "completely empty" (16). Arizona, for instance, is "too late" in getting "its solar power projects up and running" while "sand and dust from the desert c[o]me on the hot wind" and people realize they cannot "live without water" (17). Later, in a nod to how regional climatic disruptions will vary, the "jet stream… dip[s] south" to bring "down

colder Arctic air" just as "warm wet Pacific weather move[s] in from the west," and instead of just "a heavy spring rain, with perhaps some localized flooding" (249), or "nothing more than the last visit of winter," an unexpected "heavy snowfall" (250) occurs in a time that only knows rainfall. This is a novel that catalogues not only continental socioenvironmental changes, but also those happening to specific regions and locales.

One of the main arcs of speculative future-history that we see in *Corvus* rests in memories of a North America generally drying out, the conflicts that arise, and a mass migration of many towards the North: "there were so damn many of them and more came from the south every day" (11). As the character Katherine says, "[s]he'd chosen La Ronge because La Ronge had water. She'd left Saskatoon because Saskatoon didn't" (176). La Ronge is near the 55th parallel within a swath of lake land, and roughly 343.58 km (213.49 mi) north-northeast of Saskatoon—certainly an area ripe with water. The South Saskatchewan River, which currently runs through Saskatoon, has its headwaters in the Rocky Mountains, and seemingly because of anthropogenic climate change in the narrative, "became the South Saskatchewan Creek and then… stopped flowing altogether" (177). Such drying up of water flows creates a situation in the past of the narrative that precedes Dimaline's use of the "Water Wars" in *Marrow Thieves*,[19] where America extracts freshwater resources from mostly Anishnaabe "lakes [and rivers] with a great metal straw" (24).[20] In *Corvus*, the colonially-named provinces Alberta and British Columbia are at each others' throats, but also Eastern Canada and Western Canada; in a parallel, in the United States, "[i]t wasn't so much Red States and Blues States, Democrat or Republican," "but a difference between dry states and wet states" (Erdrich 190). The continent is consumed by what are called the First and Second Intra wars. Yet Johnson also cleverly inserts satire when he first has people praying for "'[a] little rain, *PLEASE*, enough to settle the dust'" (176), then also features

the colonial province of British Columbia physically removing glacial remnants from the icefields of the Continental Divide while perpetuating modern society's climate change exacerbating activities. Ironically, the desire for rain is followed by a sense of regional change where "it… started to rain" and then "rained, and rained, and rained, until the Saskatchewan River flooded its banks and bridges washed away" as "people began to pray for the sun again" (178).

The outcome, even in La Ronge, is that the ecological cycle is disrupted and the land becomes mostly infertile. Though there are elements in the novel that are meant to lead these humans towards a more sustainable entanglement with the environment—life and death being parts of that conversation—still the majority of humans ignore or can no longer access the teachings involved. The La Ronge city lawyer George crash-lands while out flying his biotech, "three meters tall" (28) Raven-wingsuit Organic Recreational Vehicle (ORV), which repurposes cellular level material for human entertainment. This crash puts him in proximity with the camp of the "'medicine man'" (105) Two Bears, who attempts to teach George the city-dweller about living a fulfilling life.[21] The satisfaction of community building is also apparent in the character Isadore's memories (104-105) of coming to the multigenerational Two Bears Camp (76),[22] though he carefully acknowledges George's "'powerful world,'" which "'pulls people back'" (105). This futuristic, magnetic world is still paved with "*concrete*" (7), still ruled by the loopholes of modern legal systems, and still hierarchical, privileged, and capitalistic in the sense that social status means hoping to invest in condos "in the sky cities" (11). Tellingly, at the start of the novel, "George… needed three more good years" (11) of an "expected 12%" pay increase, "maybe even a bit more" (12)—which he does not get. It is still a world built on individualism and greed. But, in the novelistic structure, the later, bookending portion of Raven's narrative, despite the Trickster's decision to go "*back to the forest… before it's all*

gone" (277), still shows a progression, still portrays some hope as demonstrated through George, "*this one human* [Raven] *know*[s]," who is "*learning… starting to get it*"—as well as another character who "[t]*alks to*" the natural (and spiritual!) world (275). Raven says, "[o]*nce in a while I hear her pray for the earth*" (275), and there is also a hope "*that she's going to teach her kids to love the earth too*" (276). Notably, this sequence underscoring the importance of a natural life cycle where "*it all worked the way it was supposed to*," "*the wolves ate… buffalo*," and the ravens "*clean*[ed] *up after them*" before "*spread*[ing] *them around on the prairie*" (276) is also the only non-numbered chapter in the novel, and is denoted by the title, "*Said Raven.*" Here, even Raven's voice demonstrates progression in the narrative, since the earlier, distanced, story about the Trickster has become, by this end-point, a first-person monologue that, while somewhat skeptical, also contains hope for humanity. *Corvus*, like many novels featuring both Indigenous Futurisms and ecocritical dystopian elements, leaves the final lessons to be taken up by the reader and brought into the present of the real world.

Healing of and by Community

In *Why Indigenous Literatures Matter*, Daniel Heath Justice (Cherokee) concludes that he is given "hope that the future world will be an improvement on the one we've inherited, that different stories will mean different possibilities, that we can live, love, and imagine otherwise, and that we can do it together" (210). It is in this forward-imagining sense that much Indigenous sf aims for communal healing from centuries of settler colonial violence to not only Indigenous peoples, but also to the land, waters, plants, and animals—and not just a healing *of* community, but a healing *by* community. This is true of even narratives that we categorize as "dystopias" in following the word's Ancient Greek roots where "dys-" means "bad, difficult" (Montanari, "δύσ-") and

"topos" means "place" (Montanari, "τόπος"). The role of characters inhabiting such "difficult" landscapes—like those in the ecocritical dystopias of *Future Home* and *Corvus*—is to present narratives where it is possible to not only overcome, adapt to, or otherwise survive such conditions, but also where the conditions themselves have the potential of starting a healing process. Indigenous ecocritical dystopias, in particular, entangle the solutions for the characters with solutions for their lived places and environments.[23]

The example of King's *Back of the Turtle* also engages in an ecocritically dystopian fashion with realism through environmental changes to settings such as the city of Lethbridge and the Alberta tar sands. Here, the storyteller puts the onus of his teachings on those listening, on those who are asked to carry forward community-making into the real-world in opposition to current hypercapitalistic overdrive through the co-opting of science towards profit and petromodern ways of living that disconnect us from the environment and contribute to the ravaging of land and waters. King's narrative ends with the renewal of the biotic lifeforms in and around a damaged creek and oceanfront, and community buds again alongside the ocean's resurgence after the industrial, biochemical impact of a defoliant. The natural world's resilience to overcome this modern ill becomes intertwined with the characters' communal healing. King's novel is called *The Back of the Turtle*, after all, and this clear reference to the Anishinaabeg's and others' name for North America—that is, Turtle Island—implies that we are all involved in and required to engage in healing practices. For the Anishinaabe, at least, the history of the Turtle Island term ties into the creation story of their people, the history of their engagement with the land, and an understanding of how the world is now.[24] The turtle from these teachings bears the weight of the continent, at least, and like the living turtle escaped from a corporation's tank in King's novel, which has "a strange indentation in its shell, as though it had spent its life

bearing a heavy load" (King 22), is an apt metaphor for the anthropogenic pressures that have been applied to not only North America, but the entire world. Healing of and by community is indeed required.

Johnson's *Corvus* and Erdrich's *Future Home* can be taken together to demonstrate an opportunity to engage with human-caused environmental catastrophe from a common standpoint. As Nuu-chah-nulth hereditary chief Umeek (Ahousaht) indicates with his discussion of *tsawalk*, or a sense of oneness,

> The ancient Nuu-chah-nulth assumed an interrelationship between all life forms—humans, plants, and animals. *Relationships are*. Accordingly, social, political, economic, constitutional, environmental, and philosophical issues can be addressed under the single theme of interrelationships… existence, being, and knowing, regardless of seeming contradictions, are considered to be *tsawalk*—one and inseparable. They are interrelated and interconnected. (Atleo ix).

In a fitting parallel, *Corvus* asks us "[w]hat… it mean[s] to be human" and "what [one's] *role* [is] as a human" (203; my emphasis): ultimately the novel is about the entanglement of humanity with the greater ecological community. But so is *Future Home*, as both books contemplate where and how we humans will live tomorrow, and the next day. As the character George concludes in *Corvus*, "we are more than human. The species is greater than the individual. Everything is made up of something smaller" (205). These novels, taken together, teach us that, as readers, we are bound together in contemplating the present, and moving towards the future.

The rebuilding of sovereign Indigenous community and engagement with the land in *Corvus* and *Future Home* demonstrate deliberate, focused modes of learning to live with the land and its ecologies. This echoes how Potawatomi scholar-activist Kyle Powys Whyte argues, for real-world relationships with the natural world, that

"indigenous conservationists and restorationists tend to focus on sustaining particular plants and animals whose lives are entangled locally—and often over many generations—in ecological, cultural, and economic relationships with human societies and other nonhuman species" ("Our Ancestors" 207). Today's interconnections with the land and waters are often complicated by concerning ecological rifts and absences, but an emphasis on landscape-based traces relatable to the present day allows writers of ecocritical dystopias to further speculate about the availability and viability of both living spaces and resources. In its role of imagining ecological, geographical, cultural, and other shifts from the time of modern society, the ecocritical dystopian body of fiction enriches contemplations about the future and ponders why current social undertakings matter in grave ways. These narratives ask the world to carry forward community-making into the real-world in opposition to things like hyper-extractive invasions of natural spaces in search for more and more resources. The ecocritical dystopia, as seen through narratives like Johnson's *Corvus* and Erdrich's *Future Home*, asks us to contemplate seriously and carefully what our future real-world places will look like, and how we will interact with them and with each other. It asks us whether we can only expect the emergence of bad places and deplorable social conditions, or whether we can perhaps work towards a reality formed by more positive communal imaginings and practical engagements with each other, as well as the lands, waters, and other non-human persons with whom we co-inhabit the world.

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Notes

[1] Here I do not mean the notorious Wet'suwet'en Matrilineal Coalition, which was formed by the colonial government alongside industry to undermine negotiations with hereditary governance (Turner).

[2] The Water Protectors and extended community at Standing Rock demonstrated an understanding that everyone is affected. This was the message when Madonna Thunder Hawk (Oohenumpa/Cheyenne River Sioux) travelled from the South Dakota camp to talk with the 2016 Under Western Skies conference attendees, who had gathered to weigh in on "water" from various angles (Thunder Hawk). Audra Mitchell notes that such relationships should be reciprocal, though; as Kyle Powys Whyte catalogues, "some allies of the Standing Rock Sioux Tribe in the resistance against the Dakota Access Pipeline participated vigorously in the Tribe's ceremonial and direct actions. Yet they do not participate on an everyday basis to undermine educational, economic, legal and cultural conditions that made it possible in the first place for the Tribe to even be in the proximity of the Dakota Access and other pipelines" ("Indigenous science (fiction)" 237).

[3] Consultation, permission, and inclusion are, of course, essential here; as Kimberly R. Marion Suiseeya and Laura Zanotti have pointed out, Indigenous peoples have markedly been made invisible in "contributions to global environmental governance" and global climate discussions.

[4] To date, the "ecocritical dystopia" concept first appeared in my article "'Everything Change': Ecocritical Dystopianism and Climate Fiction," which was published as part of *Paradoxa*'s 2019-2020 special issue on *Climate Fictions*, edited by Alison Sperling. The term also appears in my chapter "Post-Anthropocenic Undying Futures: The Ecocritical Dystopian Posthuman in Lai's *The Tiger Flu* and Bacigalupi's 'The People of Sand and Slag'" as a part of editor Simon Bacon's *The Anthropocene and the Undead* (2022). I further theorize "ecocritical dystopianism" in my Ph.D. dissertation, "Here, at the End: Contemporary North American Ecocritical Dystopian Fiction" (2019).

[5] Johnson is of Cree and Swedish descent, and Erdrich is an enrolled member of the Turtle Mountain Band of Chippewa Indians (Anishinaabe).
[6] Ildney Cavalcanti, Raffaella Baccolini, and Lyman Tower Sargent also notably contributed to an understanding of the "critical dystopia."
[7] Though Gibson Lake and the Gibson River exist in the real world near the Township of Georgian Bay ("Gibson Lake"), Rice's city of Gibson does not.
[8] A sense of the dystopian now certainly fits with how Brett Josef Grubisic, Gisèle M. Baxter, and Tara Lee suggest that contemporary dystopian texts feature the "ends of water, oil, food, capitalism, empires, stable climates, ways of life, non-human species, [or] entire human civilizations" (11).
[9] Elsewhere, Nixon refers to the "environmentalism of the poor," following Joan Martínez Alier and Ramachandra Guha; see also Isabelle Anguelovski and Joan Martínez Alier on a revisiting of this terminology with more contemporary circumstances and "glocal" movements.
[10] Contra Amitav Ghosh (*Great Derangement* 72), see Shelley Streeby (5).
[11] Heather Davis and Zoe Todd's interventional work into the process of the Anthropocene Working Group's discussions supports placing a "1610" (763) Anthropocenic "'golden spike'" (762) in terms of colonialism; earlier, Simon L. Lewis and Mark A. Maslin also suggest a 1610, "post-1492" "'Orbis spike'" (175). Given this, perhaps a more useful term than the "Anthropocene" could be the "Plantationocene" (Haraway), since it involves the ongoing effects of colonialism, and thus how "plantation logics organize modern economies, environments, bodies, and social relations" (Perry and Hopes). However, while Whyte agrees that "'Anthropogenic climate change' or 'the Anthropocene'… are not precise enough terms for many Indigenous peoples" because of the unequal implications and effects of "colonialism, capitalism and industrialization" ("Indigenous Climate Change Studies" 159), he asserts that "Anthropogenic (human-caused) climate change is an intensification of environmental change imposed on Indigenous peoples by colonialism" (153), and instead offers "Indigenous Climate Change Studies" as "a field that opens up [Indigenous] interpretations of [their] own histories and futurities, with the goal of supporting Indigenous capacities to address climate change and the continuance of flourishing future generations" (160). Whyte later contends that "[s]ome Indigenous peoples… offer the idea that [they] confront climate change having already passed through environmental and climate crises arising from the impacts of colonialism" ("Indigenous science (fiction)" 226); more importantly, he argues against situating Indigenous experiences "in some time period like the Holocene or Anthropocene" (237). Part of this argument against prioritizing concepts like the Anthropocene or even

climate change over other factors involves how "Indigenous perspectives on mobility support an understanding of colonialism itself as a major
cause of what today is understood as 'climate' resettlement" (Whyte et al. 320).

[12] The key, here, appears to be the ability to continue storytelling, since Gerald Vizenor (Minnesota Chippewa/White Earth) teaches us that Indigenous "survivance is an active sense of presence over absence, deracination, and oblivion; survivance is the continuance of stories, not a mere reaction, however pertinent" ("Aesthetics" 1).

[13] One example is the fictionalized Smoke River area.

[14] Note that I do not refer to these as "climate fictions"; see the special issue critiquing this generic terminology in *Paradoxa* number 31, edited by Alison Sperling.

[15] The lake Cedar mentions (see above) is likely either Lake Minnetonka or Lake Harriet, since Cedar says the "house where [she] grew up" is in "a pleasant part of Minneapolis near a wide green lake invaded by quagga mussels and purple loosestrife" (53)—though the lake is never actually named in the book.

[16] On "SEPTEMBER 8[th]," the father of Cedar's child, Phil, comes home and says that there's a new "'church government'" called "'The Church of the New Constitution'" (108).

[17] They are not reclaiming "'the whole top half of the state, or Pembina, Ontario, Manitoba, or Michigan'" (214).

[18] That is, the sign "reads *Future Home of the Living God*" (13).

[19] However, *Corvus* was published the same year as Paolo Bacigalupi's 2015 *The Water Knife*, with its armed tension over water resources between southwestern States and other interests in an extension of the recent mega-drought (Meyer, "Mega-Drought")—a mostly non-Indigenous commentary on near-future freshwater scarcities, though Bacigalupi underscores the action of his narrative with a document signed between the Bureau of Indian Affairs and the Pima (the Akimel O'odham people), a river people whose cultural ancestors, the Hohokam, had mastered the agricultural practice of canal irrigation.

[20] In *Marrow Thieves*, the polar ice caps' "Melt [then] put[s] most of the northlands under water" (25), creating part of the fundamental backdrop for Dimaline's narrative.

[21] George's crash is prompted by a curious, oddly-directed storm that passes from east to west (72-75).

[22] This camp is said to be near one Long Lake Pass (77, 80), which is "at the end of a very long narrow lake that filled the mountain valley floor for miles north of Two Bears" (80), and "west… straight as the crow flies" of "what remained of" Edmonton "after the oil had run out" (107). It is highly possible that Long Lake is therefore Kinbasket Lake in the Canadian Rockies.

[23] Such solutions are not only the realm of fiction—which is also why ecocritical dystopianism's relationship with realism is so potent—but also interconnect with real world examples, such as the Yurok Nation and its people's revitalization of the Klamath River as a means of self-healing (Mozingo).

[24] Anishinaabe academic and writer Niigaanwewidam James Sinclair (St. Peter's/Little Peguis) generously shared this cultural history and worldview during his keynote address to the 2016 Under Western Skies conference on "water," while speaking of the importance of "the everyday throughout Turtle Island."

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"Fleshy Stories": Towards Restorative Narrative Practices in Salmon Literature

SVETLANA SEIBEL

> "When we say we respect the salmon, we mean respecting everything about them, including keeping the rivers where they live clean, and honouring their spawning time. We need to understand how to help the sockeye survive, as well as the other species of fish and animals. We must all look after one another in this world: fish, animals, and humans, and all the living and non-living beings on this earth."
>
> Dr. Ellen Rice White-Kwulasulwut (Snuneymuxw)[1]

Introduction: "Kincentricity" and Restor(y)ing Salmon

"Indigenous people of Pacific Northwest America are Salmon People and want to *continue* being Salmon People," writes O'odham/Chicano/Anglo scholar Dennis Martinez in his article "Redefining Sustainability through Kincentric Ecology: Reclaiming Indigenous Lands, Knowledge, and Ethics" (161, emphasis in original). In recent years there has been an upsurge of Indigenous literature that features salmon prominently in its storylines, or focuses on them as protagonists—this includes genres such as poetry, autobiographies, children's literature, or drama, as well as publications based on ancestral stories.[2] This literary trend reflects the profound significance of salmon and the people's relationship to it for many Indigenous cultures of the Pacific Northwest, as well as the cultural and subsistence crises posed by the ever further dwindling numbers of the fish.

In many respects, this crisis is already here, and has been for quite some time. Jim Lichatowich and Seth Zuckerman write:

> From redwood-covered hills of coastal California through the waterways of metropolitan Portland and Seattle to the arid country east of the Cascades, salmon populations have been listed as "endangered" or "threatened" under the Endangered Species Act. For some runs, however, this level of concern has come too late. As least 232 genetically unique groups of Pacific salmon and steelhead are known to have disappeared entirely, losses that have occurred across a startlingly large portion of the salmon's natural range. (18)

The authors give various reasons for the catastrophic decline in salmon numbers and diversity: the large-scale decimation of beaver populations in the region as a result of fur trade; overfishing and the cannery industry; irrigation practices such as stream diversion and irrigation pumps; commercial logging; dams; and urban growth (20-23). Today, all of these factors are exacerbated by the increasing pressures of climate change. This list alone demonstrates the intricate interdependence of factors in the ecosystem that supports salmon and, in turn, needs it in order to survive. What the list also demonstrates is the profound role that coloniality plays in salmon's decline.

Prior to the take-over by the colonial industrial complex and its ideology, Indigenous peoples of the region developed not only a deep relationship with salmon, but also a set of practices geared towards upholding the ecosystem as a whole, so that the fish can continue to have a home in the region. Although colonial discursive significations of North America's landscapes historically tended to what Timothy Clark calls "dubious sanctifications of so-called wilderness" (32), in recent years it is increasingly recognized that the reality looked quite different, and that the land and waters of the continent were carefully tended by its Indigenous inhabitants through the application of what has become known collectively as "'Traditional Ecological Knowledge,' or TEK" (Shilling 10). Referring to California in particular, Kat Anderson speaks of "traditional management systems" used by the region's Indigenous peoples:

> Traditional management systems have influenced the size, extent, pattern, structure, and composition of the flora and fauna within a multitude of vegetation types throughout the state. When the first Europeans visited California, therefore, they did not find in many places a pristine, virtually uninhabited wilderness but rather a carefully tended 'garden' that was a result of thousands of years of selective harvesting, tiling, burning, pruning, sowing, weeding, and transplanting. (125-26)

In her book *Salmon and Acorns Feed Our People: Colonialism, Nature and Social Action,* sociologist Kari Marie Norgaard explains further: "What people have described as 'traditional management' involves a sophisticated non-Western ecology that includes extensive knowledge of particular species and ecological conditions, as well as the knowledge of how to reproduce them. Rather than doing something *to* the land, ecological systems prosper because humans and nature work together" (11). Norgaard's work is dedicated to the significance of salmon and traditional management practices associated with it for the Karuk people of the Klamath Basin in California—to which I will return later in this article.

It is not surprising that salmon in particular plays such a central part for the peoples of the Pacific Northwest: as the region's keystone species, salmon is widely recognized as one of its most defining inhabitants and, consequently, it became one of its most potent cultural symbols. Author and journalist Timothy Egan goes so far as to define the region through the movement patterns of the fish: "The Pacific Northwest is simply this: wherever the salmon can get to" (22). In response, salmon biologist Jim Lichatowich wistfully remarks that "by that definition the region has been shrinking for the last 150 years" (8), the "historical range" of wild Pacific salmon having by now decreased by forty percent (Lichatowich et al. 1). "Rivers without salmon have lost the life source of the area," Egan goes on, pointing towards the effects of the devastation

of salmon decline (22). But however severely the loss of salmon may be felt by settler cultures in the Pacific Northwest, its cultural, spiritual, emotional, and health implications are much graver for Indigenous cultures who have cultivated the relationship with salmon for many generations, and who experience a sense of ecological and personal grief in the face of salmon's degradation, to which literary works discussed in this article attest. "Salmon is at the hub of our memory wheel," writes Stó:lō scholar and author Lee Maracle. "The health of salmon is directly connected to the health of Indigenous people" (58). Dennis Martinez, too, points out the connection between the ecological health of salmon and the cultural health of Indigenous communities in the Pacific Northwest:

> Western scientists and Native knowledge holders alike consider salmon to be an ecological keystone species as well as a prime indicator of ocean, estuary, river, and watershed health or 'integrity,' i.e., adequate ecological function with all watershed components intact. Since salmon are central to Indigenous cultures of the Pacific North America, they can also be described as a cultural or ecocultural keystone species. (160)

The link between salmon's role as ecological and cultural kin within Indigenous epistemic frameworks is a powerful example of a particular kind of relationality between humans and the rest of nature that Martinez calls "kincentricity" (140), a term he coined in 1995 and which describes a mindset that underpins an "ethical-economic model" (Martinez 140) of land stewardship practiced by Indigenous communities, as opposed to the extractive model of industrial capitalism privileged by settler-colonial states. Martinez understands kincentricity as "a way of relating respectfully to all life as kin," and "Indigenous cultural land-care practices" as "'kincentric ecology'" (Martinez 140). Apart from representing a mindset and a set of practices, kincentricity is also a storied relationality, not least because it "refers to the reciprocal relationships contained in

Indigenous stories of an 'Original Compact' made between animals and humans" (Martinez 140).

Martinez's concept of kincentricity and the corresponding land-care practices connect to Jim Lichatowich's insistence that the restoration of salmon depends on a change in cultural mindset at least as much as it does on conservationist management—in other words, the wellbeing of salmon depends on a state of mind: "To confront this loss, we need a different vision, a different story to guide the relationship between salmon and humans. To give the salmon any hope of recovery, we have to break free of the myths that have brought us to the point of crisis" (Lichatowich 8). The cultural assumptions Lichatowich is referring to are grounded in the worldview on which the Euro-American and Euro-Canadian settlement of the Pacific Northwest was built, a worldview that interprets nature as subject to human domination in the name of industrial economy (Lichatowich xiiv). The ultimate result of this approach is not only the decline of salmon and biodiversity in general, but the colossal shift in the dynamic of co-existence between humans and the rest of the natural world that since 2016 has been called the Anthropocene. Arguing in favor of reconsidering the beginning date of the Anthropocene and setting it back to the beginning of colonialism in the so-called New World, Heather Davis and Zoe Todd (Métis/otipemisiw) point out "the failure of the Anthropocene, as a concept, to adequately account for power relations. Instead, all humans are equally implicated under the sign of the 'anthopos' (sic)" (763). Challenging this normative assumption embedded in current conceptualizations of the Anthropocene, Davis and Todd point out the epistemological exclusion of Indigenous ecological knowledge that is its part and parcel:

> Evidence does not, generally, entail the fleshy stories of kohkoms (the word for grandmother in Cree) and the fish they fried up over hot stoves in prairie kitchens to feed their large families… But these fleshy philosophies and fleshy

> bodies are precisely the stakes of the Anthropocene, as the Anthropocene has exacerbated existing social inequalities and power structures and divided people from the land with which they and their language, laws, and livelihoods are entwined. The stories we will tell about the origins of the Anthropocene implicate how we understand the relations we have with our surrounds. (767)

Although they may be all but absent in academic discussions of the Anthropocene, it is precisely these "fleshy stories," which inspired the title to this article, that are at the center of salmon literature. This can be taken quite literally, because the sheer physicality of these stories is one of their most notable features: they are stories that focus on salmon's bodies, on fish flesh, and thereby they foreground both the storied and the material significance of salmon. As Lichatowich's arguments about the origins of the current predicament of salmon in a destructive and extractive worldview indicate, while restoration through management and direct action is important, restoration through storying the relationship between the people and the fish is equally as vital. Lee Maracle issues such a call when she writes: "The world is in dire need of another point of view. We need to embark on studies that will influence literary authors to create the kind of novels that affect a change of heart" (56)

All this suggests that there is much literature and storytelling can do to restore salmon, for they have the power to contribute in profound ways to restor(y)ing the human-salmon relationship. Salmon literature narratively brings the fish (back) to life in hearts and minds in order to do so in rivers and seas. Part of the restorative narrative practices that this body of literature develops and promotes is an understanding of salmon as an "ecocultural keystone species," in Martinez's terms (160). These artistic works may be read as kincentric narratives aimed at restoring salmon to its position as a lynchpin of ecological as well as cultural relational systems, and showcasing the bond between the enactment of kincentric ecological knowledge and the wellbeing of the

fish. While this practice is narrative, it in no way separates the stories from the land and the people—on the contrary, their connection to the land and the waters is at its heart. Kincentric narratives revolve around the dynamic Dennis Martinez describes when he writes: "When lands are lost, the people disrupted, traditional knowledge and hard-won environmental know-how *and* Western science lose. Ecological understanding by science is diminished. Accurate knowledge of what restoration should be restoring and what conservation should be conserving is lost" (171). By the same token, when separated from the land and the people, stories lose too.

At this juncture it is important to note that when speaking about restoration, I do not mean a turn to nostalgic notions of unity with nature projected onto Indigenous peoples by colonial discourses of the "ecological Indian" or "Noble Savage."[3] Rather, I am speaking of a renewal of ecological practices grounded in notions of reciprocal relationships with other-than-human members of the ecosystem that in many cases have been disrupted by settler colonial regimes in North America and elsewhere, but also have been suppressed or given up in Eurowestern cultures themselves. In this I follow thinkers such as Tewa scholar Gregory Cajete, who calls on Euro-Americans and Western cultures in general not only to learn, but also to remember:

> There is an important legacy of traditional environmental knowledge that we must again revitalize for ourselves and the generations yet to come. Indigenous people have been entrusted with an important package of memory, feeling, and relationship to the land that forms a kind of sacred covenant. Modern Western peoples are challenged to strive to educate themselves about this knowledge and associated forms of education. This covenant bids modern Western peoples to reclaim their own heritage of living in a harmonious and sustainable relationship to the land, thereby fulfilling a sacred trust to that land. (265-66)

The salmon stories and salmon scholarship outlined above reflect an understanding that a restoration of this kind of reciprocal relationality is a prerequisite for any success in sustainably revitalizing salmon. It is an understanding that challenges notions of separation between nature and culture that permeate many currents of Western thinking, as Val Plumwood notes: "The ideology of dualism and human apartness can be traced down through Western culture through Christianity and modern science. With the enlightenment, human apartness is consolidated and augmented by a very strong reductionist materialism, whose project, in Descartes' formulation, is 'the empire of men over mere things'" (445). Plumwood calls the hallmark of the mindset that emerges from these processes "hyperseparation," which is "expressed in denying both the mind-like aspects of nature and the nature-like aspects of the human: for example, human immersion in and dependency on an ecological world" (444). In contrast, Deborah Bird Rose recounts the teachings of Aboriginal people in Australia as characterized by an understanding that "the earth itself has culture and power within it. In this line of thought, all of us living beings are culture-creatures… It is a multicultural world from inside the earth right on through the ephemeral life inhabiting water, air and land" (139).

Salmon literature unfolds its power precisely by emphasizing the inseparability of the people, the land, the waters, and the fish, the deep entanglements that cannot be torn asunder without a high cost and a heavy loss. The restoration of salmon, therefore, goes hand-in-hand with the restoration of land and stewardship to Indigenous nations. All this is encapsulated in the assertion that sounds throughout Indigenous salmon stories: "We are Salmon People."

Restoration Through Writing a Life: *My Life with the Salmon*

There is a special power that lives in autobiography and memoir—a power to encircle and affirm a life. It is this power that is emphasized in the designation of autobiography and related genres as life-writing. This life-affirming aspect of autobiographical writing becomes all the more profound when it unfolds in a dialogue with a threat of extinction. Given the current state of the salmon throughout the Pacific Northwest, Diane Jacobson's *My Life with the Salmon* can be read as an example of that.

Diane Jacobson is a member of the 'Namgis First Nation whose unceded ancestral territory is located on Vancouver Island and an author of two autobiographical books: *My Life in a Kwagu'l Big House* (2005) and *My Life with the Salmon* (2011). While *My Life in a Kwagu'l Big House* is focused on Jacobson's childhood and growing up, *My Life with the Salmon* documents her adult life, her professional journey and how the work she was doing has led to a more deeply felt personal connection to her homeland and her cultural heritage. As the book's title suggests, the catalyst for this process is salmon. The title points towards a narrative orientation that focuses on a relationship between the narrator and the fish, and can thus be read as a kincentric autobiography.

Defining the term life-writing, Zachary Leader asserts that it "describe[s] a range of writing about lives and parts of lives, or which provide materials out of which lives and parts of lives are composed" (1); Jacobson's autobiography writes a life that is constituted by both her own life story and the life story of the salmon, as well as by the ways in which these lives intermingle, relate to, and define each other. Such a narrative gesture asserts the life of the salmon in the face of severe existential challenges that the species faces and describes its life as tied to other lives—the narrator's own as well as other human and non-human people who participate in these conjoined lives. In a certain way, Jacobson's text writes the endangered salmon back to life. She does so by affirming kincentricity of her 'Namgis culture, thereby harnessing the critical potential of Indigenous autobiography theorized by Cree-Métis scholar Deanna Reder: "Indigenous

autobiographies, especially, offer theories about the world they describe, drawing on the Indigenous perspectives of their authors and those described within its pages" (Âcimisowin 65)—which, in Reder's words, renders autobiography an "unrecognized Indigenous intellectual tradition" (Âcimisowin 9). Jacobson's life story presents a theory of a world rooted in a kincentric relationship with the fish (and all other-than-human inhabitants of the territory)—a theory of Salmon people.

In this, Jacobson's text goes against starkly traditional Eurowestern iterations of autobiographical writing that affirm a grandiose Cartesian confessional subject in an exceptionalist and clearly anthropocentric manner (Derrida 390). In "The Animal That Therefore I Am (More to Follow)," Jacques Derrida wonders:

> Is there, and in particular in the history of discourse, indeed of the becoming-literature of discourse, an ancient form of autobiography immune from confession, an account of the self free from any sense of confession? And thus from all redemptive language, within the horizon of salvation as a requiting? Has there been, since so long ago, a place and a meaning for autobiography before original sin and before the religions of the book? Autobiography and memoir before Christianity, especially, before the Christian institution of confession? That has been in doubt for so long now, and a reading of the prodigious *Confessions* of European history such as have formed our culture of subjectivity from Augustine to Rousseau, would not be about to dispel that doubt. Between Augustine and Rousseau, within the same indisputable filiation, within the evolving history of the *ego cogito ergo sum*, stands Descartes. He waits for us with his animal-machines. I presume that he won't interrupt the linage that, for so long now, had tied the autobiographical genre to the institution of confession. (390-91)

Here Derrida only considers autobiography as a practice that evolved and continues to resonate within the context of Eurowestern episteme, and that supports what he calls "the anthropo-theomorphic reappropriation" and "domestication" of other-than-human life (387). While critiquing Eurowestern normative discourses (including anthropocentricity) that find their expression and cementation in traditional currents of autobiographical genre, Derrida at the same time presents autobiography as trapped within its own genre history, generic conventions, and Eurowestern canon.[4] By contrast, Indigenous scholarship in the field of autobiography liberates it both from these kinds of entrapments and from Eurocentric claims to ownership of the genre. Instead, Indigenous critics such as Robert Warrior (Osage) and Deanna Reder read Indigenous autobiographies as texts that "preserve Indigenous knowledge and specific tribal understandings for their descendants and subsequent generations" (Reder, "Indigenous Autobiography" 170), arguing that Indigenous autobiographical texts, rather than "exist[ing] because of the existence of the colonizer," are "legible as examples of their specific tribal/national philosophies" (Reder, "Indigenous Autobiography" 171). Such critical approaches make it possible to read Jacobson's text as a kincentric autobiography without it being a contradiction in terms, as in the context of the Indigenous episteme, intellectual tradition, and autobiographical practice, it clearly is not. Following tenets of Indigenous thought, kincentric autobiography affirms personhood and peoplehood of both human and other-than-human subjects.

The joint life Jacobson records in her book is concerned quite literally with bringing salmon to life, insofar as it describes the years she spent working at a salmon hatchery where her tasks frequently included the insemination of the salmon eggs and monitoring their development until birth and their subsequent release into the wild. The connections between salmon, the 'Namgis ancestral lands, culture, and the

narrator's personal consciousness are emphasized from the very beginning of Jacobson's story:

> In the early 1980s, I got my first hatchery work in the Nimpkish Valley working with the 'Namgis crew. Aquaculture taught me humility and great respect for my living Elders today, along with even greater respect for previous generations, those who passed on the oral history. My present position is in treaty research, this gives me insight into how our ancestors lived and how tough their lives were. (5)

As is the case throughout the book, this passage demonstrates that working with salmon on ancestral land in the company of 'Namgis colleagues is a learning experience that is constitutive of the narrator's self as an individual and as a member of a culture. As the narrative unfolds, all these aspects remain tightly twined together and impossible to separate. The learning and personal growing that takes place during Jacobson's life with the salmon is both ecological and cultural: "When I first started working in the valley, I didn't care about culture—never realizing that I was being taught culture by our Elders who have passed on from this world. They were all around us each and every day that I worked in the valley" (*Salmon* 162).

That the narrator's work at the hatchery and the textual and cultural work of her autobiography are both geared towards salmon restoration is clearly marked in the text. The centrality of the restorative framework to Jacobson's story becomes obvious early on, when the narrator contextualizes her work—both as a hatchery worker and a writer—by taking stock of the state of the salmon in the Nimpkish River:

> Among some key facts one should know is that 'Namgis leaders voluntarily stopped food fishing at the mouth of the river because of declining stocks in 1978 and even though it was part of our traditional fishing territory, we have not fished there with our families since that time. In 1958, the Department of

> Fisheries wrote that the Nimpkish fishery was second in value only to that of the Fraser River. The Nimpkish River sockeye alone totaled 130,000 the year before and has been in decline ever since. Total salmon escapement has declined by ninety-five percent. There were only 10,000 sockeye in the year 2000. 'Namgis took it upon themselves to have Gwa'ni Hatchery start doing sockeye enhancement in 2001. The hatchery tries its best to bring sockeye and chum stocks back, but it is like trying to plug a dam with your thumb. The salmon numbers continue to dwindle… The chum salmon return dropped to less than one hundred fish in 2003 and this run may be virtually wiped out. (*Salmon* 6)

This state-of-the-salmon report outlines the measures taken by the 'Namgis First Nation in order to first preserve, and then restore salmon to the Nimpkish River. Although food fishing is a fundamentally important communal activity for the 'Namgis people, as can be seen in Jacobson's first book, *My Life in a Kwagu'l Big House*,[5] it is nevertheless suspended by the 'Namgis authorities when the salmon is seriously threatened. This decision is in keeping with what Martinez calls an "Indigenous ethical-economic model" and "responsible community-based resource use" (157) that forms the basis of kincentric ecology and relationships. However, this step on the part of the 'Namgis First Nation is unable to stop the salmon's decline, presumably because no corresponding strategy was implemented by the dominant industrial actors whose activities impact the fish stocks. As noted above, the negative impact of such factors as overfishing and habitat destruction on salmon in the Pacific Northwest is severe. It is notable that logging in particular is omnipresent in *My Life with the Salmon*: logging roads, bridges, sounds permeate the landscape as the hatchery crew is working to restore salmon. This contrast between the efforts of the hatchery crew to offset the salmon crisis and the on-going industrial business-as-usual is symbolic of one of the largest underlying causes of salmon decline—a failure to "[c]ontrol human behaviors that destroy ecological

processes, rather than trying to control nature" (Lichatowich and Zuckerman 31). By the same logic, biologists such as Jim Lichatowich have been arguing for some time that hatcheries themselves are a questionable solution, and in fact are becoming part of the problem because they do not sufficiently consider, or are unable to address, the "subtle connections between elements of the salmon system" (Lichatowich and Zuckerman 29).[6] As the above passage indicates, the narrator, too, notes the lack of efficacy of the hatchery where restoring the salmon stock is concerned—despite the hard work and dedication of the crew, "it is like trying to plug a dam with your thumb" (*Salmon* 6). But the statistics cited in the passage are so dire that no stone is left unturned in an attempt to restore salmon to the Nimpkish River.

The problematic relationship to the agencies of the settler-colonial state of Canada shines through in *My Life with the Salmon*, highlighting the complexities and pitfalls of jurisdictional and financial realities that affect efforts to restore salmon:

> As we all caught our breath and had our lunch, I cursed the Department of Fisheries and Oceans (DFO) because they only cared about the sporties (sports fishermen). We were chasing coho, a sports salmon, in the Davie River and were not doing anything about our own declining sockeye stocks or our chum salmon. These two salmon are what the Nimpkish people lived on. These two species supplied us our winter grocery store. We may have called the hatchery "ours," but DFO dollars dictated what species of salmon we would enhance. (*Salmon* 120)

In passages such as this the settler colonial reality that is the overarching context within which the 'Namgis Nation is attempting to uphold its relationship to salmon as an ecocultural keystone species comes to the fore. The fact that considerations about which species of salmon to restore or "enhance"—the latter concept in itself implies a problematic dynamic—are based not on the needs and ecological status of this

particular salmon system but on commercial factors dictated by recreational industries underlines "[t]he industrial ethos to maximize profits" (Martinez 164), a stance without regard for kincentric ties of Indigenous nations affected by those policies. Jacobson's text thus not only highlights the challenges that Indigenous restorative efforts face when confronted with colonial systems, but also the clash between the industrial mindset and considerations of "traditional land-care: Maintaining surplus biodiversity with limits always in mind and with people and resources always in balance" (Martinez 169). Significantly, and in true kincentric-autobiographical fashion, the structural components of the colonial state that threaten salmon are mirrored in structures that bear down on the narrator's own life. *My Life with the Salmon* is very much a story of Jacobson overcoming colonial discursive constructions of Indigeneity: while she feels like "a ward of the state" (*Salmon* 7) at the beginning of her narrative, by its end she is working as a treaty researcher in the Treaty National Research Department and has adopted an understanding of herself as a sovereign 'Namgis person: "I no longer feel that I am a ward of the state that the Federal Government should look after. I want equal rights, as any other Canadian citizen has" (*Salmon* 164). These thematic parallels between colonial threats to salmon's continuance and to Jacobson's sense of personhood further stress the kincentric relationality between the people and the fish, who remain always in focus.

Even though, as a general practice, hatcheries may not produce the hoped for results, work in such an enterprise allows for a closely intimate contact with the fish, its life cycle, its death and its birth—a kind of close personal relationship that lends itself to becoming a lynchpin of a life story. But, like every personal relationship, the relationship between the narrator and the salmon needs to grow and be nurtured, and undergoes a development. Recalling her days as a student in an aquaculture course at North Island College, Jacobson writes: "The very first time that I babysat the fish, it was

a small pool of coho that I did not care for at all" (*Salmon* 9). She explains this initially dismissive attitude with the fact that she "felt inadequate because of [her] insecurities" (*Salmon* 9). It seems symbolic that the aquaculture course takes place in an old residential school building; a few lines down Jacobson tells about how those coho were "placed… into three large net-pens right in front of the old residential school at our Native breakwater" (*Salmon* 9). The narrator's feeling of inadequacy seems to connect to the colonial underpinnings inscribed onto the building where her present learning is taking place. Significantly, it is the salmon who ultimately allow her to overcome these feelings of inadequacy. As she continues studying salmon and begins to understand them, she forges personal connections with the fish and, tellingly, associates them with coming home:

> I identified with the salmon I studied who had been imprinted with various river tastes and smells that compelled them to return to the same river after their ocean journey. I did not finish college, but I came back home, much like the salmon. I found my way to the aquaculture course. I did not know it at the time but this was just the first sign of my future life and why I would eventually fall in love with the Nimpkish Valley and come back over and over. (*Salmon* 10)

Salmon and the territory of the Nimpkish Valley are intimately connected in Jacobson's text, and her relationship to and work with the former eventually forges a stronger connection to the latter, a connection rooted in ancestral culture and intergenerational memories. The concluding chapters of *My Life with the Salmon* take a retrospective stance vis-à-vis the events and encounters described in the book. These chapters give an impression that writing this autobiography is a way for Jacobson to return and relive her life with the salmon from a different perspective—one of deeper insight, grounded connection, and maturity. The connection to the Valley she describes signifies the connection to 'Nimgis culture, to the ancestral presence on the land: "I feel now that I

was in touch with my Elders, ancestors, and my history but did not even know it. I was lucky enough to work with all types of family whom I now know are related to past chiefs that walked the same rivers, lakes, mountains and side streams as we do now. I have been so lucky to walk, float, raft or to be on the same land and waters as they had been in the past" (*Salmon* 161).

In these concluding chapters Jacobson's story becomes particularly embedded within 'Namgis cultural activity and restorative practices in the Nimpkish Valley—cultural, artistic, ecological, and political. As she observes these processes, familial connections are everywhere. And salmon, too, is a member of the family, an integral part of the 'Namgis ecocultural system: "Local painters and carvers are putting in new pictographs, telling of our origin stories on the Woss and Nimpkish Lake rock bluffs. One new pictograph depicts a salmon swimming upstream because we are the Salmon people" (*Salmon* 165). Much of the power of Jacobson's story of a joint life unfolds in this interplay between the exploration of the mutual relationship between salmon and the 'Namgis people and the personal component that the autobiographical nature of the text foregrounds. In many ways, *My Life with the Salmon* is a story of a personal restoration to culture through restorative work for the salmon. Taken together, this relational framework creates a kincentric narrative of individual engagement that is focused on cultural and ecological restorative practices within its diegesis, while simultaneously functioning as a restorative narrative in and of itself.

Restoration Through Mourning a Death: *Salmon Is Everything*

Salmon Is Everything, a collaborative play created by Theresa May and the Klamath Theatre Project (KTP),[7] begins with a loss and is born out of a sense of loss. The play dramatizes a cataclysmic event that took place in the Klamath Basin in northern California in September 2002—a massive fish kill that cost over 65,000 adult salmon

their lives before they had a chance to spawn (Boyles). The causes of the fish kill had to do with a complex confluence of ecological, political, and social factors:

> Members of the Karuk, Yurok, Hoopa Valley, and Klamath Indian Tribes protested at the time, claiming that the die-off of chinook and coho salmon was a threat to cultural traditions, food sources, and spiritual life. We demonstrated scientifically that high water temperatures, low water levels, and toxic algae levels caused by the overuse of water by agriculture were the material causes of the fish kill. Warnings had been given in spring 2001 by Native scientists and in reports made to the Environmental Protection Agency (EPA) by the National Marine Fisheries Service and other agencies. But when the EPA made its ruling in favor of salmon, farmers and ranchers in the Klamath County agricultural areas staged their own protests, and ultimately, the federal government reversed its position, giving farmers in eastern Oregon the water they claimed they needed to maintain their own economic survival. (Beetles xi)

Gordon Beetles, a member of the Klamath Tribes, identifies these conditions as "a collision of cultures" (xi) which is based on conflicting "creation stories that give rise to two distinct ways of relating to the natural world" (xi), an explanation that is echoed by Jim Lichatowich's argument that the decline of salmon is the result of substituting Indigenous "gift economies" with the industrial economy of the settlers (Lichatowich 34; 41). Like *My Life with the Salmon*, *Salmon Is Everything* explores this clash between a kincentric ecocultural mindset and the logics of an industrial economy, and the toll the latter takes on salmon, but in the play this exploration takes place from a vantage point of a tragedy that struck following gradual decline, generating an increased sense of urgency. The differences in ways of relating are stressed throughout the play and foregrounded early on, already in the second scene of the first act during an exchange

between the Karuk and Yurok characters as they perform different tasks in the process of harvesting salmon:

ROSE. When we do this work we are giving thanks to the Creator for the Salmon, for the River. Salmon is the center of our world, our heart, our sustenance.

LOUISE. (*to one of her children*) Salmon is our family.

JULIE. This Anglo student in my class said to me, "How can the Salmon be your relative? You eat them?"

JOHHNY. What an idiot!

JULIE. And I told him, Salmon are our relatives because we have lived in an amazingly bonded way with them since the beginning. The connection goes much deeper than food. It's a relationship created from thousands of years of coexistence.

WILL. Tell him that all the river tribes—the Klamath, Modoc, and our people—the Yurok and Karuk—we all believe the Salmon are the spirits of our ancestors, *c'iyals* come back to give life to everything.

JOHNNY. The Klamath tribes don't have the right to fish anymore!

JULIE. I don't think he'd get that.

JOHNNY. They'd been cut off from the Salmon.

JULIE. He said if there are no more Salmon, just go to McDonald's! (34)

This exchange is worth quoting at length because it encompasses a number of different points of conflict between the ecocultural perspective of the Yurok and Karuk peoples and the dominant cultural ideologies. The Indigenous characters lay out the basis of their kincentric relationship with the salmon that sees the fish literally as part of the family—as ancestors who return to sustain their people. This relationship is based on principles of reverence and thankfulness and an understanding of salmon as a gift. The settler cultural perspective is represented by the quoted words of Julie's non-

Indigenous classmate who is seemingly baffled by notions of relationality between people and their food source, which is all salmon is to him. In accordance with this instrumental worldview, his attitude towards salmon is not only irreverent and profane, but one that interprets them as interchangeable with the kinds of food one can find in a fast food chain. These conflicting perspectives as represented in the play correspond to those described by Beetles and Lichatowich and form the basis of the debate about the future of salmon in the Klamath watershed. In addition, Johnny's comments in the exchange lay bare the asymmetrical power relations as the context in which these debates are taking place and the cost of this asymmetry for the Indigenous communities who feel cut off from their ancestors when they are denied access to the fish by colonial authorities. This conversation, therefore, sets the scene for the subsequent events of the play, and arguably for the understanding of any debates around the fish kill.

The kincentric sentiments towards salmon expressed in the above quoted passage also allow the audience to imagine what an extreme devastation the fish kill represents for the Indigenous characters. Taking place early on in the action, the news about the fish kill has not yet been broken, but the sense of loss and pain at the death of thousands of salmon is foreshadowed by the loving attitudes articulated in this scene. In fact, the emotional impact of the fish kill is one of the main themes of *Salmon Is Everything* as the play shows Indigenous characters and communities mourning the death of the salmon.

The emotional cost of environmental devastation is a topic that has only recently begun receiving scholarly attention, as Kari Marie Norgaard points out (19; 199). In her book *Salmon and Acorns Feed Our People*, Norgaard, a sociologist whose work focuses, among other areas, on the sociology of emotions and who has worked closely with Karuk communities on this issue, notes that the emotional impact of environmental

decline should be recognized much more prominently than is the case today. For "when species such as salmon are considered kin, and when the natural world is a stage for social interactions and identity, the grief, anger, shame, and hopelessness associated with environmental decline may become embodied manifestations of racism and colonial violence, and emotions of outrage, hope, and compassion animate resistance" (Norgaard 19). As the notion of ecological grief and related concepts gain traction, the emotional aspect of the human psyche's response to environmental degradation is becoming more visible.[8] However, even as these ideas gain visibility and become more widely discussed, Stef Craps notes that "we tend to associate grief and mourning with human losses; more-than-human losses are traditionally seen as outside the realm of the grievable" (3). This struggle to include non-human nature into the field of "the grievable" is yet another expression of differences between kincentric ecocultural understandings and instrumental conceptualizations of nature.

This point is forcefully brought home in *Salmon Is Everything*, for while Julie's classmate may see salmon as an equivalent of a McDonald's cheeseburger, the play's characters who operate from the place of kincentric relationality are as deeply emotionally affected by the death of the salmon as they would be by the death of any other relative. Because in the Karuk Creation Story everything began as spiritual beings who eventually chose to transform into different manifestations of nature, including humans, this relationality is encoded deeply in the culture and there is no question about the "grievability" of salmon (Norgaard 91; Beetles xi-xiii). Expressions of unbelieving shock, grief, and anger abound in the play. In fact, the entire Scene 9 of the first act, the scene in which the Karuk and Yurok characters in the process of harvesting salmon learn of the disaster, is dedicated to expressions of mourning, as its title—"Lamentation"—suggests. These emotional responses go hand in hand with the almost tangible physicality of the play's dramatization of the horrors of this untimely

death. There is also a stark disconnect between the distance which separates authorities and decision-makers who are responsible for the conditions that brought about the fish kill and the visceral physical way in which Indigenous communities partake in the fish death:

ROSE. The fishermen abandoned their nets…

WILL. We counted them. We hacked their tails off…

JULIE. Leaving the bodies open, bellies to the sun…

ROSE. Floating—each its own shipwreck of life…

JULIE. Each not only a meal but a life… Seventy thousand dead in heaving waves of flesh.

ROSE. As if these sweet ones are litter, not corpses of our underwater relatives.

ANDY. Those who would have, in any other year, in any other time, been setting nets in the sun, teaching our children…

WILL. Mostly I left them there. I wanted people to see them, to smell them…

ROSE. Who picked up these dead and dying ones?

ROSE. Who laid them to rest, mixed their flesh with woodchips and ash?...

ROSE. Carried them one at a time, for some were three feet long…

ROSE. Who witnessed, who was not driven back by the smell?...

JULIE. We carried them in our arms, on our backs, in our hearts.

WILL. We counted them…

JULIE. We carry them still. In our arms, on our backs, in our hearts. (51-52)

After each of these lines all characters say in unison "As they return," emphasizing the added tragedy of so many fish dying before they are able to procreate and ensure their continuance. There is also a sense that the trust of the fish has been betrayed, because what is their home place has been rendered uninhabitable and inhospitable to them. In the days that follow this scene, grief for the salmon envelops the community. Children

are sent home from school by crying teachers to crying parents (55); Kate describes Julie's emotional state after the fish kill as "[c]razy with grief" (52); Louise cuts off her hair in mourning (56); Rose does not speak for four days (74). Julie's husband Will shows signs of outright trauma: "When I saw his face when he came home the first day when he saw the fish dead, I thought someone in his family had died. He was too upset to express any emotion. He got up at three a.m. one night and just started writing his heart out. He's never done that before," Julie tells Kate (56). In addition to the sheer shock of it, this event is so unprecedented that there is no protocol for it and the community does not know exactly *how* to mourn: "When you have a funeral there's an event; there's a grieving time. Elders have never heard about anything like this fish kill in our legends or stories" (56). This exacerbates the ominous atmosphere and feelings of helplessness, making people wonder, "[w]hy can't we fix this?" (57).

The fish kill tragedy is almost apocalyptic in its intensity, because, in the words of Bettles, "the fish kill of 2002 was a warning about the real possibility of extinction" (xv). Deborah Bird Rose describes extinction as "a loss that goes beyond balanced relationships between life and death. With extinctions there is no return, and death starts to overtake life. Extinction is unethical killing that is tipping into a black hole of death. The more life disappears, the more life disappears" (144). When Tim, a rancher from the Upper Klamath, comes to Will and Julie's home in order to hear their perspective on what happened, Will confronts him with the sheer grotesque horror of the scenes the fish kill unleashed:

> The carnage I've seen over the weeks is so utterly disgusting I can't sleep. I close my eyes and the images of dead, rotting fish—maybe you've seen photographs… but you cannot begin to imagine the smell. The smell of death and decay messes with my mind. I can't eat because food, no matter what it is, reminds me of the smell. Come walk along the banks of the River with me… I

> dare you… Come and walk with me and cut open the bellies of rotten salmon to detect their sex… Come and walk with me… count with me… hack their tails so they won't be recounted. You can't escape the smell. (75)

Will's harrowingly evocative descriptions of thousands of rotting salmon lining the banks of the Klamath River are reminiscent of historical descriptions of piles of rotting salmon sitting next to canneries and being shoveled into water by cannery workers because the overfishing at the onset of industrial fishing in the Pacific Northwest was so severe that the canneries were unable to keep up with the catch (Lichatowich 41). These parallels once again stress the link between wasteful attitudes towards other-than-human life, the establishment of colonial systems and industries, and the looming threat of extinction.

As awful and traumatic as it is, the fish kill generates widespread attention from media, politicians, general public, and the farmers and ranchers in the play—during the lamentation scene, the lines of the Karuk and Yurok characters are interspersed with lines of the reporter explaining to the public what is happening on the Klamath River and why. The fact that it took the loss of other-than-human life on this scale to get the authorities, the public, and the stakeholders not immediately affected by the fish death to listen highlights the depth of the problem. Yet there is hope in the fact that the fish kill has made it impossible to ignore the issue; there is hope in scenes where children of an Upper Klamath rancher and a Lower Klamath Karuk fisherman dance together to Will's performance of the rap he wrote for the salmon (*Salmon Is Everything* 69); and there is hope in the attention the fish kill has brought upon communities who model kincentric grief for the fish death. As Stef Craps argues, "extending grievability to more-than-human others can galvanize us to take positive action on their behalf" (3). Witnessing the emotional cost of the fish kill for members of the Karuk and Yurok communities leads Tim, one of the Upper Klamath ranchers for whose benefit the water

is diverted from the river, to reach respectfully across the aisle and start looking for practical solutions that could restore the balance.

In Act 1, Scene 11 Rose evokes the pre-colonial times when Indigenous communities were the ones who managed the land and how, when the salmon would first come in, the people would mark this time and occasion by ceremony: "During this time there would be the First Salmon Ceremony and a feast that gave thanks to the Salmon for giving their lives for the survival of the people. This was something that has never been done in my lifetime" (57). Rose's words stress the kincentric connections between salmon and culture, which means that the decline of salmon leads to a decline in cultural expressions and ancestral traditions—an ecocultural causality. Lichatowich asserts that the First Salmon Ceremony used to be performed by Indigenous communities "[f]rom central British Columbia to Northern California and inland to the Lemhi River of Idaho" (36). This Ceremony was an important act of communication between the people and the salmon, a seasonal renewal of a compact: "The First Salmon Ceremony renewed and reinforced the belief that the salmon would remain abundant if they were treated with the respect due a gift" (Lichatowich 36). However, as Rose's remarks indicate, the Ceremony has been all but lost due to the decline of salmon which caused the corresponding cultural practices to diminish or to cease altogether. Leaf Hillman, director of the Karuk Department of Natural Resources and one of Norgaard's Karuk interviewees, says:

> How do you perform the Spring Salmon Ceremony, how do you perform the First Salmon Ceremony, when the physical act of going out and harvesting that first fish won't happen? You could be out there for a very long time to try and find that first fish and maybe you won't at all and then of course in the process you'd end up going to jail too if anybody caught you. So, will that ceremony ever

> come back? Well, I don't know. But, once again, it's a link that's broken. And restoring that link is vital. (qtd. in Norgaard 207)

Both Rose's remarks in the play and Hillman's words in the interview express a sense of urgency that the First Salmon Ceremony be revived. Julie's immediate suggestion in the play is: "Why don't we try to bring the First Salmon Ceremony back and use it as healing?" (57). Norgaard explains that "[t]he Karuk are known as 'Fix the World People'" for whom "fixing the world means fixing and restoring the intertwined environmental and social degradation that has profound impact on Karuk people's lives" (9). So even though the fish kill is not of their making, the Indigenous characters in the play feel a sense of responsibility for the world out of balance: "There is a difference between blame and responsibility," says Rose. "We have a relationship that needs tending" (57). Restoring the ceremonial relationship with the salmon, therefore, is a way of fixing the world.

But there is one more dimension to this theme in the play, which opens up when Tim contacts Julie with a proposition. After having listened to Julie and Will, in an attempt to "do something" (85), Tim asks Julie to let him know when the first salmon arrive. On that day, he would turn off his irrigation system, and would get his friends, neighbors, colleagues, and associates to do the same, after which "[a] dozen admin folks who work for the City of Klamath Falls are going to fill milk jugs with water from the taps in their house and drive it down to the edge of the Klamath River and dump it in. Don't laugh. I know it's more an act of love than of water. It's holding another place tight, holding other families tight" (86). Inspired by Julie's explanations of the First Salmon Ceremony, Tim effectively devises a ceremony of his own, the purpose of which is to foster a respectful connection with his Indigenous neighbors and to help salmon, in however materially small a way. This gesture signifies the change of mind that scholars and artists whose words are quoted in this article insist is necessary in order to

effect a lasting and sustainable restoration of salmon. The fact that Tim's gesture is largely ceremonial does not mean it is empty; although it is understood as "symbolic" (86), conceived as it is as a counterpart to the First Salmon Ceremony and therefore sharing in its cultural significance, the intention is to use it as a catalyst to change other minds, so that together they would be able to bring about a material change for the better in the state of the fish and relationships between the peoples of the region.

Appealing to senses and emotions is at the very heart of performative arts. As Theresa May puts it:

> Theatre is not merely a representational art; it takes place before our eyes, in and with our flesh-and-blood presence; theatre is a living forum. Because it is alive, theatre invites us not only to think about how others might feel, but to *feel into* those possibilities in real time in the company of others. In this way it lays down new fibers of community in the form of relationships as well as stories. ("The Education of an Artist" 140, emphasis in original)

This emotional and relational power of theatre is perhaps the strongest restorative power of *Salmon is Everything*: by letting the audience feel what diverse communities of the Klamath watershed, including salmon, are feeling, it opens up doors to understanding and collaborative efforts that have the potential to make salmon restoration a reality, and might change more than a few minds on a number of issues along the way. This possibility is nowhere more evident than in the reaction of a member of the audience at the first special performance of the play staged for a small circle of community members, friends and family described by Suzanne M. Burcell: "Over the mounting sounds of clapping and whistling, a young man's voice rose, shouting, 'Yes, yes! This is what we need! This is a *lot* better than those fish council meetings with everybody screaming across the table at everybody else! *This* is what we need! More of this!'" (22, emphasis in original). Burcell, a Karuk Tribe member and

cultural adviser for the play, documents her own thoughts in response to this viewer's reaction: "For some of us, it was a life-affirming moment. A way had been found to inform, to facilitate meaningful and mutually respectful dialogue, to bridge cultures, and to begin a long-awaited healing process. I gave thanks" (22). At the end of a play that processes death, mourning, trauma, and conflict, this is a powerful statement and a powerful outcome: affirming life in the face of death, facilitating healing in the face of trauma, and finding respect in the face of conflict might yet fix the world.

Conclusion

With the advent of environmental humanities, the vital role of literary and artistic work in grappling with environmental challenges of our time becomes increasingly recognized, as does the necessity to reach across academic disciplines in order to establish a productive conversation. As Val Plumwood notes, "[w]riters are among the foremost of those who can help us to think differently" (451)—poetry, literature, and storytelling have a way of "'making room' for understanding the vivid presence of mindful life on earth" (Rose 146). Indigenous literatures and collaborative projects such as the Klamath Theatre Project do crucial critical work in foregrounding not only the need to address issues of environmental inequality and justice as part of this conversation, but also in demonstrating that the current crisis cannot be solved without drawing on epistemological diversity and recognizing the wisdom contained in Traditional Ecological Knowledge and kincentric ways of being in and with the world. This includes acknowledging the harm done by epistemological frameworks that propagate an anthropocentric vision of domination over nature and place humanity outside and above all other parts of the ecosystem. Kincentric narratives that uplift stories of ecocultural relationality with other-than-human kin make a vital contribution to restor(y)ing the operating paradigm that promotes sustainable models of being

together in the world. Such narratives are tied to the land, the material environments, and the specificities of particular ecosystems. Kincentric narratives that uphold Indigenous relational ecologies, philosophies, and science demonstrate that the way we act starts with the stories we tell, and that this power of stories can be used for good and for ill. As Thomas King famously said, "[s]tories are wondrous things. And they are dangerous" (9).

Focused as it is on the ecological and "ecocultural keystone species" of the region, salmon literature is becoming increasingly prominent in promoting a kincentric paradigm in the Pacific Northwest (Martinez 160). I have selected the two literary works discussed in this article because they constitute notable examples of kincentric narratives that not only feature salmon as their protagonists, but also arguably function as pieces of cultural criticism, undermining the perceived, artificial boundary between story and theory and strengthening the intellectual tradition of kincentrism. Much insight can be gained by engaging such narratives in a dialogic perspective, as I hope this article was able to demonstrate. The two texts harness the thematic, symbolic, and affective strengths of their respective genres and media in order to enact their vision of ecocultural restoration—one by detailing minute aspects of a life defined by a close personal relationship with the salmon, the other by coming together as a community in the theatre, both on and off stage, in order to grieve together for the dead fish relatives and look for ways of affirming life.

My Life with the Salmon and *Salmon Is Everything* are very different in their formal composition and the narrative strategies they employ, yet very similar in the kind of foundational story they tell, and in the restorative impulse that animates them. With one rooted in the unceded territory of the 'Namgis First Nation in Canada and the other in ancestral lands of Karuk, Yurok, and other Indigenous nations whose homeland is located in the Klamath River watershed in the United States, they also show that

geopolitical divisions are arbitrary constructions whose discursive and material power is called into question by the mobility patters of anadromous, migratory species such as salmon. Ignoring colonially signified national and regional borders, salmon trace and reinforce ancestral and contemporary Indigenous kinships and international relations that include them in their territory-making.

As part of these objectives, both texts meditate on how strong and simultaneously vulnerable salmon are, and what profound interdependencies exist between the fish and humankind. In the face of decimation caused by extractive cultural and economic models implanted in the land through colonization, Diane Jacobson's *My Life with the Salmon* and *Salmon Is Everything* by Theresa May and the Klamath Theatre Project both affirm the peoplehood of the salmon at the same time as they affirm epistemological, cultural, and ecological sovereignty of Indigenous nations. In this way, the people and the fish hold each other up and celebrate each other's resilience. Rose's words in *Salmon Is Everything* encapsulate this: "Salmon have seen death all around them, but they still fight back. They are strong! Watching them makes my heart glad" (57).

[1] The passage in the epigraph is taken from Ellen Rice White-Kwulasulwut's, *Legends and Teachings of Xeel's, The Creator*. Theytus Books, 2018, p. 85.

[2] Such as "The Sockeye that Became a Rainbow" by Ellen Rice White (Snuneymuxw), which is one of the "traditional stories handed down to her from her grandparents and their ancestors of the Coast Salish peoples of the west coast of British Columbia" (Archibald xiii), or "Salmon Boy: A Legend of the Sechelt People" by Donna Joe (Sechelt).

[3] For a detailed discussion of the notion of "ecoNative" see Mita Banerjee's article "The Myth of the EcoNative? Indigenous Presences in Ecocritical Narratives," in which she argues that such figurations are not only romanticizing, but also necropolitical.

[4] In fact, all different types of texts that develop within the generic space of life-writing continue to constantly morph and reinvent themselves. By presenting a subject in relation while simultaneously theorizing this relation, Jacobson is closer to a more recent development in autobiographical fiction described by Patrick Madden as the "new memoir." According to Madden, this type of life-writing is characterized by "a refusal to self-aggrandize or exaggerate for dramatic effect. The new memoirist is more interested in exploring his past and finding in it connection to others, in writing towards discovery and universality. The non-literary memoirist, on the other hand, seeks to distinguish himself from others and therefore writes about the most exceptional events" (226-27). Interestingly, the objectives of the new memoir intersect with Reder's notion of Indigenous autobiography as a theoretical practice, insofar as "contemporary memoir often theorizes as well as recounts lived experience," which raises the question whether "the genre itself perhaps presages a new era in the classic division between writing and criticism" (Dibattista and Wittman 17). In that sense, the new memoir is exhibiting tendencies similar to Indigenous autobiographical (and critical) practice as Reder describes it.

[5] The communal importance of food finishing is evident on several occasions throughout *My Life in a Kwagu'l Big House*, but perhaps most notably in a scene describing "canned fish days" (34) when the narrator's family processes the salmon they caught on the previous day: "We took turns washing up and began a new day helping with what came naturally to our family—working on fish that would be our main source of food during the long winter months ahead. Our elders started us at the simplest of jobs as children. No one did anything else other than what he or she was told because we had to be taught the right way to do our fish by the more experienced workers" (28).

[6] For an in-depth discussion of the negative impact of hatcheries on the wild salmon stocks, see Lichatowich and Zuckerman 28-31. In his book *Salmon Without Rivers*, too, Lichatowich points out that "[c]urrently, hatcheries remain the primary means of restoring salmon even though such programs have clearly failed to achieve their purpose for more than a century" (8).

[7] Explaining the process by which the play came into being in her introduction to the printed version of the play, Theresa May, a non-Indigenous playwright, writes: "Over a three-year period, I worked closely with Native faculty, staff, students, and community members throughout the Klamath watershed to research and write a play that told the story of people directly affected by the river's crisis—we called this the Klamath Theatre Project (KTP)" (7).

[8] For in-depth discussions of ecological grief, see, for example, Ashlee Cunsolo and Karen Landman's edited volume *Mourning Nature: Hope at the Heart of Ecological Loss and Grief*.

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Cherishing the Impaired Land: Traditional Knowledge and the Anthropocene in the Poetry of Gwen Westerman.

JOANNA ZIARKOWSKA

In the first chapter of a historical narrative about the Dakota homeland, Sisseton Wahpeton Oyate poet and artist, Gwen Westerman and Bruce White, emphasize the centrality of land in Dakota cosmologies:

> Mni Sota Makoce. The land where the waters are so clear they reflect the clouds. This land is where our grandmothers' grandmothers' grandmothers played as children. Carried in our collective memories are stories of this place that reach beyond recorded history… No matter how far we go, we journey back home through language and songs and in stories our grandparents told us to share with our children. (*Mni Sota Makoce* 23)

Not only do the stories affirm the significance of Dakota places but they also explain complex and reciprocal relationships among human and non-human beings, originating from environmental conditions and rendered in the Dakota. Similarly, the connection between the land and all beings features prominently in Westerman's poetry. In "Morning Song" from the 2013 collection *Follow the Blackbirds*, a blackbird summons spring with his song and celebrates the seasonal return of all his relatives, human and non-human alike. "Waŋna mitakuye hdipi" [Now my relatives are coming home] (53, 70), rejoices the bird. While the world conceived in Westerman's poetry is governed by the principles of harmonious multispecies relationality, it also includes

images of damage and contamination caused by industrialization, its resulting environmental pollution, and climate change, all identified with the Anthropocene. However, Westerman's lyrical world is not one of destruction either. Rather, Westerman acknowledges the changes brought about firstly by settler colonialism and secondly by industrialization and capitalism, and she traces possibilities for a continuation of harmonious coexistence in which human beings occupy neither central nor superior position in relation to their environment. What facilitates the continuation of the relationship with the land is the tribal knowledge built up over centuries about how to respectfully and responsibly interact with the environment.

In this essay I am interested in the value that Gwen Westerman's poetry ascribes to Indigenous Knowledge (IK) as a way to understand and react to environmental changes and preserve Dakota values in these new contexts. As numerous Indigenous scholars emphasize—Winona LaDuke (Anishinaabe), Leanne Betasamosake Simpson (Michi Saagiig Nishnaabeg), and Gregory Cajete (Tewa) among them—Traditional Indigenous Knowledge (TK), place-based and attentive to all forms of being, emphasizes adaptability to transformation as a framework to think about climate change and the resultant decrease in biodiversity. I believe that the most significant consequence of addressing the ecological state of the twenty-first-century world with Indigenous Knowledge is a disruption of the Anthropocene narratives which identify humankind as the sole agent of change, the sole author of its scientific explanation, and finally, the possible solution to the problem. Instead, Westerman relies on a more nuanced model, which draws attention to the relational character of interactions with other species and beings (those which biology would refer to as nonlife) and thus decenters man in the Enlightenment narrative of progress. Moreover, Westerman rejects the debilitating language of the Anthropocene which describes affected lands

as "damaged," contaminated," and "impaired." It is this last qualifier that is of special interest to me.

Following an illuminating presentation by Disability Studies scholar Sunaura Taylor, "Disabled Ecologies: Living with Impaired Landscapes," given at the University of California, Berkeley, on March 5, 2019, I would like to draw attention to how definitions and descriptions of well-functioning ecosystems depend on how useful they are for human beings. These inherently anthropocentric perspectives introduce hierarchies in which landscapes severely affected by human activity are no longer viewed as ecologically or societally significant. Taylor's research on the Hughes Aircraft lagoon in Tucson, Arizona and the Tucson aquifer led her to explore heavily loaded terminology used in environmental discourse. For instance, according to a definition provided by the Environmental Protection Agency, waters are impaired when there is "detrimental effect on the biological integrity of a water body caused by an impact that prevents obtainment of the designated use" (qtd. in Taylor). Similarly, in the field of ecological risk assessment, an ecosystem is impaired not when it ceases to form meaningful and biologically efficient relations with other ecosystems and beings but when it is no longer significant for *human consumption*. The significance of the metaphor taken from disability studies is certainly not lost on Taylor, who emphasizes how such language perpetuates the idea that impairment is a serious deficiency that needs to be cured or attended to. Taylor draws attention to the fact that Indigenous epistemologies do not sustain such human-oriented perspectives. Instead, they "have long understood the environment as kin or as an extension of one's body" (Taylor). Indigenous scholars have demonstrated this repeatedly and incessantly. Nishnaabeg artist and activist Leanne Betasamosake Simpson, quoted by Taylor, commenting on the pollution on her tribal lands, explicitly articulates her commitment to land: "I can connect myself to every piece of my territory no matter what shape it is in, because *we*

cannot abandon our mother because she is sick" ("I Am Not;" my emphasis). This act of caring for kin, the mother, and all relatives, human and non-human is extensively described in the Indigenous body of knowledge about environments and changes that they undergo. Indigenous Knowledge offers a perspective on the environment that disrupts anthropocentric narratives, with human agents as the makers and transformers of ecosystems.

While the concept of Indigenous Knowledge or Traditional Environmental Knowledge has recently gained a lot of attention in academic circles, it is by no means a new idea in Native communities. As Anishinaabe scholar Deborah McGregor asserts, IK is not an invention of non-Indigenous people nor an academic discipline to be studied and approached in theoretical terms. Instead, IK is a foundational element of Indigenous epistemologies:

> it is regarded as a gift from the Creator and provides instructions for appropriate conduct to all of Creation and its beings. It not only instructs humanity but assigns roles and responsibilities to all of Creation as well. Indigenous Knowledge comes from our relationship with Creation. In an Indigenous context, IK is by nature also environmental knowledge. (389)[1]

Since it is passed on in the oral tradition and community practices, Indigenous Knowledge is often conceived as an accumulated experience and wisdom unique to Native cultures and the environments in which they live. As Melissa K. Nelson (Anishinaabe/Metis) asserts, Indigenous Knowledge is a system of "local knowledges of specific places, geographies, and homelands. They are site-specific, place-based, *in situ* knowledges. Local knowledge is about persistence in place and orientation. This orientation operates on a spatial level with both vertical and horizontal dimensions, among others" (198; emphasis in original). Indigenous Knowledge is hence understood as process rather than content. It is a way of life, manifested in actions rather than

theorized about (Berkes 4-5). Moreover, it is directly related to tribal sovereignty and decision-making processes on a community level and involves diverse areas of tribal governance such as food security, education, human and animal health, management of natural resources, and environmental justice (Settee 61).

If Indigenous Knowledge is a process, it needs to be responsive to changes, be they societal, technological, or environmental. As Eugene Hunn explains, the fact that Indigenous Knowledge is embedded in traditional practices, passed on for generations, does not preclude its ability to adapt to the changing world: "New ideas and techniques may be incorporated into a given tradition, but only if they fit into the complex fabric of existing traditional practices and understandings. Thus traditions are enduring adaptations to specific places" (qtd. in Berkes 3-4). Faced with the effects of climate change, such as declining runs of fish (e.g., salmon and steelhead), declining populations of wildlife and game, loss of water supplies and many others, Indigenous people are addressing regional environmental problems and developing responses based on a thorough knowledge and understanding of environments in which they live (Marchand et al. 179-84).

In the context of climate destabilization and its effects, it is not surprising that Indigenous Knowledge has been appropriated by academia and non-Native scholars and researchers as a reservoir of observations about climate patterns (Williams and Hardison 532) and possible solutions to environmental problems. Simpson draws attention to the political significance of this trend. What is very often forgotten or strategically glossed over is the fact that, although people now look to Indigenous Knowledge for solutions to the detrimental effects of environmental disasters, it had long been the target of assimilationist policies in the US and Canada and discredited as superstition by Western scientists. IK survived only thanks to joint communal efforts and perseverance ("Traditional" 134-35). Moreover, as Simpson emphasizes, Western

scientists are primarily interested in those aspects of Indigenous Knowledge that promise solutions to environmental problems afflicting the modern world, "while the spiritual foundations of IK and the Indigenous values and worldviews that support it are of less interest often because they exist in opposition to the worldview and values of the dominating societies" ("Anticolonial" 374). Potawatomi biologist Robin Wall Kimmerer emphasizes Western scholars' propensity for dismissing Indigenous Knowledge systems as unscientific and superstitious. "Getting scientists to consider the validity of indigenous knowledge is like swimming upstream in cold, cold water," writes Kimmerer. "They've been so conditioned to be skeptical of even the hardest of hard data that bending their minds toward theories that are verified without the expected graphs or equations is tough" (160). This indiscriminate approach to Indigenous Knowledge mirrors the Anthropocene narratives constructed from the perspective of "an unmarked masculine species deriving from the global north" (DeLoughrey 12) and dominating "what is an undeniably *white* intellectual space of the Euro-Western academy" (Todd 247-48; emphasis in original).

This Euro-Western orientation of the Anthropocene discourse is signaled by the gesture of locating its beginnings in the mid-twentieth century, in itself a politically significant act, as Heather Davis and Zoe Todd (Métis/otipemisiw) observe. Rather than relying solely on data from geological strata, Davis and Todd draw attention to the power structure inherent in narratives about progress and the ensuing environmental transformation, and suggest the rise of settler colonialism as the starting date of changes that today result in, among others, climate destabilization. With the emphasis thus shifted, the discussion concerning political implications is expanded to include non-Western epistemologies and societies. More importantly, however,

> to use a date that coincides with colonialism in the Americas allows us to understand the current state of ecological crisis as inherently invested in a

> specific ideology defined by proto-capitalist logics based on extraction and accumulation through dispossession—logics that continue to shape the world we live in and that have produced our current era. (Davis and Todd 764)

Analyzing the rhetoric of the original essay in which Paul Crutzen and Eugene Stoermer introduced the term, Davis and Todd assert that the Anthropocene "replicates a Euro-Western division of mind/thought from land when it is framed as the business of 'research and engineering'" (768). Such a framework stands in sharp contrast to many Indigenous ontologies which reject the view of man as the center and agent of the world. Thus, similarly, the Anthropocene is an extension of a colonial logic of erasing difference, of brutally imposing "the right way of life" through genocide, forced assimilation, dispossession, relocation, and violent transformation of nature. "[F]orcing a landscape, climate, flora, and fauna into an idealized version of the world modelled on sameness and replication of the homeland" (769) was an integral part of the colonialist project and today is understood as one of the reasons for climate destabilization and the loss of biodiversity.

Indeed, in the United States, Canada, and other settler states (e.g., New Zealand and Australia), Indigenous people were forced to reckon with anthropogenic transformations long before the word "Anthropocene" entered academic discourse. As Potawatomi scholar Kyle Powys Whyte observes, for Native people, this highly disruptive moment occurred not in the twentieth century but with the coming of settlers, when many Native communities were forced to discontinue their relationships with plants, animals, and ecosystems. Therefore, if Indigenous people experience the Anthropocene in a different way, it is because after centuries of land dispossession, forced relocation, assimilation, and the loss and/or disruption of cultural continuity, they need to focus "their energies *also* on adapting to another kind of anthropogenic

environmental change: climate destabilization" ("Our" 207; emphasis in original). Moreover, not only did the anthropogenic change dramatically alter the environment through deforestation, industrialization, overharvesting, and pollution, but it also "obstructed indigenous peoples' capacities to adapt to the changes" (Whyte 208). And change, as pointed out earlier, has always been an integral part of Indigenous Knowledge which, based on centuries of observation and interaction with the surrounding world, instructs people how to react to transformations in ecosystems.

Gwen Westerman's *Follow the Blackbirds* features a world that is affected by environmental, cultural, and socio-economic changes. The collected poems portray a landscape of highways, asphalted roads, Walgreens, and wired fences. It is a world transformed by the rule of the Capitalocene, "a way of organizing… a nature in which human organizations (classes, empires, markets etc.) not only make environments, but are simultaneously made by the historical flux and flow of the web of life" (Moore 7). However, it is also a world of blackbirds and the buffalo following their ancient migration routes. The lyrical voice carefully observes the new contexts and offers insightful and often ironic comments which reveal the short-sightedness of projects constructed around the desire to control nature. A responsible and reciprocal relationship with the environment is displaced by consumerism, unchecked extraction of natural resources, and settler colonial practices of land grabbing. Yet, what the poems communicate, imparting Indigenous Knowledge, is that regardless of this violence perpetrated on the land and its inhabitants, environments—following the ancient cycles of destruction and renewal—find a way to seek balance and restoration.

In "Innocent Captives," Westerman pointedly illustrates the scale and scope of changes introduced by capitalist industrialization. The poem traces the extent to which the capitalist economy is responsible for mass transformation of the landscape and the rupture in the natural balance. Moreover, submitting nature to the rules of profit motive

displaces non-human beings that have lived in the area for centuries. The titular "innocent captives" are blackbirds that abundantly populate central and southern parts of North America. Among the most commonly observed species are "red-winged blackbirds (*Agelaius phoeniceus*), common grackles (*Quiscalus quiscula*), yellow-headed blackbirds (*Xantbocephalus xanthocephalus*), and brown-headed cowbirds (*Molotbrus ater*)" (Werner et al., 251-52). The poem emphasizes how blackbirds have been natural and rightful inhabitants of the area, taking advantage of the land's seasonal abundance: "Ancient memory guides them each spring and fall / along river valleys and wetlands" (Westerman 10). However, in the Capitalocene, marshes that feed blackbirds and other beings are "drained and fertilized for increased yield / and prized cash crops and condos grew" (10). The birds are greeted not by sustainable ecosystems but by agricultural fields, artificially enhanced for maximum production. The function of the intervention into the environment is not to counter the effects of earlier interference in ecosystems but to maximize profits.

Indeed, the blackbirds' ancient home has become a site of mass-scale agricultural production whose logic displaces blackbirds and reevaluates their presence in the area. Since the 1960s, North and South Dakota have become the main regions of commercial sunflower cultivation, producing approximately 73% of the total 1.95 billion kg (National Agricultural Statistics Service qtd. in Blackwell et al 818). As expected, the plant "with oil-laden seeds" (Westerman 10) attracts blackbirds, which appear in the area in spring. From the business-oriented angle, it is estimated that the losses caused by the birds' activities in the sunflower fields (red-winged blackbirds are identified as the most prevalent and dangerous to crops) can amount to $2.8 million annually (Blackwell et al 819). To prevent damage, the industry runs programs of baiting during spring with DRC-1339 (3-choloro-4- methalalanine)-treated rice: lured by a treat, the birds ingest the toxin and die (Blackwell et al 818).[2] The rationale behind

the practice is the focus on efficient production, which redefines the birds' ontological status: from rightful seasonal inhabitants of the area, they are turned into a risk to an otherwise economically successful operation. The language used to describe the practice is striking. Justifying the reasons for the use of lethal toxins and their potential effects on non-targeted species, Bradley F. Blackwell and colleagues thus describe the situation: "Concurrent with the growth of the sunflower industry in the Great Plains have been *increased conflicts* associated with bird (primarily red-winged blackbird. . .) *depredation* of unharvested crops in late summer" (818; my emphasis). The apparently military imagery used to describe birds' natural behavior endows them with agency oriented at calculated deceit. The term "depredation" inevitably evokes images of looting, plundering, and destruction, again associated with the disorder characteristic of war zones. Thus the red-winged blackbird, rather than a natural element of the ecosystem, is redefined as an adversary. Not only does the logic of the Capitalocene intervene in a previously sustainable ecosystem but also it dictates which species are allowed to function in inherently altered landscapes.

In the poem, Westerman focuses on the very act of poisoning the birds and offers an acutely painful description of their death. Moreover, she emphasizes the improvement of the baiting method: next to trays with poisoned rice, farmers place caged blackbirds, "innocent captives" of the poem's title, whose role is to attract free-flying birds: "Captured blackbirds call their unsuspecting relatives / to a feast placed away from fields of ripening sunflowers" (10). The cruelty of this practice concerns the ways in which caged birds are implicated in their kin's demise. Their presence is supposed to signal safety whereas in reality, the blackbirds invite their free-flying relatives to a feast of toxins: "On top of cages, brown rice glitters in toxic trays, / a tempting easy meal. / Poisoned" (10). In Dakota cosmologies, all living and non-living beings are intimately interrelated. In view of this, using captured blackbirds as bait is a

violent act that disrupts the reciprocal relationships in the ecosystem and among the species, not only by eliminating animals the industry deems dangerous but also by destroying intraspecies trust.

The scene of the blackbirds' death strongly resonates with the image of human violation of natural laws that regulate the presence of all beings in an ecosystem. The blackbirds need food to build muscles for their future migration and therefore, motivated by the instinct of survival, easily fall prey to poisoned rice. Interestingly, in texts describing DCR-1339's efficacy, the birds' death is presented as quick and painless and the language employed is focused on the reliability of the chemical: "It has been noted that birds may be thirsty and seek water prior to death (a consequence of renal failure; . . .), but this is the only adverse effect recorded. Birds that ingested a lethal dose of the compound died a quiet death; there was no flapping, convulsing, vocalisation or any other indication of pain or distress" (Dawes 1). The impersonal passive voice implies an absence of anyone's culpability; the absence of wing flapping and vocalizing is supposed to reassure the reader that no pain is felt. These deaths are supposed to be silent and invisible. This discourse of efficacy is contrasted with Westerman's closing stanza in which the birds' death, though silent, is by no means without impact: "Husks drop and rice scatters, as darkness falls / blackbirds roost / in a flash of black and red / and they fall / silent / among the blooms" (10). The contrast between blooming sunflowers and dying birds is striking. The abundance, "the blooming flowers," is artificially produced and protected at the price of other beings' lives, all to ensure profits in a capitalist economy. The birds, defined as a danger to profit optimalization practices, are judged expendable and thus killed.

A similar critique of the capitalist discourse is found in "Skin Essentials." Here, Westerman mocks the language of advertisements in which everything can be transformed into a product and become sellable: "Shelves, endcaps, bins spill / over

with essences of everything—/ essential fragrances, essential products, / essential needs. . . ./ Available for a limited time only / at a special introductory price. . . . / Skin Essentials—FREE after rebate!" (48). The discursively produced state of urgency urges the reader to purchase products that most likely are useless but are represented as indispensable. The second stanza of the poem focuses on the ambiguity of the word "essence" and its use in relation to definitions of identity. Westerman emphasizes that some concepts are not subject to the rules of capitalist transactions. What constitutes Indianness is connected with active "being" rather than accumulating objects: "Prayers. / Relatives. / Ceremonies. / Connections to what is real. / There is an essence to who we are. / And a coupon from Walgreens / cannot be redeemed here" (49). Hence Westerman demonstrates the existence of contexts in which the logic of the Capitalocene does not apply.

While Westerman's poems do indeed document anthropogenic violence and destruction, they consistently draw attention to the way ecosystems seek to heal themselves and preserve the original balance, all of it meticulously described in Indigenous Knowledge. Many blackbirds are killed with a man-made toxin but there are other species that resist capitalist-oriented transformation of the land. "Where the Buffalo Roam" is a characteristic example of Westerman's insistence on depicting the perseverance of natural processes. The title already announces two important images that the poem intends to project: that of the buffalo, one of the fundamental species in cosmologies of the Plains Indians, and the idea of "roaming" that evokes associations with free, unobstructed movement of human and non-human beings across the land. As Julia Hobson Haggerty and colleagues observe, "In traditional Assiniboine and Sioux belief systems, buffalo and humans are related through ancestral heritage. In this relational cosmology buffalo can communicate, act and relate with human beings" (23). This intimate relationship was disturbed and almost completely destroyed by the arrival

of Europeans. Overhunting and, later, slaughter of the buffalo calculated to disrupt Native economies and ways of sustenance nearly obliterated the entire species. "The buffalo were killed to near extinction," writes historian Roxanne Dunbar-Ortiz, "tens of millions of dead within a few decades and only a few hundred left by the 1880s" (142).[3] It is precisely the kind of anthropogenic change that Whyte identifies with settler colonialism that long preceded the invention of the Anthropocene. In the twentieth century, numerous preservation and restoration efforts on the part of Native tribes have brought positive effects in an environmental and cultural sense, reintroducing the buffalo to their original habitats.[4]

In the poem, the buffalo return to the area of the Great Plains, now transformed and artificially divided by interstates, highways, and barbed wire fences. Those travelling along these man-made lines are unaware of the land's ancient heartbeat; they are "hypnotized by lines, lost without maps" (Westerman 33). As if awoken by instinct, a small herd escapes from a Minnesota ranch and is unmoved by human attempts to control its movement. The local press announces: "Buffalo Refuse to Go Home" (32). But what exactly is home? The lyrical voice asserts that the buffalo instinctively return home, which clearly is not an area of the ranch with fence posts, barbed wire, and pens. The buffalo know which direction to go, relying on a reservoir of knowledge, imprinted in their bodies, in the land, and in memories: "pulled by the tide / they return to the / bluestem grass and coneflowers" (32). Evoking the metaphor of the body, the poem compares ancient routes of animal migrations to a pattern of veins that carry blood: "Filled with life, / the ancient trails vein / through the tallgrass prairie / from valley to valley, age to age" (32). Home and routes that lead to it are imprinted on the land, encoded in moon cycles, and remembered in the body.

Describing the buffalo's journey home, the speaker juxtaposes the ancient geography remembered in the animals' bodies with the industrial transformations of

the land. The buffalo cross states, "race across Kansas highways and history," indifferent to artificially constructed borders, and at sunset reach "Okla humma" (32, 33). The invocation of the Choctaw name of the area acknowledges the Indigenous presence on the land and the time when the buffalo, rather than being "managed" and captured in pens, roamed freely. The concept of nature running its course is contrasted with images of land transformations conducted according to capitalist rationality. "Acres for Sale, Prime Development, Master Plan" (33) read the billboards that the buffalo pass on their way. While the speaker does not underestimate the scale of the environmental change, she asserts the significance of natural processes that govern the life of non-human beings and demonstrate the power of regeneration: "From the edge of extinction, the buffalo know by heart / the tracks laid down by the millions / who passed in a dream, on an ocean, on a highway / and they watch over those held back by fences / just waiting, waiting, / waiting" (33). The group of escapees seems to be waiting for their fellow-buffalo to join them on the journey to their traditional lands and thus rebuild a connection severed by settler colonialism.

The dynamic and changing relationship with the land and its inhabitants is an important part of Indigenous Knowledge and is similarly stressed in Westerman's poetry. Marie Battiste (Mi'kmaq) and James Henderson (Chickasaw/Cheyenne) explain that

> knowledge is the expression of the vibrant relationships between people, their ecosystems, and other living beings and spirits that share their lands… To the Indigenous ways of knowing, the self exists within a world that is subject to flux. The purpose of these ways of knowing is to reunify the world or at least to reconcile the world to itself. Indigenous knowledge is the way of living within contexts of flux, paradox, and tension. (42)

The preservation of unity with the world has become even more instrumental and challenging in the context of the anthropogenic transformations which profoundly affect ecosystems. In "Delisted" Westerman asserts the continuity of the Dakota people's relationship with the land and non-human beings despite the harm done to ecosystems. More importantly, however, she reveals the arbitrariness of Anthropocene logic. The poem retells one of many Anthropocene-oriented stories about extinction or near-extinction of species due to industrialization and environmental pollution. In 1940, Congress, alarmed by the dropping population, placed the bald eagle (*Haliaeetus leucocephalus*) on the endangered species list ("History"). In 2007, after considerable preservation efforts and the reluctantly introduced reduction in the use of persistent organochlorine pesticides (such as DDT), the eagle was delisted and is now no longer under federal protection ("Endangered"). Thus, the criteria which define a species as endangered are arbitrarily constructed and reveal the political underpinnings of addressing ecological transformations and crises. Sadly, they are rarely aimed to directly address preserving natural balance. According to Whyte, the same logic, driven by the desire to manage ideological content, is detectable in Anthropocene discourse. "Epistemologies of crisis," as he refers to the philosophical building blocks of the Anthropocene, address climate change on a linear time frame as an unprecedented and imminent crisis, which obviously is a premise constructed from the Euro-Western perspective. "In thinking through the implications of unprecedentedness and urgency," Whyte asserts,

> climate change, as a concept, is a rhetorical device that people invoke so they can believe they are addressing a crisis without having to talk about colonial power. Epistemologies of crisis are presentist in their narrative orientation… Epistemologies of crisis then mask numerous forms of

> power, including colonialism, imperialism, capitalism, patriarchy, and industrialisation. (57)

In other words, like Davis and Todd before him, Whyte draws attention to the Euro- and anthropocentric orientation of discussing climate change and environmental transformations in terms of crisis only. The immediate questions that such a framework raises about the criteria used to identify a crisis and who is counted as a victim are conveniently ignored. Therefore, he juxtaposes epistemologies of crisis with elements of Indigenous Knowledge, here called "epistemologies of coordination." "Different from crisis, coordination refers to ways of knowing the world that emphasise the importance of moral bonds—or kinship relationships—for generating the (responsible) capacity to respond to constant change in the world. Epistemologies of coordination are conducive to responding to mundane and expected change without validating harm or violence," writes Whyte (53). Thus, the relationship with the environment involves *continuous* nurturing of responsible and reciprocal connections, not only in a moment of a subjectively defined crisis but over generations.

In portraying Euro-Western and Dakota approaches to the environment, "Delisted" evokes Whytes's epistemologies of crisis and coordination. The poem begins with placing of the eagle on the endangered species list and then its removal. While saving the bird from extinction appears to be a noble gesture, the speaker is quick to remind us that the reasons it is in danger are anthropogenic and directly result from settler colonialism and its practices: "Forty years later, / the bald eagle has recovered / from loss of habitat, *deliberate* / killing, and DDT poisoning" (Westerman 39; my emphasis). Moreover, by referencing Rachel Carson's 1962 *Silent Spring*, the poem emphasizes that the toxic effects of pesticides were known long before the book was published (Lutts 211-12). Despite vocal outcries, nothing or very little had been done to ban or limit the use of pesticides by 1962, as *Silent Spring* eloquently argued.

It was only when the bald eagle population dropped dramatically, leading to a situation that could be classified as a "crisis," that appropriate legislation was introduced. In other words, what triggers action is a rupture in continuity rather than a concern for continuity itself.

By contrast, the Dakota relationship with the eagle is based on the epistemology of coordination, which organizes "knowledge through the vector of kinship relationships" (Whyte, "Against" 62). The intimate connection between humans and the eagle is forged on spiritual and emotional levels. For instance, as David C. Posthumus reports, bald eagle feathers are often used in rituals and ceremonies and when attached to a person's body the individual "embodies the characteristic attributes and bodily apparatus of the eagle and hence temporarily *becomes* an eagle" (194-5; emphasis in original). Dakota cherish and revere the animal for its beauty and power and in return they receive protection. Thus, the relationship is one of respect and reciprocity, illustrating the relationality of all beings: "For longer than time, / the eagle has been sacred / and in our songs we have / asked it to protect us" (39). The bald eagle is approached as kin rather than a part of the environment that needs to be managed due to pollution. Moreover, each stanza concludes with the Dakota words which celebrate the eagle and acknowledge his significance in the times predating settler colonialism: "Ake wambdi kiŋ hdi" [Again the eagle returns]; "Wambdi kiŋ uŋkicidowaŋpi" [We sing for the eagle] (39, 69). Thereby, the speaker demonstrates the continuity of the relationship between the Dakota people and the eagle, which has been disrupted but not completely broken. Thus, this connection is not established as a response to a crisis but instead accompanies and evolves with the changes induced by settler colonialism.

Despite the changes triggered by settler colonialism, the reciprocal relationships among all beings are encoded in the land, its geography, ecology, in every molecule

and in DNA. In "Quantum Theory," the speaker observes blood oozing from her finger cut by paper. The red liquid contains past generations as well as the promise of the future. Most importantly, "Blood carries stories of our origins from / beyond the stars," thus validating the Dakota people's claim to the land as home. In "Below the Surface," the Dakota land is transformed by human intervention but it never ceases telling stories of its inhabitants. Therefore, the speaker recognizes the blackbirds' song, migration routes, and names of creeks and bluffs, now renamed with English terms. They may be changed but nevertheless they remain the same and retell the story about relational responsibilities of human and non-human beings. This message, located "below the surface" of what is visible, defines the speaker's place in the world and her ontological status of a being that understands the non-verbal language of the land. "I am thirsty and / I know the way home" (65), she announces.

This body of knowledge about the land and its inhabitants, Indigenous Knowledge, lies at the core of Dakota culture and identity. It connects people, non-humans and other beings in a network of interdependencies, which, while not necessarily hierarchical, create a balanced and sustainable system. The longevity and perseverance of this body of knowledge relies on intergenerational transmission. In "Follow the Blackbirds," the poem opening the collection, the speaker recalls the last moments of her grandmother, confined to a hospital bed on the reservation. Her grandmother describes the feeling of discomfort at the realization that death is approaching with an image of drought. The speaker elaborates on this image, referring to her grandmother's body as "evaporating" (3). It is an important comparison: lack of water means death for all organisms, not only humans, which clearly signals an anti-anthropocentric perspective on the surrounding world.

The grandmother's message to her granddaughter is an example of how one's survival depends on and is inextricably linked with understanding the environment and

its inhabitants. It is also a lesson in an epistemology of coordination (and cooperation), which "come to know the world through the state of kinship relationships" (Whyte, "Against" 59). "Grandma told us / to look for / blackbirds, / she said, / that they always / go to the water. / You won't ever / be lost / or thirsty / if / you follow / the blackbirds" (3), reports the speaker. The short, dynamic lines emphasize the urgency of the message as it ensures not only survival in a dry landscape but cultural survival as well. The speaker recognizes the significance of her grandmother's words rendered in the continuation of the water/thirst imagery: "I *drink* in her fluttering voice / trying to *quench* / the imminent drought" (3; my emphasis). Considering Westerman's consistent return to the theme of colonization and forced assimilation in boarding schools, the "drought" may also imply a threat to the life of Dakota culture. Thus, remembering that blackbirds will always lead the speaker to water constitutes a celebration of IK. In another poem, "This Is My Explaining Ceremony," the speaker again recalls the grandmother's teachings: "A grandma's words that can fill a rain barrel or wash away fences and / fields like a flood. / Sounds that bring life ticking on a tin roof, that sting / bare legs and hearts. Sounds of water flowing. Sounds of water falling. / Sounds of water filling" (27). Words about water sustain life, in a physical and cultural sense. The speaker's insistence on repeating her grandmother's words is in turn an act of resisting the absence of Indigenous ontologies in the Euro-American context, which, according to Sisseton Wahpeton Oyate scholar, Kim TallBear, is a denial of Native people's vibrancy, survival, and endurance. "It is a denial of ongoing intimate relations between indigenous peoples," writes TallBear, "as well as between us and nonhumans in these lands" (198). Thus the IK that is contained in the speaker's grandmother's seemingly insignificant words in fact communicates a message about all life's survival on the planet through relational responsibilities.

Gwen Westerman's collection *Follow the Blackbirds*, with Sunaura Taylor's illuminating presentation and Leanne Simpson's powerful call about polluted tribal lands in mind, is an important reaction to the climate and environmental transformations we are facing today. Westerman's poems communicate Indigenous Knowledge about ecology, interactions between human and non-human, and ways of adapting to change, thus offering a different narrative than that of crisis. While undoubtedly the era of the Anthropocene is a moment of irreversible loss, it cannot be forgotten, as Westerman reminds us that there are still well-functioning connections in the environment. They provide instructions on how to deal effectively with anthropogenic transformations and need to be cherished. This body of knowledge constitutes a part of Indigenous epistemologies, for so long dismissed by Euro-Western science. Secondly, as Taylor asserts, human activities that have produced the Anthropocene and disabled environments are not only related to the rise of capitalism and technological advancement but are also related to systemic racism and injustice, and other manifestations of settler colonialism. Westerman's poetry is attentive to all these issues. On the one hand, the prevalent theme is the environment, mimed, impaired, but nevertheless, loved, appreciated and preserved in traditional stories, and thus becoming a building block of Dakota identity. On the other hand, there is settler colonialism and its myriad practices aimed at the elimination of Indigenous Knowledges and people. Yet, despite all these genocidal efforts, Westerman demonstrates how the land remembers its people and how the people revere the land in a kinship-oriented ecology.

Notes

[1] In certain contexts, the terms Indigenous Knowledge(s) and Traditional Ecological Knowledge are used interchangeably, while some see TEK as a part of IK.

[2] On the question of whether the use of DRC-1339 constitutes humane killing see Joan Dawes, "Is the Use of DCR-1339 Humane? PestSmart.org.au, https://pestsmart.org.au/wp-content/uploads/sites/3/2020/06/DRC1339.pdf.
[3] A more complex history of the demise of the buffalo can be found in Andrew C. Isenberg, *The Destruction of the Bison: An Environmental History, 1750-1920* (Cambridge: Cambridge University Press, 2000).
[4] For more on buffalo restoration see e.g., Ken Zontek, *Buffalo Nation: American Indian Efforts to Restore the Bison* (Lincoln: University of Nebraska Press, 2007).

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Critiquing Settler-colonial Conceptions of 'Vulnerability' through Kaona in Mary Kawena Pūku'i's Mo'olelo, "The Pounded Water of Kekela"

EMMA BARNES

As Nicole George notes in *Climate Hazards, Disasters, and Gender Ramifications,* Pacific Islanders are "the first communities to be negatively impacted as we enter an era known as the Anthropocene" (113). For Indigenous peoples of the Pacific, environmental change is not part of an "impending climate crisis" (Whyte, "Indigenous Science" 225) or "doomed" future (McNamara and Farbotko 18) but is a lived reality. Having endured and survived changing environmental conditions for centuries, Pacific Islanders possess a host of traditional, ancestral knowledges that enable not only survival, but the ability to thrive amidst extreme weather events, one of which is drought. Due to the colonial conditions that have created climate change and inform its mitigation strategies, however, global powers frequently dismiss Pacific Islanders as 'vulnerable', and, I argue, use this logic of 'vulnerability' to exclude Indigenous peoples and Indigenous knowledges from climate change responses.

This article aligns itself with scholarship that asserts that climate change and the conditions that produce climate change vulnerability are a direct result of colonialism (Whyte "Indigenous Climate Change Studies" 153; Robinson 312). Kyle Whyte encapsulates this relationship in his statement, "climate change is an intensification of environmental change imposed on Indigenous peoples by colonialism" ("Indigenous Climate Change Studies" 153), and similarly, Angela Robinson makes the case that "climate change functions in many ways as an affective regime of colonialism" (312). This is particularly pertinent when considering the relationship between colonial

powers and Indigenous nations in the Pacific, as Robinson explains: "Insofar as the United States has been the primary contributor to climate change and its effects, it is therefore largely implicated in and responsible for the environmental devastation occurring in Oceania" (320). This article builds upon this scholarship by foregrounding the gendered components of this "affective regime" (Robinson 312) and the ways in which it disproportionately impacts Indigenous women. As a structure, settler colonialism does not exist in isolation, but intersects with heteropatriarchy and capitalism. It is the triangulation of these structures that has produced our current climate crisis and continues to monopolise mitigation strategies. As Maile Arvin, Eve Tuck, and Angie Morrill explain, "settler colonialism has been and continues to be a gendered process" (9), and it is the gendered elements of settler colonialism and its use of "vulnerability" that this article seeks to explore in relation to climate change responses. I argue that the colonial and "masculinised nature of contemporary climate change governance" (George 115) now weaponises gendered vulnerability to climate change to perpetuate the colonial myth that Indigenous women need to be "instructed, led and managed" (Fordham et al 8) and prevents Pacific Island women from leading adaptation strategies to drought and disaster management. As Robinson suggests, "Attempts to delay solutions that effectively address climate change can thus be framed within the larger regime of US colonialism and imperialism" (320), and it is for this reason that the concept of climate change "vulnerability" needs to be analysed within the context of the Pacific's settler-colonial history.

Building upon recent efforts to foreground the political utility of Pacific literature (Oh; Robinson), this article turns to a Hawaiian story, or mo'olelo, "The Pounded Water of Kekela", to challenge the colonial and patriarchal conceptions of Indigenous vulnerability. As Jenny Bryant-Tokalau states, "islanders and their countries are not always as vulnerable as they may appear, and had, in the past, the ability to survive in

the face of environmental changes without a large amount of assistance from donors" (3). Hawaiian mo'olelo, or stories, make visible this long-standing ability to respond and adapt, and thus offer counter-narratives to contemporary discourses of climate change vulnerability. Through this first analysis of Mary Kawena Pūkui's fiction, I make the case that this vulnerability does not prevent Indigenous women from being central to the recovery and reparation of the environment. I examine Pūku'i's depiction of mana wahine, or "feminine spiritual power" (McDougall, "Wondering and Laughing" 27), to emphasise how Hawaiian women or wahine 'ōiwi are agents of change in forming responses to environmental change globally. I demonstrate how the navigation and combatting of environmental disaster is conceptualised through kaona, or metaphor, relating to the female body. It demonstrates how this mo'olelo at once provides a narrative of Indigenous, female adaptability, and also demonstrates how the lessons of the past (ka wā mamua - that which is in front of us) can guide Native Hawaiians in the wake of an unknowable future (ka wā mahope).

Critiquing the Deployment of 'Vulnerability' in Climate Change Discourse

In its original usage within climate change discourse, vulnerability encapsulates two circumstantial contexts: the initial propensity to anticipate or be harmed by environmental disaster, and the ability to recover from, or adapt to, the consequences of an environmental disaster (Wisner et al. 11; Kelman et al. 130; Kelman 8). In terms of exposure to risk, the Hawaiian Islands, along with other Pacific Islands and territories (PICTs),[1] are indeed vulnerable to effects of climate change including rising sea levels, coastal erosion and drought due to their geographical location and extensive littoral zones. It is the latter that this article, and Pūku'i's mo'olelo, are primarily concerned with, as Hawai'i's climate variability and reduced rainfall results in wide-spread droughts of various forms: meteorological, hydrological, ecological and agricultural

(Frazier et al. 96). The impacts of drought extend well beyond limited access to drinking water, as water scarcity then impacts diverse ecosystems across the archipelago as well as agricultural productivity (100). Reduced moisture in the soil can cause "plant stress" (96) as well as an increase in wildfires.

Under these conditions, the vulnerability of Pacific Island women to drought is well documented (Showalter, López-Carr and Ervin 60; Alston 41; Aipira et al. 227). Prior to colonialism, however, Pacific Islander women possessed the ability to recover from and adapt to drought and its ongoing effects. Writing about Native women from Fiji and the Marshall Islands specifically, George explains that: "women have played key leadership roles in their communities and on the international stage to build awareness of and respond to the damaging impacts of climate change phenomena" (125). Elizabeth McLeod et al. also state that Pacific Islander women "hold valuable traditional knowledge gained from their individual experiences adapting to environmental changes over generations" (179) and are "implementing climate-smart agriculture [and] revitalizing traditional practices that utilize drought-tolerant species and the benefits of nature" (2). Like Pūku'i, George and McLeod et al. ("Lessons"; "Raising") demonstrate that Pacific Islander women are not vulnerable to drought due to an inability to respond, as it is clear that Indigenous women have been responding for centuries. Rather, their research reveals that the vulnerability of wahine 'ōiwi is a result of the poverty, violence, and limited access to resources, the conditions of which are result of settler colonialism and heteropatriarchy.

Recent scholarship outlines how female vulnerability to drought and the inability to adapt and respond to drought is the result of systemic oppression, and as Kirsten Vinyeta, Kyle Whyte and Kathy Lyn note: "Native Hawaiians have endured intersecting layers of oppression" at the level of colonial, racial and gendered oppression (2). Hawai'i, alongside other Pacific Islands, has for centuries existed under the

triangulation of settler colonialism, capitalism and heteropatriarchy. As J. Kēhaulani Kauanui explains: "the U.S. occupation in Hawai'i was founded on gendered oppression" (285), evident in the ways that "processes of colonialism eroded Hawaiian women's status" (282). As well as divesting Hawaiian women of political power and voting rights, the logics of settler colonialism, capitalism, and heteropatriarchy have sought to either restrict or invisiblise women's cultural, social and spiritual responsibilities to the land. Lisa Kahaleole Hall explains that "colonialism takes place through gendered and sexualized forms that reconstitute both individual and communal indigenous identities in stigmatized and disempowering ways" (15). Hall goes onto explain that "the legacy of colonial conquest and hyper-commodification has made Hawaiian women's experiences invisible or unintelligible within both dominant and counter-hegemonic discourses" (16). This disempowerment and invisiblisation of Hawaiian women is evident in relation to the role of wahine 'ōiwi in responses to drought, as patriarchal and colonial structures have prevented Native Hawaiian women from possessing leadership roles within their communities. It is the triangulation of settler colonialism, capitalism and patriarchy that has created the conditions of female vulnerability to drought, and perpetuated the notion that Indigenous women are in need of assistance.

The colonial and patriarchal conditions that have produced this gendered vulnerability are the same conditions that continue to prevent Pacific Island women from being given platforms to implement Indigenous knowledge and respond to climate disaster in ways that are culturally appropriate. As Haunani-Kay Trask explains: "The relationship between ourselves [Indigenous peoples] and those who want control of us and our resources is not a *formerly* colonial relationship, but an *ongoing* colonial relationship" (*From a Native Daughter* 103). The ongoing nature of this relationship is visible within the exclusionary nature of contemporary climate change governance.

Whyte explains that although "[c]limate change impacts affect Indigenous women more acutely [...] colonial policies for addressing climate change devalue the leadership of Indigenous women" ("Indigenous Climate Change Studies" 155). The continued invisiblisation of Pacific Island women from climate change strategies is particularly pertinent, as McLeod et al. note that "the perspectives of Pacific Island women are not included in the extensive literature on climate change" ("Raising the Voices" 179). McLeod et al. explain that "the lack of attention to the voices of Pacific Island women in climate research reflects a broader pattern of underrepresenting the importance of indigenous people, gender, and traditional knowledge" ("Raising the Voices" 179). It is these circumstances that lead me to argue that settler-colonial rhetoric deploys the notion of Indigenous, female "vulnerability" to limit Indigenous women's involvement in climate change responses. The colonial and "masculinised nature of contemporary climate change governance" (George 115) is using the notion of "vulnerability" as another "gendered barrier" (116) that prevents Pacific Island women from being included within disaster management and responses to climate change.

Mo'olelo and Mana Wahine

To begin to remedy this exclusion of Pacific Island women and Indigenous knowledge within climate change responses and foreground the resilient and adaptive capabilities, this article turns to a traditional form of Hawaiian storytelling, the mo'olelo. Mo'olelo are a form of Hawaiian intellectual production that "directly linked the kānaka to their land and spirituality" (de Silva and Hunter 1932), and thus preserve traditional, ancestral knowledges (ike kupuna). As well as encapsulating Hawaiian epistemologies and ontologies, mo'olelo demonstrate the significant social, cultural and spiritual roles and resilient capacities of Hawaiian women. As de Silva and Hunter explain, such stories "are crucial to understanding the power behind the voices of the women,

whose resiliency has survived millennia against many colonizing and assimilationist forces" (1935). The most famous mo'olelo, "Moolelo no Hiiakaikapoliopele" (1861-1863), tells of the akua wahine, or female deities, Pele and Hi'iaka, and encapsulates the power of these Hawaiian goddesses that has been passed down through genealogies. In 'ōlelo Hawai'i (Hawaiian language), this feminine power is referred to as mana wahine, which is a "strength" that is inherent, inherited from genealogies and ancestors such as earth mother Papahānaumoku and the volcano goddess Pele (ho'omanawanui 209). Turning to mo'olelo to access mana wahine in climate change contexts is necessary because as ku'ualoha ho'omanawanui explains, "mana wahine is exemplified through our mo'olelo because it is valued in our culture" (209). In their encapsulation of land-based epistemologies and ontologies, and female power, mo'olelo can destabilise rhetoric that presents Pacific Islanders, particularly women, as "vulnerable", and therefore unable to respond to climate change. Building on the work of Brandy Nālani McDougall, who makes the case that mo'olelo and mana wahine "enable strong social, political, economic, and cultural critiques that subvert colonialism, support ancestrally informed decolonial movements, and inspire people to act" ("Wondering and Laughing" 27), this paper demonstrates how mo'olelo and mana wahine continue to subvert the settler-colonial view that vulnerability to drought is synonymous with inability to respond to drought, and instead present Hawaiian women as integral to environmental recovery.

Native Hawaiian Mary Kawena Pūku'i played a central role in the collection of Hawaiian mo'olelo and traditions by interviewing Kanaka Maoli across various localities and transcribing mo'olelo and cultural knowledge (Maly and Maly 40). "The Pounded Water of Kekela" is one mo'olelo that Pūku'i recorded that conveys two simultaneous realities: that wahine 'ōiwi (Hawaiian women) are disproportionately impacted by the effects of drought, but that wahine 'ōiwi are central to the recovery and reparation of

the environment. This mo'olelo was initially told to Pūku'i "by an old man of Kona" (Pūku'i 66), however, it is important to note that "authors of the many mo'olelo wrote their own versions, using both mnemonic devices from the oral tradition and literary devices that developed over time" (Silva 160). Pūku'i first published her retelling of "The Pounded Water of Kekela" in English in the magazine *Paradise of the Pacific* in 1933, a monthly magazine "replete with stories by writers who live in the Islands" (1922 April issue 35 32).[2] It was then compiled in *Pīkoi and Other Legends of the Island of Hawai'i* by Pūku'i and Caroline Curtis in 1949 and republished as *Hawai'i Island Legends: Pīkoi, Pele and Others* in 1996. It is this later version that this article examines.

Kaona, Kupuna, and Menopause

I argue that in "The Pounded Water of Kekela", Pūku'i deploys kaona, an intellectual, rhetorical and literary practice, to represent the response to drought as a female practice informed by female, ancestral knowledges. In its simplest form, kaona is a "hidden meaning" expressed through allusion, symbolism, pun, and metaphor (McDougall, "Putting Feathers on our Words" 3). More than a literary aesthetic, however, kaona "draws on the collective knowledges and experiences of Hawaiians" (3) and it therefore also an expression of Hawaiian epistemologies. Pūkui herself describes kaona as the "spirit" of the text, and in "The Pounded Water of Kekela", I argue that this "spirit" is distinctly feminine. Throughout the narrative, three women - a kupuna, or "old woman", Pele, the Hawaiian goddess of volcanoes and creator of land, and Chiefess Kekela, after whom the mo'olelo is named - play a central role in recovering water for the village of Kona. This discovery of water is a communal effort between the women, as Pele leads the kupuna to the water source, and then the kupuna informs Chiefess Kekela of this hidden body of water. It is then through the

Chiefess's leadership that the village gain access to this water, and the impact of the drought is ameliorated. These wahine ʻōiwi synecdochally represent women of all ages, positions of power and social statuses, and thus convey how wahine ʻōiwi more broadly are central to forming strategies that help communities recover from the effects of drought.

The moʻolelo centres upon a Native woman existing within a colonial space, as it takes place when "the people of Hawai'i had learned from the missionaries about the God of the Christians" (Pūkuʻi, "The Pounded" 61). The subsequent sentence links this colonial presence with environmental decline, as Pūkuʻi writes that "this was a time of drought in South Kona. Had it not been for a few deep wells everyone would have had to leave or die" (61). From the opening of the story, Pūkuʻi deploys kaona in the form of a pun or playfulness with ʻōlelo Hawaiʻi (Hawaiian language) to convey the role of Hawaiian women in this colonial and environmentally-compromised space. As McDougall explains: "kaona may also be made using the Hawaiian language, which is accessible only to some and emphasizes both the untranslatability of certain Hawaiian concepts and the multiple meanings that are inherent to the flexibility of ʻōlelo Hawaiʻi" ("Putting Feathers on our Words" 4). In English, the protagonist is repeatedly referred to as "an old woman", however, a Hawaiian audience would understand the woman to be a "kupuna", a word used in one context to refer to grandparents or elders (Craighill Handy and Pūkuʻi 18). Within traditional Hawaiian culture, elders or kupuna play an essential role in the continuance of knowledges relating to the environment. As Leilani Holmes explains: "stories of the *kupuna* contain historic discourses about knowledge, memory, land and social change" (49). Pūkuʻi deploys kaona in this narrative by drawing upon the multiplicity of meanings associated with the word "kupuna". As well as referring to a grandparent or elder, kupuna also refers to "a starting point" or "source" (Kagawa-Viviani et al. 2). Pūkuʻi uses kaona in the form of a pun to convey that the

kupuna is the source of knowledge relating to reciprocal relationships with the environment, knowledge that is "intended to incite humans to act in such ways as to ensure the protection and reproduction of *all* creatures in the universe" (Holmes 37). Pūku'i also implies to Kanaka Maoli readers that this woman will also locate a new "source" of water during the drought, and thus uses kaona to depict the kupuna as enabling the people in her village to adapt to the lack of rainfall. Through her playfulness with the Hawaiian language, Pūku'i foreshadows how Indigenous women will be pivotal to tackling the issues of water scarcity despite their status as a vulnerable group under colonial conditions.

Pūku'i intertwines the kupuna and the declining state of the environment, and in doing so mobilises the needs of the environment through her female protagonist. As Holmes explains: "the *kupuna* speak of the earth/human relationship", so much so that they "articulate the voice of the land" (38-46). Pūku'i does this through a Hawaiian concept that McDougall refers to as "island-human relationality" ("What the Island Provides" 203). Island-human relationality is "approaching every part of the island as sacred and as ancestor. Doing so entails seeing humans as part of and not separate from the island" (203). In particular, Pūku'i conveys a gendered notion of island-human relationality, as the vulnerability of the archipelago and the vulnerability of wahine 'ōiwi to drought are intertwined through imagery that connects the infertile environment with the aging female body. Repeatedly referring to her as "the old woman", Pūku'i presents a woman who is likely to be post-menopausal. Pūku'i expresses island-human relationality by reflecting this sense of aging and infertility in the barren landscape around the woman: "Dry grass, dry ferns and withering lehua trees—that was all she saw" (61). Stating that these dying plants are "all she saw", Pūku'i conveys the reflexive nature in which the woman views the scorched earth. Here, her perception of self is reflected in the way she perceives the environment. Within the context of Hawaiian

epistemologies, referring to the lehua trees as "withering" also conveys a "hidden meaning" or allusion to the aging female body (McDougall, "Putting Feathers on our Words" 3). In the Hawaiian language there exists a euphemism, "ke kulu waimaka lehua", which translates to "the flowing of the red lehua blossom tears" and refers to menstrual flow (Kame'eleihiwa 75).[3] By referring to the lehua trees as "withering", Pūku'i invokes this Hawaiian phrase to allude to the end of a fertile period, both in terms of the female body and the landscape that is deteriorating due to the lack of rainfall.

As McDougall suggests, however, the perception of the land as ancestor is also visible here, as "lehua trees" are an allusion (kaona), to the ancestor and goddess Pele.[4] In some representations, Pele "adorned herself extravagantly with wreaths of lehua blossoms" (Ho'oulumāhiehie 5). Kaona in the form of an allusion foreshadows how the female ancestors will be central to guiding the protagonist in her responses to the drought. After observing the kupuna has observed the lehua trees, Pele appears to her and her dog. Despite not taking her usual form of an old woman herself, Pele is immediately recognisable to the kupuna, as she exclaims: "'Pele!' She whispered under her breath. 'I have seen Pele!'" (Pūku'i, "The Pounded"63). When considering the first interaction between the goddess Pele and the old woman or kupuna, I argue that their relationship evocative of the relationship between a haka and an akua (god). A haka, which "means literally 'a bird's perch, or a rack to hang things on'" functions as "the medium for a chosen spirit" and a mouth through which the spirit speaks (Craighill Handy and Pūku'i 123). What is significant about a haka is the notion that, as Craighill Handy and Pūku'i state, "[a] woman could become a haka only after menopause" and that "[n]o menstruating person might come there" (124). Whilst Pele does not physically take control of the woman's body, the idea that Pūku'i's protagonist is Pele's chosen haka stems from the fact that the old woman becomes the mouthpiece through

which the water is discovered, and thus is a metaphorical haka. At the end of the narrative, Pūku'i also writes that "[t]o the old people and their dog the people gave great honour, saying 'they are the chosen of Pele and she always chooses the best'" ("The Pounded" 66), highlighting that their encounter was not coincidence, but that the woman was chosen by Pele. In her depiction of the meeting between the kupuna and Pele, Pūku'i emphasises the central role of ancestral guidance and Hawaiian genealogies in the empowerment of women and their ability to adapt to changing environments. As Kame'eleihiwa explains, goddesses such as Pele "are our ancestors, they are our inspiration, they live in us" (72). Indicative of how the Akua metaphorically "live" inside the wahine 'ōiwi, Pūku'i uses the metaphorical *haka* to convey how Pele "lives" inside the woman and empowers her in saving her village from the ongoing drought (Kame'eleihiwa 72). As Pele is "the most important *kupuna*", who guides another *kupuna*, who then guides the Chiefess, this trajectory is a form of *kaona* that demonstrates how women's actions in relation to the environment are indicative of the collective action in which Indigenous women partake (Craighill Handy and Pūku'i 38).

Menstruation and Regeneration

In the same way that the deterioration of the environment is depicted through kaona and the aging female body, the replenishment of the landscape is also signified through kaona relating to youthfulness, menstruation and regeneration. This is first represented through the inclusion of Pele.[5] Whilst her role in creating land contributes to the construction of land as feminine, her femininity is not a means of imagining the landscape as passive and conquerable as is typical of imperialist rhetoric wherein the Hawaiian Islands are constructed as female (Trask, "Lovely Hula Lands" 23; Kauanui 285). As McDougall suggests, Pele's "passionate nature and her emotions drive her to both violence and love, which are demonstrated through the flow and eruptions of

Kīlauea", the volcano ("Wondering and Laughing" 28). Through her ability to take the form of human woman as well as lehua and lava, the figure of Pele presents the feminine nature of the land as dynamic, powerful and dangerous with the potential for disruption and eruption. Similarly, ho'omanawanui explains that Pele "garners respect from the male gods and conquers men" (209). Pele thus poses a challenge to the Western, patriarchal, and imperialist modes of thought that construct Indigenous women as vulnerable to the changing conditions of the environment as Pele is one of the central agents of change upon the archipelago and is therefore representative of mana wahine.

Like many Hawaiian mo'olelo that use kaona through symbols and imagery associated with the female body, this narrative uses kaona or metaphors associated with Pele and menstrual flow to represent the beginning of a new cycle. Analysing Pūku'i's depiction of Pele as a metaphor for menstruation, and the beginning of a new environmental cycle, stems from how Pele is understood within Kanaka legends and the concept of kino lau, or "many forms" (Bray 13). John Dvorak explains that "native Hawaiians traditionally regarded an eruption as the menstruation of the goddess Pele" (8), and Carolyn Bray similarly states that: "[h]er sacred life-giving form, from the menstrual blood that courses through the body/earth, flows from the mouth of the volcano as hot lava" (13). This association between Pele, lava and menstruation is visible as when Pele appears, the kupuna observes that: "[h]er bare feet trod the rough lava road as lightly as if it had been a smooth floor" (Pūku'i, "The Pounded" 61). As well as the lava being associated with a menstrual cycle, in this mo'olelo it is representative of the beginning of a new, environmental cycle that is gendered and therefore functions as an expression of mana wahine. As Bray suggests, "[o]ver time, when the lava-drenched soil is soaked with rain, flora and fauna thrive. When Pele's sacred liquid reaches the sea, new land is formed" (13). It must be noted that as well as

lava being associated with growth through kaona, its association with growth also is representative of pedological findings wherein soils formed by volcanic ash are known to be particularly fertile grounds. Evaristo Haulle and Delphine Njewele explain that in Hawai'i "it is believed that the eruption of volcanic ash greatly enriches the soil, giving better crops" (22). Within these epistemological and pedological contexts then, Pūku'i uses kaona associated with the female body to represent women as central to restoring environmental balance and promoting growth, a notion which contrasts the association of vulnerability with passivity. This life-giving force associated with Pele is another way mana wahine can be understood, as the female body is central to the renewal and growth of the environment.

Pūku'i also draws upon Pele's other bodily forms to symbolise menstruation and regeneration: the end of an infertile period, in terms of drought, and the beginning of a period of growth for the environment. I argue that the first sign of rejuvenation, or the beginning of a new cycle, is seen through this link between the "withering lehua trees" and Pele's appearance as a "young woman" (Pūku'i , "The Pounded" 61). This is due to the fact that, as McDougall explains, one of Pele's bodily forms is lehua groves ("Wondering and Laughing" 38). This means that the opening "withering lehua trees - that was all [the old woman] saw" depicts one form of Pele in decline, before she re-appears in youthful, human form. After seeing these "withering lehua trees", the protagonist looks up to see "a young woman approaching, tall and beautiful, dressed in a red holoku'" (Pūku'i 61). This description is atypical of Pele's kino-lau as her "dominant form" is volcanic activity or an "old hag" (Bray 13). Whilst not implying that Pele transformed from those particular lehua trees into "a young woman", I read the inclusion of the "withering lehua" before Pele's arrival as a form of kaona that signals the end of life, before Pele appears in human form, a metaphor for her new beginning. This unusual and youthful appearance of Pele and her meeting with the "old woman"

are the first ways in which Pūku'i signals a form of re-birth or rejuvenation, and a foreshadowing of how wahine 'ōiwi will provide a solution to the drought.

Within the context of Pele legends and this drought narrative, the lehua and Pele's red dress take on a new significance regarding the menstrual cycle. H. Arlo Nimmo summarises Pūku'i's writings on Pele, stating that "[a]ccording to Pūku'i, when Pele appears, the colour of her clothes are significant" (50). Pūku'i herself writes that: "Pele in white has traditionally been interpreted as a warning of sickness; Pele in red as a coming volcanic eruption" (Pūku'i, Haertig and Lee 13). Despite Pūku'i's statement, within this narrative, Pele's arrival in the "red *holokū*'" heeds no volcanic eruption, but the opposite: the discovery of water and the ending of a drought. I argue that this inconsistency and anomaly in terms of Pele's appearance and significance is due to the overarching use of kaona relating to the environment and the female body. In evoking Pele firstly through the "withering lehua", and then through a "red *holokū*'", Pūku'i demonstrates how, in a metaphorical sense, the lehua have once again become red, and thus invokes once again the euphemism relating to menstruation: "the flowing of the red lehua blossom tears" (Kame'eleihiwa 75). Due to the fact that within this narrative, Pele's "red *holokū*'" does not foreshadow a volcanic eruption, the colour gains a new significance. As Kame'eleihiwa explains, in Hawaiian epistemologies red is "the colour of sanctity, as well as the colour of menstrual blood" (75), again supporting the notion that Pele's youthful and vibrant appearance within this barren space can be read a form of rejuvenation and the beginning of a new cycle. The "red *holokū*'" emphasises Pele's sacredness and embodiment of ongoing fertility in contrast to 'the old woman' and the ongoing drought in Kona, and foreshadows how the restoration of the environment is a specifically gendered act.

This embodiment of Pele, beautiful and youthful, represents the hope of recreating a fertile world, as it is Pele's appearance that leads the old woman to have

hope of finding water: "Pele loves Kona and has brought us water,"; "Pele has shown kindness to her thirsty people"'; '"Pele has brought water for her people" (Pūku'i, "The Pounded" 63-65). Here, Pele embodies mana wahine as the discovery of water is owed to Pele. Understanding Pele as central to the regeneration of the environment contributes to existing discussions surrounding Pele's role within Hawaiian mo'olelo by placing her regenerative qualities within the context of drought. Whilst Pele is, as aforementioned, the creator of land, her association with volcanic eruption and fire in other mo'olelo places Pele in a cycle of growth and destruction within Hawaiian mythologies. Pūku'i herself rejected the view that Pele was a goddess only of destruction and a deity to be feared. Together with Craighill Handy, she writes:

> It is profoundly significant that the Hawaiians of Ka-'u did not fear or cringe before, or hate, the power and destructive violence of Mauna Loa [the volcano] [...] They loved Pele, whose home was their land: they endured her furies, and celebrated the drama of creation with which they lived. (22)

Celebrating Pele's power to destroy, as well as her power to create, demonstrates a respect for the diversity of mana wahine, and for the cycles of which the environment is part. Pualani Kanaka'ole Kanahele supports this idea of regeneration, and explains how Pele and her sister Hi'iakaikapoliopele are "necessary in the cycle of destruction and regeneration that gives life to the Hawaiian Islands. Both are necessary for the growth of the land" (xii). Kanahele addresses the regenerative role that Pele plays within this narrative, transforming Kona from a place of drought and destruction to a rejuvenated land: "It is the gift of Pele [...] She loves Kona and remembers her people when no rain falls" (Pūku'i, "The Pounded" 66). McDougall and Nordstrom continue this notion, stating that "[b]ecause the mo'olelo and the undeniable forces associated with Pele and Hi'iaka are so well known by Kanaka Maoli, all *mo'olelo* relating to the sisters work as

powerful metaphors for the potential of life after destruction" (98). Through this use of kaona, which engenders associations of women with growth after destruction, Pūku'i emphasises how wahine 'ōiwi are essential in the regrowth and rebuilding of the environment after environmental disasters.

(Re-)Birth

The final expression of mana wahine in this mo'olelo is the metaphorical re-birth of Kona, as the discovery of water signals the end of the drought and a new beginning. In a continuation of kaona, imagery of the female body is continued through the repeated images of womb-like spaces from which new beginnings can be metaphorically 'birthed'.[6] Rather than depicted as one single event, images of birthing and rebirth appear throughout the short narrative through recurring motifs of womb-like spaces, specifically that of caves and wells. When Pūku'i first introduces the "old woman" she is "sat in her cave", partaking in the tradition of kapa making. She also "gazes out of her cave" and her dog Huelani lies "beside her on the cool floor of the cave" (Pūku'i, "The Pounded" 61), until Pele appears and beckons the dog away to find water, before he returns and "[capers] proudly about the cave" (63).[7] As well as caves, wells are represented as a source of hope and sustainability: "Had it not been for a few deep wells everyone would have had to leave or die" (61). The central image of birth and the giving of life is the final moment in the story, as water is discovered within a cave. "'The cave!' she thought. 'There is a cave near here'. She found it and stooped down to peer in. Water! A great pool of water disappearing in the darkness of the cave!" (64). Associating these images of birthing with mana wahine is significant as Kame'eleihiwa states that "[w]omen are powerful because they give birth" and explains that the existence of land is due to the birthing capacities of women (73). Kame'eleihiwa explains that it is Papahanaumoku who "gives birth to islands" and Haumea, the

goddess of fertility and childbirth who is the guardian goddess of the island of Hawai'i (76).[8] It is women's fertility and ability to reproduce that that Nicole Alice Salis Reyes et al. explains "reminds us of the mana (power) Hawaiian women possess [...] and the mana to nurture potential" (242). Through considering pregnancy and motherhood as forms of power, Hawaiian ontologies associate wāhine ʻōiwi with the protection and nurturing of the future. This becomes particularly significant within this mo'olelo as it is this womb-like imagery that conveys the power of wāhine ʻōiwi in creating solutions to the drought and nurturing new relationships with the environment.

In representing mana wahine through kaona relating to women's reproductive abilities, Pūku'i expresses the Hawaiian belief relating to genealogies and the continuance of power and knowledge through the generative capacities of women. The idea that the solution to the drought is "birthed" by women is expressed through the fact that the water is discovered in this cave, as Pūku'i describes the water as being "of Kekela" the "of" often being used to denote when someone is a child "of" a person ("The Pounded" 66). In this sense, the water has metaphorically been birthed by Kekela through her leadership and creativity that allows the water to be accessed. This association between water and pregnancy is outlined by Kim Anderson who explains "women carry water during pregnancy, and the first part of giving birth involves the release of that water" (9). Anderson's interviewees also express this relationship between birth, water, and the environment, as Anderson explains that "[a] number of grandmothers drew the equation between life-giving waters carried by women and what occurs with Mother Earth in her life-giving cycles and abilities" (11). Through using these repeated motifs of caves and wells, Pūku'i draws upon Native Hawaiian knowledge to reveal the centrality of wahine ʻōiwi to the birthing of generations who can continue to care for the environment, and to the birthing of ʻāina—love of the land.

This continuance of ʻāina through women and genealogies is fully encapsulated at the end of the moʻolelo when the water is 'birthed' or released from the cave. In the same way that Pele is associated with the destructive power of fire and the generative life cycles, the ending of "The Pounded Water of Kekela" continues these associations through mortal women. Pele is the generative life force through which the women are able to mitigate the effects of the drought. Upon locating the water inside the caves, the "old woman" informs the chiefess Kekela of the discovery. The old woman and her husband "started at once to Kekela's home on the shore" to tell her that "Pele has brought water for her people" (Pūkuʻi, "The Pounded" 65). Upon hearing the news, Kekela "called the servants, directed them to the cave, and bade them take water gourds to fill" and "commanded that people gather *kuikui* nuts for torches to light the cave while others gathered vines with which to measure the pool's size and the cave's roof" (66). When arriving at the cave, however, they realise that the water is difficult to access as "the roof is very low and the cave dark" (65). Faced with this obstacle, chiefess Kekela turns to the element associated with Pele and powerful femininity: fire. The chiefess first suggests that the people "gather *kukui* nuts for torches to light" before commanding that people "bring wood" with which to "[make] a fire" (65). This turn to fire is symbolic of mana wahine, as Kameʻeleihiwa explains: "it is woman who has the secret of fire. It is mana wahine" (3). Pūkuʻi depicts how, in order to ensure her people access the water, Kekela turns to the element of her powerful ancestor, Pele, and thus uses ancestral knowledge to resolve the environmental disaster. In relation to Pele and her role in cycles of destruction and regeneration, the fire is used to destroy the cave so that water can be accessed:

> [W]hen the fire died men chipped away at the hot rock [...] another fire was built and more rock chipped away. After days of work a

> section of the cave roof had been removed and the pool was easy
> for thirsty folks to reach. (66)

Through depicting the use of fire, which is symbolic of Pele, and the evocation of the cycle of destruction and regeneration, Pūku'i demonstrates the necessity of ancestral knowledge in the resolution of environmental disasters. As Kame'eleihiwa explains, "[i]t is the female *Akua* [gods] that empower Hawaiian women" (72). That the solution to the drought begins with Pele, then passes to the kupuna, and then to Kekela demonstrates a genealogical empowerment; a metaphorical passing on of knowledge from ancestors that is emblematic of mana wahine. As McDougall explains, mana wahine is "the power of women to bring forth new generations" ("Wondering and Laughing" 30). Mana wahine is expressed through the way that Pele, the kupuna, and the chiefess Kekela work to discover the water and end the drought, as it is through the actions of all these women that "[t]here was water enough to last throughout the drought!" (Pūku'i, "The Pounded" 66). Whilst Pele leads Huelani to the water, it is the two mortal women that facilitate accessing the water and sharing it with the community.[9]

In this mo'olelo, Pūku'i presents the possibility of powerful women bringing forth new generations of environmental healers who have the ability to restore aloha 'āina: "love for land and all who dwell upon it; the kind of love that affirms the importance of independence and interdependence; the kind of love that demands action, ingenuity, creativity, and memory" (Yamashiro and Goodyear-Ka'ōpua 5). Reyes et al.'s statement "Wāhine 'Ōiwi hold the potential of our lāhui (nation) in our bodies and birth them; we create hei (nets, webs) of potential to raise our future leaders, and we also serve as fierce protectors of these hei" (242) also bolsters the notion that Hawaiian women have a generative capability to foster environmentally conscious generations. In using kaona to portray the generative power and invocation of ancestral knowledge, this mo'olelo

conveys how the empowerment of Indigenous women is not reliant upon introducing settler-colonial strategies that marginalise Indigenous voices. The empowerment of Indigenous women to lead and engender change that can restore human and more-than-human relationships is already existent in knowledges gained and shared through ancestors, and a cultural responsibility towards the environment.

Conclusion

As Robinson asserts: "In order to begin effectively and affectively addressing climate change, Indigenous peoples and our knowledges must be front and center" (334). In analysing mo'olelo, this article decentres Western knowledges relating to the recovery of the environment, and instead centres 'ike kupuna, or ancestral, land-based knowledges. Given that mo'olelo at once preserve 'ike kupuna, and encapsulate mana wahine, mo'olelo emphasise the integral role of Hawaiian women in sustaining productive relationships with the environment, and thus in the continuance of aloha 'āina. Similar to how J. Uluwehi Hopkins asserts that mo'olelo were "used as a form of resistance to the influences of Westernization" during the nineteenth century (231), this article highlights the ongoing capacity of mo'olelo to resist contemporary hegemonic discourses that privilege Western global powers over the experience of Indigenous communities. As a literary and rhetorical practice, mo'olelo function as counter-narratives against the colonial and patriarchal narratives that reconstitute Indigenous women as needing to be "instructed, led and managed" (Fordham et al. 8).

Examining kaona as both a representational strategy and as a way of knowing highlights the political and decolonial utility of this literary and rhetorical practice. Through weaving into the narrative pun, allusion and metaphor, Pūku'i uses kaona to represent how cycles relating to the female body—birth, menstruation and menopause—are symbiotic with the environment, and thus reveals how restorative

environmental relationships are intricately intertwined with women. Using these bodily functions to convey the mutually constitutive nature of wahine ʻōiwi and the environment reveals how Indigenous women are a necessary part of the environment's survival, particularly within the context of its exploitation, degradation and destruction under capitalist, imperialist and patriarchal systems. As McDougall explains:

> Because of the colonial context of Hawaiʻi, contemporary practices of kaona, however, must also be viewed as decolonial assertions—they are both actions (doing something with a particular aim) and enactments (acting something out) reinforcing ancestral knowledge. This reinforcement of ancestral knowledge, in turn, provides a foundation to guide us within contemporary colonial contexts to overturn colonial narratives and to actualize claims to ʻāina (literally 'that which feeds,' our word for land), sovereignty, and governance. (3)

In our contemporary moment, kaona can thus serve to "overturn" colonial and patriarchal narratives that perpetuate Indigenous, female incapability to effectively respond to climate change disasters under the guise of 'vulnerability'. To counter these narratives that use discourses of vulnerability to justify the ongoing intervention and governance of imperial powers in the Pacific Islands, kaona reinforces not only competence and knowledgeability, but claims to sovereignty that are based upon genealogies and land-based knowledges.

Beyond its representation of knowledge transmission across generations, "The Pounded Water of Kekela" itself is an embodiment of transgenerational knowledge. From its oral origins, to its publication in *Paradise of the Pacific*, and finally to its resurgence in mo'olelo collections, this mo'olelo evidences the communication of Native stories and knowledges across generations. This, in itself, is representative of

the Hawaiian worldview "ka wā mamua", or "the time in front", which "acknowledges all that has come before ourselves" (Wilson Hokowhitu and Alului Meyer 17). By turning to ka wā mamua, Native Hawaiians can "[seek] historical answers for present-day dilemmas" (Kame'eleihiwa 28). The contemporary, colonial and patriarchal rhetoric of Indigenous, female vulnerability is a present-day dilemma for which mo'olelo can hope to provide answers, and guide wahine 'ōiwi in the move towards ka wa mahope—or an environmentally sound and decolonial future.

Notes

[1] I use this term in lieu of U.S-Affiliated Pacific Islands (USAPI), which continues the colonised status of Hawai'i and denies the existence of any Hawaiian sovereignty.

[2] *Paradise of the Pacific* was launched in 1888 and changed its name to *Honolulu Press* in 1966.

[3] The inclusion of lehua could also function as an allusion to Pele's fury, as in the mo'olelo "Moolelo no Hiiakaikapoliopele", Pele "overreacts with volcanic fury, destroying the lehua grove and the person that her sister loves best" (Silva 165).

[4] This connection between fertility and water, or infertility and lack of water, is expressed throughout Pacific Islander epistemologies. The intertwining of women, fertility and the environment can also be seen within other Pacific Islander epistemologies more broadly, for example, among Maori tribes of Aotearoa (New Zealand). Jade Sophia Le Grice and Virginia Braun explain that: "[w]ithin traditional mätauranga Mäori, the process of human reproduction is interwoven with biological, social, spiritual and ecological elements […] For Mäori, within traditional mätauranga, reproduction and human growth activities are likened to the process of growth in other natural phenomena, incorporating biological and spiritual development" (153). What Le Grice and Braun outline here is that ecological growth, and thus the fertility of the ground - does not exist in isolation but is also connected to human reproduction and the continuance of genealogical lines that are central to Hawaiian lifeways. This interconnection between humans and land in terms of fertility is epitomised in the Maori language, as the word for land, whenua, also means placenta (Le Grice and Braun 154).

[5] Pūku'i's representations of Pele gain further significance when considering Pūku'i's full name, Mary Abigail Kawena'ulaokalani (The-Rosy-Glow of the Heavens) ahi'iakaikapoliopele (of Hi'iaka [youngest sister of Pele] in-the-bosom-of-Pele)

Naleilehuaapele (wearing the crimson *lehua* wreaths of the Volcano Goddess) (Craighill Handy and Pūku'I 13). Her name reveals that she shares her genealogies with Pele.

[6] Whilst not unique to Hawaiian literature, these motifs relating to the female body are often deployed through kaona. Beyond literature, however, imagery relating to the female reproductive system is used to explain the topographical features of Hawai'i: "Lualualei is the birth center of Oahu, hence the female, Hina's womb or cave" (Enos qtd. in Fujikane 45). Using kaona to represent the power of the female body is consistent with the idea that kaona was used as a tool of colonial resistance as it provided as way to obscure sexual images from missionaries. McDougall and Nordstrom explain that "it was through the printing of mele, or songs, and mo'olelo during this time period that it was realized that sexual kaona was especially difficult for missionary/haole audiences to read and understand" (98).

[7] Naming the dog Huelani also creates an intertextual significance, particularly regarding narratives concerning water and drought. Pūku'i's contemporary, Samuel H. Elbert, with whom she published *Place Names of Hawaii* (1974), *Hawaiian Grammar* and several dictionaries, published a poem "The Waters of Huelani", that also depicts drought on the Hawaiian Islands (see Cabacungan 1). It is likely a reference to Huelani Drive on which Elbert lived. This narrative, like "The Pounded Water of Kekela", ends with the discovery of water. Pūku'i's decision to name the protagonist's dog 'Huelani' therefore allows her to speak across texts wherein droughts have been overcome.

[8] Haumea is often referred to as "Haumea of the wondrous births" (Kame'eleihiwa 7) due to her ability to "give birth from multiple parts of her body" (Reyes et al. 242)

[9] Reading the use of fire as a gendered way of sourcing water becomes even more significant when considering the way water is located in another mo'olelo about the god Kane. Kane acquired water in ways associated with penetrative and phallic imagery, as Kane "thrust his staff into the pali near at hand, and out flowed a stream of pure water that has continued to the present day" (Maly and Maly 19).

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The Crisis in Metaphors: Climate Vocabularies in Adivasi Literatures

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Adivasi Lives Matter, a social media forum for young Adivasi thinkers, shared these four names listed above, following recent arrests of climate activists in India ("Young Adivasi"). The forum extended their solidarity and raised their voices against the detainment of Disha Ravi. It remembered and recognised the contributions of young Adivasi climate activists who have resisted industrial invasions and have been similarly arrested or incarcerated for demanding protection of their ecologies. Adivasi voices on climate action remain largely marginalised, while Adivasi communities have steered and sustained "this battle" for climate justice "for generations" ("Young Adivasi") in the Indian context. The forum's timely reminder adds vigour to a global Indigenous concern: that the current form of the climate crisis is largely anthropogenic, and to comprehend and repair the interface between humans and non-humans is paramount for a sustainable future, a point that has been consistently articulated by Indigenous thinkers. Métis scholar Zoe Todd claims precisely that the absence of Indigenous voices in framing the crisis, while being the most vulnerable to its impact, "elide[s] decades of Indigenous articulations and intellectual labour to render the climate a matter of common political concern" (Todd 13). Indigenous knowledge systems of the non-human that are based on the

essential co-existence of humans and non-humans, with lived practices that acknowledge "all our relations", are overlooked. Akash Poyam, a Koitur (Gond) journalist and writer, articulates allied concerns for the absence of Adivasi voices in the Indian context. In an online panel discussion organized by Indigenous Studies Discussion Group (ISDG), he said, "Even though Adivasis are said to be in the frontline of the crisis, their voices are not there in the discourse. It is an upper-caste dominated environmentalist discourse" (Poyam, Soreng, et al.).

Questions raised by Poyam and *Adivasi Lives Matter* reveal the position of Adivasi voice in climate discourse which, as I consider in this paper, mirrors the precondition of Adivasi voice in the humanities. As the perpetual subaltern in postcolonial literary studies, Adivasis "[embody] the limits of representation as the limit horizon of modernity itself" (Varma "Representing" 103). Adivasi voices are still accessed either through the "imperial copy"[1] of ethnographical disciplines like folklore, or the subaltern in representational narratives.[2] This is while a thriving movement towards an Adivasi "self-governing literature" (Wright, "The Ancient Library")[3] has been ongoing since the early twentieth century. The archived speeches of Jaipal Singh Munda and the poetry of Sushila Samad are testaments to this history. The writings of Bandana Tete, Alice Ekka, Ramdayal Munda, and Hansda Sowvendra Shekhar, the poetry and songs of Jacinta Kerketta, Bhagban Majhi, Dambu Praska and Salu Majhi, among many others, and the thriving archives of *adivaani, Adivasi Resurgence* and *Adivasi Lives Matter*, voicing ongoing land dispossession and lived positions in contemporary India, command critical centring in the climate discourse as well as in postcolonial literary studies. This positioning cannot be limited to the area-specific context of South Asian studies alone. Adivasi voices challenge the global industrial complex, and their concerns echo those voiced by Indigenous communities in settler colonial contexts (mining giant Adani, for instance, impacts Indigenous communities in India and Australia). Indigenous critical theory from settler colonial contexts that complicates or rejects the

postcolonial (Corr, 187-202; Tuck and Yang, 1-40) critically positions the centrality of land for Indigenous communities. Accordingly, it re-directs discourse to understand the Adivasi position within the postcolonial nation. It revisits Adivasi demands for sovereignty as separate from its appropriations within Indian nationalism and recognizes settler practices replicated by the Hindu nationalist state. Besides, foregrounding Adivasi voices in transnational Indigenous studies allows for a reading of "literary sovereignty" or "sovereignty of the imagination" in Adivasi literature alongside those ideas envisioned and theorized by Alexis Wright, Simon Ortiz, and Robert Warrior.[4] My use of the word "sovereignty" in this article is to evoke these essential linkages.

By method and readership, this paper addresses comparative literary studies. However, given the composite forms of Indigenous thought that interweave the literary and the historical, the paper is interdisciplinary, and hopes to present relevant questions across disciplinary boundaries. Thus, it is divided into three sections. First, I discuss the position of Adivasi voices in literary studies in relation to the wider problematic of the absence of Indigenous voices while framing the climate crisis and the Anthropocene.[5] Further, this section explores a literary methodology to recover early Indigenous response to the crisis. Rob Nixon echoes a call for a return to metaphors, thus: "Sometimes [metaphors are] just hibernating, only to stagger back to life, dazed and confused, blinking at the altered world that has roused them from their slumber" ("The Swiftness"). I claim that Indigenous literatures hold early warnings of the climate crisis in metaphors we do not yet centre in climate discourse. The second section examines the climatic processes (meteorological and anthropogenic) that have radically altered the climate of eastern India. Although my focus is on the historical context of Odisha (eastern India), I draw from a wider range of resources, given that these processes, and their consequences, are not limited to the present-day borders of Odisha alone. Accordingly, this paper claims that early warnings of a "crisis" were registered in the

recurrence of concerns around *jal, jangal, jameen* (linguistically translated as water, forests, land) from the late nineteenth century onwards. *Jal, jangal, jameen* is a ubiquitous refrain in diverse Adivasi movements. These vocabularies work as a "common organizing concept" (Todd, 5-6) for Adivasi concerns because they evoke a common climatic history. Moreover, they encompass specific non-humans in the ecologies of *jal, jangal, jameen* interconnected with Adivasi knowledge systems. The third section provides literary readings of Adivasi songs emerging from the particular geography of southern Odisha. Focusing on particular ecologies of Kashipur and Niyamgiri, I examine the songs of Kondh poet Bhagban Majhi (Kashipur), and late Dongria Kondh poet Dambu Praska (Niyamgiri). The two singers pay attention to local markers and traces in ecology to assess climate breakdown following industrial invasions by Utkal Alumina International Limited (UAIL), Aditya Birla, and Vedanta. I read how their literary metaphors serve as archives of interpretations of the climate crisis as already confronted in these geographies.

I. The Crisis in Metaphors

In *The Great Derangement: Climate Change and the Unthinkable*, Amitav Ghosh writes: "it was exactly the period in which human activity was changing the earth's atmosphere that the literary imagination became radically centred on the human" (66). There was a general "turning away" from the "presence and proximity of non-human interlocutors" during the Industrial era, and in recent decades the concern has found a rejuvenation with an "interest in the nonhuman that has been burgeoning in the humanities", together with the rise of "object-oriented ontology, actor-network theory, the new animism" (31). On this phenomenon in literary studies, Stephen Muecke writes in his review of Timothy Morton's *Hyperobjects: Philosophy and Ecology after the End of the World*, that "postmodernism has returned with a vengeance, bolstered with all the moral force of global ecological concerns" (Muecke, "Global Warming", np). While reading Ghosh, Todd, and

Muecke's respective works, I gleaned two corresponding strands of thought: as in the history of philosophy that centred the human, this "renewal" of engagement with the non-human too is yet again overpowered by the position of its production – one predominantly representative of the global North, and particularly the Euro-American man. From this positionality, literary fascination with climate crisis and the non-human, can claim postmodern newness to the extent of having rationally discovered relevance of the concepts themselves, solely by the virtue of occupying the discourse position of the Euro-American centre. For communities, and their histories deemed "unthinkable" (referred to in the sense of Trouilliot's "unthinkable history")[6], literary studies has yet to centre Indigenous literary traditions as *literary* beyond the reams of anthropological proof. That Indigenous communities may have articulated early forms of the crisis still remains in the realm of the "unthinkable".

It is precisely a "crisis of the imagination" (Ghosh, 9) that has foreclosed a literary reading of Indigenous philosophies of the non-human and of Indigenous articulations (oral and written) that intimated the crisis. When Indigenous land, people, or artistic practises are referred, if at all, they create the "hypersubject" (Muecke, "Global Warming", np). Peripheral geographies and the oppressed on the peripheries of the enquiry are called upon to be reinstated as the representation of outerwordly crisis (reproducing visual constructions similar to colonial encounters of "contact"), but never to qualify their own concerns. In this context, Zoe Todd and Jen Rose Smith discuss the hypervisibility of the Arctic (Todd, 6; J.R. Smith, 158-162). Similarly, among distinct (and numerous) Adivasi land rights movements against mining ongoing in eastern India, it is chiefly the images of Dongria Kondh communities that are used to exoticise ecological margins. Moreover, for philosophies built on the metaphysics of a centre, a metropole or a symbolic universal space of human crisis, the crisis is often read as events, as the experience of the "uncanny" (Ghosh, 30)[7]or as marked instances defined by a state of significant visibility such as the melting of polar icescapes. This practise may

unconsciously displace the seemingly insignificant particularities of "localised markers" in peripheral geographies as adequate evidence of the climate crisis.

Besides, marginalisation of Indigenous responses to the crisis depoliticises the fact that the climate crisis in the peripheries is the result of excesses of the Euro-American centre, not just historically but in contemporary global industrialism (Agarwal and Narain, "Global Warming",np). The way the Kondh songs that I discuss in this paper are linked to the United Kingdom, for instance, is that they sing against mineral extraction by Vedanta, a bauxite mining giant with its headquarters in London. The capital flow from the company's profits is felt predominantly in centres of capital and culture in the Global North, rather than outside the company walls in southern Odisha, where the Adivasi communities are displaced. Therefore, positioning these songs in literary studies is not simply to answer the question of why Indigenous literatures continue to occupy particular corridors in literary studies, a subject of continued engagement in decolonising syllabuses recently. Attending to the voices of resident communities in these geographies in our literary readings of the Anthropocene is to render the crisis in these geographies visible and disrupt the inequalities and centre-peripheral binary which global capital does not follow but insidiously maintains. Historicising the "locality in the Anthropocene", Vineeta Damodaran writes, "challenges planetary debates by earth scientists through a historical and political engagement with capitalism, democracy and resource extraction and to focus on communities in particular periods and places and specific places in the Global South" (96).[8] Her work in environmental history foregrounds the local and Indigenous in eastern India, specifically Jharkhand and Odisha. I emphasise Indigenous literary articulations as fundamental evidence of this history, given that an account of climate vocabularies cannot be assembled outside the realm of Indigenous literary traditions that serve as historical archives.

Literary methodology serves to uncover metaphors and other literary devices used to describe the crisis in regional languages and, more importantly, to help

recover and restore Indigenous voices.[9]The absence of Indigenous imaginations of the crisis in contemporary discourse is rooted in the problem of the absence of Indigenous literary voices. Here, I will briefly discuss the particular absence of Adivasi literary voices. An access to imaginations and representations of Indigeneity or "Adivasihood" of the Global South in transnational discourse has been aided largely by subaltern studies and postcolonial theory. However, these methods have been dominated by caste-privileged scholars. Here, I similarly acknowledge my positionality as one, and hence I am cautious of my voice operating within this structure. While engaging with Adivasi voices from an institutional position in the United Kingdom, a first introduction to understand the position of subaltern voice is Gayatri Chakrabarti Spivak's essay "Can the Subaltern Speak?". Similarly, the first primer to "Adivasi literatures" are the representational narratives of Gopinath Mohanty and Mahashweta Devi. These texts are representative of the textual decolonisation of the dominant canon and decolonised syllabuses. In postcolonial studies, they occupy the positions of canonical literary and theoretical treatises. Both accounts are crucial to challenge the continued Eurocentrism of institutional discourse that I discussed earlier and do not in themselves form the primary problematic. The concern, however, is that Adivasi literatures are accessed, but from sources twice-removed from the original source. In transnational literary studies, these texts become exemplary to situating Adivasi concerns. In the process, they have marginalised Adivasi voices and positionalities. It further shifts focus from Adivasi agency for the (now) indispensable necessity to complicate the postcolonial Indian nation state, and its virulent Hindu nationalism, where the idea of the "Adivasi" is employed in maintaining the myth of the Hindu nation at the same time as Adivasi sovereignty is deemed as a threat to Hindu nationalism.

Subaltern Adivasi histories have been recovered to challenge the mainstream nationalist narrative. Still, literary history and criticism has often failed to read into the disquiet *within* Adivasi literary tradition and the complexities they voice through

self-definitions not only in the "self-governing literatures" (Wright "The Ancient Library", np), but also in the interface of folklore collections and colonial archives. Though literary studies (global and national) can claim the sheer diversity of literatures across several Adivasi languages and literary forms, and scarcity of translations to access these literatures, it is in fact the continued marginalisation of Adivasi literatures *as literary* that precludes impetus to translation, transmission, and publication. Santhali writer and activist Bandana Tete critiques the Brahminical Hindi literary tradition that has dominated vernacular literary culture. She claims that not only has this literary tradition acted as the central voice in Indian "national" literatures but also exercised control on publications and publishing houses. She writes that "their" incompetence in finding Adivasi women's writing should not be an excuse (here, I translate and summarise) "to elide the very essential existence of women in the history of poetry writing" (Tete 7). Recovering Adivasi voices in literary reading, therefore, centres the "self-governing" Adivasi literary landscape where the subaltern no longer *remains* the subaltern but embodies sovereignty.

Recovering voice recovers vital evidence. Here, I return to my previous point about Indigenous voices on the crisis. Literary methodology can serve to unravel overlooked markers of crisis already felt in peripheral geographies. These imaginations present "localised markers" and the local impact on non-humans. They do not necessarily intimate an apocalyptic imagination of sudden colossal change, but rather direct attention to long-term changes in ecology which frequently go unarchived in dominant cultures of documentation. It directs us to question *what* is considered as legitimate evidence of the crisis? Heather Davis and Zoe Todd discuss the language of evidence in documenting anthropogenic impact. They discuss that evidence, especially the one measured and conceptualized in scientific disciplines, does not necessarily accommodate the possibilities of imagining evidence from material and embodied community histories. In order to theorise the Anthropocene from land-based philosophies, the writers provide

methods to understand the particular place that the non-human occupies in Indigenous knowledge systems (Davis and Todd, 767). [10] On discussing personal narratives of seeing "a flash of a school of minnows" and memories of growing up beside the prairie lakes as "tracers" to the way they see ecological change, Todd argues that these "fleshy philosophies and fleshy bodies are precisely the stakes of the Anthropocene" (767). Documenting the "school of minnows" as the "tracer", here, serves to connect the material and the epistemological. The writers communicate that not only has the Anthropocene aggravated "existing social inequalities and power structures", but it has separated people from the land/material (here, minnows in the prairie lake) "with which they and their language, laws and knowledge systems are entwined". The argument made here is not to pit the scientific and the social to serve as evidentiary for the climate crisis; making binaries of these categories is not a productive endeavour in either discipline. Rather, the argument is to reveal that the crisis has profound political and social repercussions within communities. The crisis is not impersonal and distant but is keenly felt and interpreted by different species – human and non-human. And these localised markers and personal memories of climate change likewise need documentation.

As Ghosh notes briefly in relation to people of the Sunderbans and Yukon, some communities in fact "never lost this awareness" of "non-human interlocuters" (63-64). How, then, to recuperate these imaginations which would serve as evidence to the crisis? An emerging glossary in contemporary English language has served to accommodate the climate breakdown, the "realization" of living in the epoch of the "Anthropocene", and ways to comprehend the dissimilar magnitudes of historical and geological timescales. Likewise, Indigenous languages have imprinted in them the distinct registers of historical processes markedly felt as a "crisis", in vocabularies that we do not yet centre in climate studies. Apart from the meteorological terms of analysis that are required to write climate history, it is

imperative to foreground recurring terms and popular vocabularies that have served as means to communicate similar phenomena. Given that these vocabularies might not necessarily be historically archived, literary studies need to *trace* the occurrence of terms that have echoed increasing anthropogenic impact. Although it needs acknowledging that these connections may not occur as direct lines of causation, of exact historical co-relation between events and literary responses (in songs, oral narratives, or written literature). Historicising climate resistance vocabulary necessitates literary criticism to ponder on and *imagine* a potential map of literary traces from significant historical junctures to ascertain a consciousness that is often absent or erased given that these have been minority histories and voices. As has already been reasoned in the context of South Asia, Native American oral history, and Australian Indigenous literatures, among others, Indigenous ways of historiography and archiving memory span across literary genres (Skaria; Rao et al; Womack; Benterrak et al; Wright). While a significant scale of resources is available for history-writing and literary studies for dominant communities (given they have dominated ownership and access to knowledge as settler colonisers or caste hierarchies in India), Adivasi histories and vocabularies from the nineteenth and early twentieth centuries exist between the crevices of anthropological constructions, and erasures. This makes it all the more important for literary studies to create interpretative spaces. In these spaces, metaphors and repetitions of particular words can be imbued with meaning, to assemble a repository that restores gaps in the deliberations around the crisis.

Language, additionally, is crucial to comprehend the loss of the material that has occupied an other-than-human temporality. Cultivation of attention to perceive deep time in the minute details of the local is facilitated by the metaphorical function of language. Robin Wall Kimmerer, the Potawatomi plant scientist and writer, calls such a function a "grammar of animacy" (*Braiding* 48). She writes that, along with being a plant scientist, she is a poet: "the world speaks to me in

metaphor" (29). She theorises that a "profound error in grammar" in scientific conceptions of the natural world (and consequentially of the climate crisis) is because of "a grave loss in translation from [N]ative languages" (48). To understand *a bay*, a non-human element of the landscape, she retrieves the word from its containment as a noun form in English. She explains that the Potawatomi word for a bay, *wiikwegamaa*, is a verb that assigns agency to the non-human feature of landscape: "*To be a bay"* is the bay making its presence known (55). The other elements around it, the water or "cedar roots and a flock of baby mergansers" (55) variously interact with the bay as animate entities striking alignment through their specific channels of communication.[11] In the final section of this paper, I discuss the poetry of Bhagban Majhi and Dambu Praska, remembering this "grammar of animacy" (48). Together with providing a linguistic pathway to understand the deep time of non-human elements, [12] this "grammar" is committed to an understanding of political inequality.[13] Indigenous poetry provides rich sites that amalgamate a political critique of colonialism alongside cognitive tools to situate the non-human.

Through a literary reading, therefore, I frame *jal, jangal, jameen* as climate vocabularies, in the next section. The plural form of "vocabularies" used in this paper is to encompass the translations and transmutations of *jal, jangal, jameen* in several Adivasi and other vernaculars. Here, I will briefly raise the question about the choice of using "climate" in climate vocabularies and climate consciousness, as opposed to an ecological or environmental consciousness. Wider awareness about changing earth systems over geological time-scales and their impact on humans globally, is arguably recent. The global day-to-day acceptance of climate as a planetary system as opposed to regional weather regimes is also contemporary. The Anthropocene, similarly, is a recently coined (English) term to define an epoch where humans have influence at a geological scale. More than a definitive stance on when a climate consciousness of the current form of the crisis begins, I would like to maintain an open-ended one. This might allow a space for rethinking and robust

gathering of vocabularies from a longer time-period that informs current understanding. As I discuss in the next section, work on climate history and extreme weather events was ongoing in research and scholarship much before it grew into common parlance. Indigenous populations were not just affected by local ecological phenomena, but by these events which we currently study as global climatic occurrences (ENSO). Moreover, while the use of "climate" in the humanities, more than ecological or environmental, refers to a recent and specific conglomeration of ideas on planetary phenomena, it remains one which is bound to an understanding in scholarship within the dominant English language.

To use the word climate is thus to acknowledge the many other iterations and interpretations of the term in Indigenous languages that are similar and may contribute to a broader social and historical understanding of the term and phenomenon as we use and know it today. Consider, for instance, Rachel Qitsualik's (Inuk, Scottish, Cree) and Keavy Martin's definition of *Sila*. In its varied use in Inuit languages, *Sila* encompasses a material understanding of climate as tangible phenomena. Here, climate is a combined influence of land, air, and sky and a community-held belief in its separate presence and animacy (Todd 5; Martin 4-5). Of a similar iteration, Inupiaq anthropologist Herbert Anungazuk called some of the "old ways of weather and ice predictions" as "*ilisimiksaavut*—'what we must know'" (Anungazuk, 101). In the context of Australian country, Nyigina elder Paddy Roe evokes the word *liyan* which approximates as an "intuition" or "life force of a place" that "enables people to feel their environment" (Roe, qtd. in Morissey and Healy 229). It is in this glossary, I choose to examine the occurrence of *jal, jangal, jameen*. Finally, the focus on the local is to question continued Eurocentrism in climate studies and to centre marginalised histories. However, an either/or between the local and the planetary is limiting to a deeper reflection on the crisis. It tends to streamline the complex understanding of both which Indigenous thinkers and artists have sought to express in their literatures. Thus, it is with care that these

vocabularies need to be read and situated. A simplified leaning to unearth the "precolonial" as the site for "alternative" knowledge as an *isolated* framework to study the crisis can do more harm to decolonial endeavours. Such a method often tends to exoticize rather than historicise key Indigenous understanding on the crisis. It frames it as a "return" to a past of Indigenous knowledge systems, rendering them stagnant as opposed to an evolving, continuous process of interacting intellectual histories. Climate vocabularies, therefore, are an invitation to seek the fine print of the crisis registered in literary metaphors; this reading can enrich our knowledge of the crisis as it unfolds today.

I re-iterate, here, the need to access Indigenous voices in archived literatures. This is emblematic of a larger problem while reading oral traditions, origin myths, and archived Indigenous literatures, which come to the researcher removed from their context and burdened with the constructions created in colonial/upper-caste translation or ethnographic work. However, this does not discourage readings of these texts. Adivasi literary archives open to a significant world of possibilities when read in conversation with other Indigenous writers and when studied with the methodologies formulated by Indigenous theorists. Creek historian Craig S. Womack critiques the ongoing "problem" of Native American texts (oral, performative, and written) characterized as "lost in translation" (64) as opposed to translations from other dominant cultures; this, he argues, postpones contextual and political analysis. Therefore, rather than a rejection of early twentieth-century archives of Adivasi songs and myths, transcribed and translated by colonial anthropologists and ethnographers, I read them as texts operating within the milieus of their historical encounters and responding to colonial methods of collections and archives. Being supported by methodologies of literary reading provided by Womack and Muecke among others helps recover Indigenous voice from the aporias around oral texts and translations built by structural categories in

colonial ethnography. This allows for the text's reinstatement as political and presents possibilities for a "literary repatriation" (Unaipon xliii).

II. *Jal, Jangal, Jameen* as Climate Vocabularies

The climate history of Odisha is largely anthropogenic. Mineral extraction of the last few decades has exacerbated the crisis on ecologies already fragile from a history of exploitation of *jal, jangal, jameen.*[14] Odisha—which in recent years is known as a cyclone-prone region—was infamously called *marudi anchala* or Land of Droughts. El Niño and the Southern Oscillation (ENSO) occurrences caused meteorological dry periods in the region. In addition, hydrological droughts[15] significantly increased from radical changes in land use during the nineteenth century, especially with the growth of commercialized agriculture and deforestation. The time-period in Odisha's history that is primarily remembered for its scarcity is also, ironically, a time when land use became largely agrarian to increase revenue. Prior to 1850, upper-caste communities from the plains of Sambalpur and Raipur started migrating for settled agriculture in the districts of Kalahandi, Bolangir, and Koraput (KBK) (Pati *Situating* 101-102), areas with the highest population of resident Adivasi communities in eastern India. Grain shortages, due to changes in the crop cycles (ibid), also began during this period, leading to resistance by Adivasi communities. The scarcities become acute in the 1860s. J. P Das, in his historical narrative *A Time Elsewhere* (2009), translated by Jatin Nayak, earlier published in Oriya as *Desa Kala Patra* (1992), describes the years leading up to 1866, the year of the deadly Odisha famine. This was a decade of paradoxes for the region. The reigning leaders and litterateurs like Madhusudan Das, Fakir Mohan Senapati, and Radhanath Ray eagerly awaited Odisha's first printing press. An independent press would establish the eminence of Oriya literature and, in turn, Oriya nationalism, rescuing it from the colonial impact of Bengal. At the same time, houses were steadily declaring grain scarcity. The famine ravaged. Market prices soared, grain was exported to the

empire, stocked rice controlled by zamindars and colonial officers along with imported relief was stranded in ports and delayed reaching the famished (Das ch.2) The drought and the Great Famine of Odisha in 1866 killed a million people, nearly a third of the population of Odisha (Odisha division of Kolkatta presidency) at the time, leading to vast demographic and geographical change (Mohanty, 608).

Following this year, the famines of 1876-79 severely impacted east-Indian geographies, with a total of 50 million deaths across India (Grove, 144). This was a severity similar to the 48-55 million deaths between 1492 and 1610 because of disease and enslavement (Lewis and Maslin, 75) that is commonly considered as the beginning of the crisis for American Indigenous communities. The Odisha Famine of 1866 served as a warning to the famines that followed. Henry Blanford was appointed as imperial meteorological officer to the government of India on the recommendation of the 1866 Orissa Famine Commission to study the failure of monsoons and the persistence of droughts (Davis, 217). Climate studies on east-Indian geography were supported since agricultural failure directly impacted the empire. Richard Grove discusses this history: severe droughts and shortage of rainfall of the 1870s and 1890s have been determined to be a result of ENSO, extreme warm events that have a global climatic impact leading to similar drought conditions in South Asia, Australia, Southern Africa, the Caribbean, and Mexico (124). However, as he mentions, climate studies had already been conducted since the 1700s to record the periodicity of droughts and study the reason for long-term weather conditions. Colonial researchers like William Roxbourgh, who had been collecting data on tropical meteorology, had identified the relationship between climate change and recurrent famines as relating to colonial impact (even leading to afforestation efforts in the nineteenth century).

Global meteorological surveys and climate studies were, yet again, within a limited realm of knowledge controlled by the empire and dominant communities. It could be argued that the scientific conception of a world climate system and its

effect to generate conditions of crisis did not yet exist as community knowledge (or it requires further search). However, the severity of drought and famine conditions as a result of these climatic events—and the exploitation of *jal, jangal, jameen* to facilitate revenue-generation for the British empire—framed the climate vocabulary of eastern India. Anthropogenic impacts on these geographies (the *jal, jangal, jameen* of Adivasi communities) had rendered them incapable to cushion the force of periodically occurring calamities. More than a singular "event", the year of 1866 and the following famines have been read as part of a "process" that was a direct continuation of land-loss to *zamindars* (landlords) and commercialized grain trade without adequate returns to the farmers (Mohanty 609).[16]

The easy accumulation of *jameen* (land) was aided by the Land Acquisition Act of 1894. Changes in the use of *jameen* meant that Adivasi communities were assimilated into the caste system, serving under highly oppressive forms of bonded labour like *bethi* and *gothi*, systems in which existence was defined by a perpetual state of debt and enslavement to the landlord. A significant number of Adivasi communities migrated to forest tracts, given the increase in agricultural settlers on their land. However, the India Forest Act 1865, designed specifically to clear forests for railways, and later the Forest Act of 1878, heralded the "reserved" forests to increase timber production and to grow more cash crops such as jute and indigo. This act prohibited use of the *jangal* and curbed Adivasi agricultural practices such as *bewar*, *jhum,* or *podu chasa*, various forms of shifting cultivation practiced on forest slopes. The *jameen* and *jangal* (and *jal*), the non-humans that sustained Adivasi communities, were appropriated as resources. Furthermore, they were regimented to disallow interconnected living. The onset of fragility of east-Indian geographies was brought about by an accretion of control on *jal, jangal, jameen*. This lent itself to a lived sense of "crisis", owing to fractured ecologies and growing inequalities felt in the apocalyptic proportions of the century's famines which Mike Davis describes as "late Victorian Holocausts" that formed the "Third World" (see

Davis). Having lost *jal, jangal, jameen*, the once-princely communities became destitute within half a century. When the colonial government imported "poorhouses", Davis quotes a missionary document as saying, "Confinement was especially unbearable to the tribal people, like Gonds and Baigas, whom one missionary claimed, "would sooner die in their homes or their native jungle, than submit to the restraint of a government Poor House'" (Davis, 147). He claims that such antipathy was less about confinement and more revealing of the diet the poor houses served: flour and salt. For Adivasi communities, these decades prefigured a dire future. Their essential organizing ecologies were not only colonized, unresponsive, and crumbling, but they had to depend on the apocalyptic measures of the colonizer for survival.

While these early instances of a seismic shift in eastern India may have found utterance archived in Adivasi oral traditions of the nineteenth century, we may have lost access to them in transmission. Moreover, apart from the climatic constants of famines and droughts, the micro-climates of eastern India were heavily altered with the beginning of mineral extraction that exacerbated ongoing concerns of land dispossession. By the end of the nineteenth century, there were increased invasions on eastern Indian landscape through mining for mica, slate, and chromite (Mishra "From Tribal to", 30). We see articulations of mining activity in myths transcribed by Verrier Elwin in *Tribal Myths of Orissa* collected in the 1940s-50s, and we can assume that these songs had already been in circulation in popular memory before these decades.[17] One of the Bonda myths from Koraput reads:

> There was no money in the old days. But after Mahaprabhu gave the kingdom of Simapatna to Sima Raja and Sima Rani, a government office was made to deal with everything […] One day Mahaprabhu took Sima Rani to the Silver Mountain and showed her great heaps of silver. "That is silver", he said […] Then he took her to the Gold Mountain and showed

> her great heaps of gold […] Then he took her to the Copper Mountain and showed her great heaps of copper. (Elwin *Tribal Myths,* 561)

The myth not only demonstrates land transactions, as Sima Raja and Sima Rani are "given" the kingdom, but also the entry of a third entity that carried out these transactions, "the government office". That a scanning of the landscape to determine sites for mining minerals was on-going is reflected in how Sima Rani is "shown" these riches of the land. She subsequently mints them into coins, signifying a transition from seeing mountains as living entities to seeing them as capital.[18] Such occurrences in mythical narratives coincide with increased mining in the region. Coal and iron ore exports steadily increased with the expansion of railways and industries in the 1880s. Tata and Sons and the Bengal Iron and Steel Manufacturing Company started sustained mineral extraction in 1905 (Pati *Adivasis,* 257). Samarendra Das and Felix Padel explore the history of bauxite in Odisha, a sedimentary rock that has become a site for struggle in recent movements, which I explore in the next section. They write about how the bauxite-rich hills of Kalahandi were documented as a resource by geological surveys carried out by T. L. Walker in early 1900, who named the rock Khondalite, after the resident Kondh community (Das and Padel, 58). Subsequent surveys continued through the twentieth century until the last decade, when liberalization of the economic policies of the 1990s allowed multinational companies access to mine the hills. The mining excesses of the last three decades further impaired an already fragile ecology, and form a significant period in the climate history of Odisha after the decade of 1866. Therefore, Bhagban Majhi and Dambu Praska's poetry, which I discuss in the next section, situate the present crisis as one with a longer history.

The radical impact on *jal, jangal, jameen* had been noted as a significant climatic concern albeit in a language and scale that was localized. *Jal, jangal, jameen*, apart from evoking this common climatic history for diverse Adivasi communities, unify a common understanding of material ecology and provide a

holistic basis to "sacred"[19] philosophies present in Adivasi knowledge systems. A recent resolution was passed for Sarna to be accepted as a religious code which would include Adivasi religions similar to Sarna under its fold. It was claimed that the acceptance of Sarna as a separate religious group by the Indian government would also regulate "resource politics" (perhaps, in favour of the Adivasis). This rested on the claim that religious identity of Adivasis is founded on the natural resources of *jal, jangal, jameen* (Alam "Why the Sarna Code", np). These intricate systems that combine a philosophy of ecological interdependence, religion, and literary tradition[20]have often evaded colonial classifications,[21] those classifications that presupposed Adivasi "primitivity" and intellectual inferiority. Perhaps for this reason, the archival transcriptions of anthropologists like Verrier Elwin and Shamrao Hilvale, among others, carry the warnings of crisis, without further consideration of the predicament articulated by Adivasi communities. The loss of the *jangal* was registered as a "calamity" in a song transcribed by Elwin and Hilvale in the 1930s and 1940s:

> Such a calamity had never been before!
> Some he beats, some he catches by the ear,
> Some he drives out of the village.
> He robs us of our axes, he robs us of our jungle.
> He beats the Gond; he drives the Baiga and Baigin from their jungle. (Elwin *The Baiga*, 130)

Here, the "calamity" is described as unforeseen and of a form not encountered previously. The song proclaims that the hand of colonial power and human intrusion on the *jangal* practiced excesses that even surpassed the accustomed bearings and regularity of a natural "calamity". Localised resistances to counter the increased control on *jal, jangal, jameen* were ongoing since the early nineteenth century. It was Birsa Munda's movement, or *ulgulan* in Chottanagpur province in the 1890s, that provided an impetus for *jal, jangal, jameen* to become a "common organizing

force" for Adivasi communities. Birsa specifically demanded the re-instatement of *Khuntkatti* system, which was based on collective ownership of land and forests by Adivasi communities. In his reading of Gond history, Akash Poyam claims that the slogan "*jal*, *jangal*, *jameen*" as a unified call for protection was later coined by a forgotten Gond Adivasi leader from Telangana, Komaram Bheem ("Gondwana", 131). Sharing "common cause" with Birsa Munda to resist against exacting taxes and oppression by landlords, Bheem used the call during the Gondwana movement against the Nizam government of Hyderabad to demand complete land and forest rights. Poyam contends that the vocabulary of *jal, jangal, jameen* was specific in its concern to establish Gond sovereignty and autonomy over *jal, jangal, jameen* ("Komaram Bheem"). Contemporary discourse on climate change and environmental conservation, therefore, cannot be studied separately from the long history of Adivasi movements for land rights and sovereignty. These contexts reveal Adivasi vocabularies that signal structural inequalities which makes them more vulnerable to the current crisis.

The crisis of the human, especially after the theorization of the Anthropocene in geology in 2000 in dominant Euro-American centres, has critical precursors in the peripheries. For Adivasi communities, the crisis of human and non-human existence was anticipated in the calls to protect *jal, jangal, jameen. Jal, jangal, jameen* rhymed and echoed to sustain material and epistemological continuity after the calamitous impact of resource exploitation during the nineteenth century. Although it is beyond the scope of this paper to access further literary readings of archives and transcribed myths and songs, my intention is to revisit the recurrence of *jal, jangal, jameen* and read them as climate vocabularies. These vocabularies are recurrent because they archive a generational memory of lived crisis during climatic occurrences (such as droughts and famines) and anthropogenic impact on non-humans around which Adivasi philosophies are organized. The political consciousness of Adivasi movements on land rights that is deeply committed to the

indispensability of protective measures for *jal, jangal, jameen* is indeed contemporary climate discourse prefigured. To this climate history and genealogy of resistance, the songs of Bhagban Majhi and Dambu Praska bear allegiance. Their invocations of the mountain, earthworm, and seeds present vital evidence of the enmeshed ecology of *jal, jangal, jameen* particular to their contexts in south Odisha.

III. Of Mountains and Earthworms

Bhagban Majhi, a Kondh singer and leader from Kucheipadar village (Rayagada district in southern Odisha), was one of the leading voices of Kashipur resistance against bauxite mining by Utkal Alumina International Limited (UAIL), and later, Aditya Birla.[22] The movement began in the early 1990s and continued for over two decades, a momentum of resistance that was later carried forward by the Dongria Kondh community to oppose Vedanta in Niyamgiri. Despite a sustained struggle by the Kondh-Paraja community in villages around Kashipur, Aditya Birla acquired land and, in present day, the displaced Adivasi communities live in the peripheries of the factory walls.[23] Bhagban, as a teenager, along with Lima Majhi, composed a number of songs (in *kui* and *desia*, which was later adapted in Oriya and Hindi), that were widely transmitted to unite the communities. From those specifically composed for the movement, *Gaan Chadiba Nahin* (We Will Not Forsake This Land), was identified as a common anthem in several movements against mining and forced evictions in India. Having found utterance in a dominant language such as Hindi, with a popular video *Gaon Chodab Nahin* subsequently produced by K. P. Sasi, the song acquired pan-cultural presence. Apart from its rhyme that was predisposed to transmission across linguistic and regional borders, *Gaan Chadiba Nahin* remains one of the most subversive songs to be formulated as part of Adivasi literary song traditions in recent decades. Bhagban's political critique is embedded in Kondh-Paraja epistemology particular to south Odisha. His interpretation of *jal, jangal, jameen* which, in this song, is articulated as *dongar-jharan-jangal-paban* (mountains-

waterfalls-forests-winds), connects it to the long history of Adivasi climate consciousness.

We will not yield,
we will not give up,
no, we will not forsake this mountain.
[…]
Our hills, our companions,
our growth, our progress.
We are the children of this earth.
With folded hands,
we bow down to our earth mother.
[…]
We are the people of this earth—
we are earthworms—
mountains—streams—forests—winds—
if we forsake this earth
how shall we endure?
Worlds shall collapse,
lives will crumble, when
the pathways drown,
how will we endure?
We will be nowhere
we will be no more—
there is no hereafter—
no, we will not forsake this land. (*Prakrutika*, 19)

My translation is from a *desia* (a pidgin variety of Oriya and Kui) transcription of the song archived in the Kashipur movement pamphlet, *Kashipur Ghosanapatra*, published by *Prakrutika Sampad Surakhya Parishad* (a local environmental

protection committee founded during the Kashipur movement). Here, Bhagban presents two fundamental ideas, *unnati* (progress/development) and *matrubhakti* (love for the mother). *Matrubhakti* for the mountain or *dongar* as the mother, as invoked in Bhagban's song, departs from invocations of the motherland/mother-earth in the context of Indian nationalism. Additionally, *matrubhakti* linguistically may have its roots in songs composed during the Gandhamardhan movement against Bharat Aluminum Company Limited (BALCO). In its philosophy, however, *Matrubhakti* digresses from the Hindu mythical motifs that became the driving force in Gandhamardhan. Here, the salutation of deference bows to non-human elements. *Matrubhakti* is ethical kinship with "all our relations".[24] *Matrubhakti* is for the earth mother, *Dharni penu*. Notably, because of this conception of mountains forming essential basis to all human–non-human life forms, they occur invariably as gods, or kings, as entities who are agential, in the religious beliefs prevalent in Kashipur as well as Niyamgiri. Through a general use of *dongar*, Bhagban alludes to Baplamali, Kutrumali, and Sijimali, the bauxite-rich ranges of south Odisha, which have formed "through the alternating rhythm of rain and sun continuing every year for about 40 million years, eroding layers of feldspar and other rocks" (Das and Padel, 32). Bhagban presents evidence of this elemental bind that sustains the ecology of eastern India: "*dongar-jharan-jangal-paban*" or "mountains-waterfalls-forests-winds" exist because of the mineral-rich mountains. The Kondh community is intricately bound to this ecology.

His song, consequently, offers the Kondh understanding of humans as *matira poka*, or *biripidika*—earthworms.[25] As part of the movement against mining, he demanded, "We ask one fundamental question: How can we survive if our lands are taken away from us? […] We are earthworms. […] What we need is stable development. We won't allow our billions of years old water and land to go to ruin just to pander to the greed of some officers" (qtd. in Das and Padel, 394-395). For Bhagban, notions of *unnati* or development are embedded in a cosmology that has

decentred the human. For *dikus* (outsiders) of such a conception, his poetry conveys a radical understanding of progress that necessitates discerning the temporalities of the earthworm and the mountain. The "fleshy philosophy" of the earthworm opens a "pathway" to grasp the dissimilar magnitudes of temporal perceptions that the Anthropocene commands: the *dongar* of deep geological time, and the *dongar* as capital in the history of mineral extraction. Kondh conceptions of the human as *biripidka* or earthworm, the human as part of the elemental cosmology of the Kucheipadar landscape, enables a comprehension of mountains as autonomous annals of knowledge beyond their reductive quantification as "resource" for a nation's progress. To understand the extent of irredeemable loss of the *dongar* would require understanding its existence as separate from human history, with its own annals of millennia of slow formation and evolution.

Unnati and *matrubhakti* have essentially formed the ideological basis of the Hindu nationalist state's divisive enterprise and the nation state's invasion of Adivasi land for industrial progress. Bhagban's interpretation of these words thus becomes crucial. He frames climate action as the political responsibility of the present to resist complicit governments whilst having a deep-time consciousness of the mountains, a dual task that delineates human positionality in the Anthropocene. In his speeches and testimonies, *unnati* as imagined by the Indian state and mining companies for short-term profit that would deplete this "resource" within thirty to forty years, is juxtaposed with *unnati* rooted in a comprehension of the mountain that has a profound dimension. He asks, "Sir, what do you mean by development? Is it development to destroy these billions of years old mountains for the profit of a few officials?" (qtd. in Das and Padel, 10). He represents and communicates a Kondh humanism in his songs through his interpretation of development as one that honors the human's ethical relationship to land. "Humans as earthworms" in kinship with the mountains orients human perception and equally counsels on the fragility of these enmeshed interfaces. During our conversation in 2017, he presented this

thought as a "fairly basic" idea which he had attempted to convince people of during the movement. Human impact on land is fueled by industries, and to oppose destruction of ecologies is a universal responsibility. He said, "People think this is for Adivasi's self-interest. This resistance is against 'loot'. The riches of the land that is being destroyed is not of the Adivasi's alone. The environment, sky, this is not of the Adivasi's alone. It belongs to the living, and the living suffer. The profits are for the company" (Majhi).

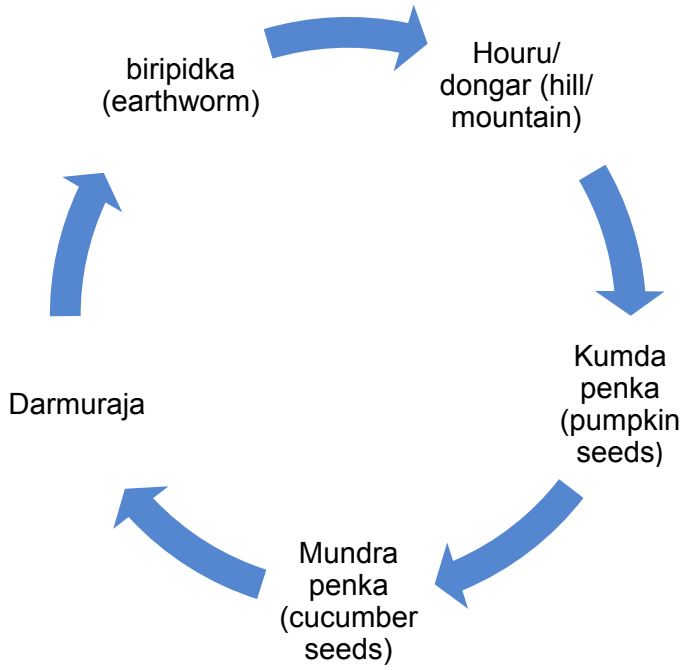
Bhagban's political thought, beside a consciousness of "humans as earthworms", poses further questions to our belated understanding. Is the binary by which we understand the Anthropocene in literary imagination, of geological and historical time, adequate to comprehend the lived temporalities of non-humans? For are not our metaphors for understanding the non-human again dependent on the scales of human measurements and the grammar of theory? What is the language in which to imagine scale and inhabit temporal dimensions as earthworms and living mountains? As in several Adivasi creation stories, the earthworms collected earth until it sufficed living beings. The *dongar* is a law-making entity as much as its creation and sustenance depends on the enterprise of the earthworms. And yet again, given the mutuality in their relationship, can the temporality of the mountain alongside the earthworm be imagined at all through progression or variations in scale? The *dongar* and *biripidka* claim sovereignty on temporality, equally on the forms of the annals they maintain. As a conduit to their claims, Bhagban Majhi's political activism becomes critical. For young Kondh leaders of the movement, understanding the metrics used by the company was equally important to predict the "calamity" that mining would ensue. To thoroughly investigate the statistics proposed by the state and the company, the "tonnes of bauxite" as opposed to a living *dongar* was vital, so that Kondh ideas of progress could be proposed and reasoned. To examine the measures of employment and education that was promised by *unnati* was to ascertain whether the villages would be direct

beneficiaries or marginalised again. The annals of the earthworms and the mountains had to be juxtaposed with metrics that stem from and accommodate human centrality and that are estimated to have higher "pragmatic" value. As we shall come across in the next section, the translation of Dambu Praska's song carries a similar duality: "a measuring has begun of *Leka houru*" (Praska, qtd. in Dash 2013). Praska, similarly, juxtaposes temporal scales of his origin epic and company metrics. The elders of the village, and singers like Bhagban Majhi, were consequently part of a philosophical struggle to grapple with the modes of adopted languages to convey Kondh epistemologies connected to the *dongar* and *biripidka*. This leads me to explore yet another "fleshy philosophy" of the earthworm in Dambu Praska's epic rendition.

IV. Of Mountains and Seeds

Listen, O elder, O brother,
the story I tell you:
this mountain is our ancestor, our Darmuraja.
This mountain is cucumbers, pumpkins, and all that was created.
Listen, O brother, our only story.
……
The king summons the elder brother to the feast,
the middle ones with tattered clothes,
are asked to leave—
crossing mighty rivers, the middle ones are scattered
……
A call resounds from village to village—
assemble on the mountain—
But we shall not leave.
There, lives Darmuraja… (Praska, qtd. in Dash 2013)[26]

The late Dongria Kondh poet's song "The Lament of Niyamraja" is rooted in the Dongria Kondh oral epical tradition. As the *jani* (priest) of the community, he sings in a literary form of Kui. The singular long-form of this rendition is archived in the video documentary by Bhubaneswar-based filmmaker Surya Shankar Dash titled "Lament of Niyamraja".[27] Here, my English translation is based on a recent full-text translation by Arna Majhi (from Kui to Oriya) that has clarified the complex text of Praska and helped bring previously unconsidered aspects of the song to light.[28] The song was collected in the years leading up to the village council hearings held in Niyamgiri by the Supreme Court of India in 2013. India's apex court demanded legitimate reasons why the Dongria Kondh community opposed Vedanta's proposal to mine bauxite on their hills. One afternoon during the movement, Dash asked Dambu Praska that, if Praska was called by the state to a hearing, what would he render as a reply on behalf of his community? In reply to Dash's question, Dambu Praska sang "The Lament of Niyamraja", presenting evidence of legal ownership of the hills: the intimate knowledge of *penka* (seeds) which for him are "the stakes of the Anthropocene" (Davis and Todd, 767). Through metaphors in his poetry, he communicates legal conceptions embedded in *penka* or seeds of the pumpkin (*kumda penka*) and cucumber (*mundra penka*). In his song, the Dongria Kondh cosmology is represented as having its origins from non-human elements like the earth and its earthworms (*biripidka*), as well as the sky, who is called Darmuraja, the god who transmits this law and knowledge.



Darmuraja, also known as Dharmaraja or Niyamraja (King of Law), is believed to be an ancestor, an animate entity who holds a religious position and is resident on the hills of Niyamgiri. The name "Niyamgiri" itself suggests why it is essential to read this song through the philosophies of the non-human articulated in Dongria Kondh mythology. "Niyamgiri", as the name of the hill of Darmuraja, might have been a Sankritised import: *giri* means hill, *niyam* means law in Oriya and some other Indo-Aryan languages. It is unclear when the words may have entered Dongria Kondh vocabulary. It is worth pondering with some skepticism whether it is a recent import or a result of interactions with dominant traditions like Oriya, Telugu, and Hindi, among others, during the nineteenth and twentieth centuries or even earlier. Therefore, contrary to what is widely believed in non-Indigenous readings of Niyamgiri, that Niyamgiri is the "Mountain of Law", with "Niyamraja" or "Dharmaraja" presiding as the "King of Law", might be our error in translation or an idea in Dongria Kondh mythology that has grown out of linguistic adaptation. *Dharma* is a Sanskrit term for "just action" or "duty", whereas *Darmuraja* refers to the Dongria Kondh "ancestor", who decides the law of the community. The law that

Dambu Praska sings about is distinctive and not related to "dharma" in Hindu traditions. In other words, Dambu Praska is potentially singing about the law embedded in the seeds of the pumpkin and the cucumber.

Praska braids the origin myth of the Dongria Kondhs with the narration of present-day call to a court hearing. He speaks through numerous voices in a tense arrangement that alternatively straddles the temporalities of the origin myth and the present day, where the mythical elder brother of Darmuraja, called to the king's court to decide on the proposed settlements of their community, overlaps with the Dongria Kondh villager called to a state hearing. Both, the brother and the villager, are asked the same riddle:

> How many seeds in a pumpkin?
>
> How many seeds in a cucumber?
>
> How many shall sprout and how many are hollow? (Praska, qtd. in Dash 2013).

Dambu Praska's song performs a struggle to answer the riddle of seeds, an answer that would form communal evidence of belonging to their hills. At one point, Darmuraja sits beside him to offer answers through a secret understanding, an answer Dambu Praska does not reveal to us, the listeners. Praska's metaphorical use of the riddle of seeds forms the basis of Traditional Ecological Knowledge (TEK)[29] to judge those seeds (*nida penka*) which would yield a healthy crop, a local knowledge passed down through generations in the form of a riddle. Traditional knowledge of ownership is often guarded and closed to non-members of the community—Darmuraja, the King of Law, offers the knowledge to Praska and not the listener. That is why Dambu Praska sings that both acts, of sharing and denial of this "sacred" knowledge, threaten him. On the one hand, he cannot break his community's rules of intellectual property. On the other, withholding this proof of ownership would displace his community. At one point, the narrator in the song denies seeds that are offered to him in order to protect their hills. Here, the *penka*

or the seeds become an allusion to non-Indigenous seed varieties that were introduced on Adivasi land promising a high yield, but which were essentially seed varieties that yield monocrops and are not suitable for cyclical sustainable production.

Robin Wall Kimmerer, similarly, writes of corn and essential Indigenous epistemology and history associated with varieties of the crop that has been deemed as "primitive" by colonial settlers. The industrial production of corn is "waste producing", she writes, far removed from the relationship between maize and human as planted and consumed within an "honor system": "[The] human and the plant are linked as co-creators; humans are midwives to this creation, not masters. The plant innovates and the people nurture and direct that creativity." ("Corn tastes better", np). When Dambu Praska similarly rejects the seeds that are offered to him in a "pouch", a non-Indigenous variety for a high yield, it is his way of maintaining the Dongria Kondh "honor system" for seeds indigenous to the hills. The hollow seeds (*hatun*) also suggest the history of settlements by colonial and upper-caste communities in southern Odisha since the nineteenth century, that I discussed earlier in this paper. It is Dongria Kondh women who are the "guardians of seeds" (Jena "Tribal Priestesses", np). Dongria Kondh priestesses conduct a ritual for the collection and protection of indigenous millet seed varieties that are in decline on the slopes of the hills. Travelling by foot to other villages, the women request seeds to be accumulated and sown for harvest. As reported on *Vikalp Sangam*, these travels reveal not only vanishing millet seed varieties but also the sheer diversity of indigenous seeds sown as opposed to monocropping: Dasara Kadraka, a *bejuni* (priestess) from Kadaraguma village, cites the existence of thirty millet seed varieties from the hill alone that are endangered ("Tribal Priestesses").

The poetic repetition of seeds, the apparently simplistic and straightforward listing of vegetables and grain, are evidentiary of sustainable practices embedded in complex knowledge systems. The question of the number of seeds in a

cucumber, the materials of pumpkins, fruits, and grains that Darmuraja provides, is the vital materiality that determines Dongria Kondh law and survival. This relationship that binds Niyamgiri's ecology to the Dongria Kondh community stands threatened in the Anthropocene. Consequently, invocations of vegetal produce of Niyamgiri were a recurrence in the oral testimonies of Dongria Kondh villagers presented to the Supreme Court of India to protect Niyamgiri from bauxite mining. Dambu Praska, similarly, comments on the incoming dispossession by the mining industry. He laments that the answer to the riddle of the seeds is ultimately irrelevant if the land is threatened:

> Seven days in the sun,
> the seeds of the pumpkin and cucumber dry up.
> Listen, O brother,
> with the sunrise, the earth warms, the mounds crumble—
> the mountains grow muddy,
> flow murky in the streams—
> know this, O brother,
> a measuring has begun of *Leka houru*.
> Tell me, O brother,
> how many seeds of the pumpkin are hollow?
> how many will sprout?
> *Here are nine pouches of pumpkin seeds,*
> *here are nine pouches of cucumber seeds—*
> if the land is lost, how would seeds matter? (Praska, qtd. in Dash 2013).

Praska conveys a disillusionment with the government hearing. The Supreme Court hearing was limited to only a few villages in Niyamgiri. By then, continued industrial mining (more regularly since the 1990s) had already displaced several Adivasi communities and destroyed the ecology of the neighboring hills and villages in south Odisha. His image of muddy mountain streams evokes the image

of the toxic industrial mud ponds constructed by the company. Vedanta alumina refinery not only consumed water that forms perennial streams of the Niyamgiri hills, but also constructed an ash pond at the mouth of Vamsadhara River. The river and streams on the mountains were polluted, rendering them unusable for human consumption. Praska is aware of the ongoing devastation to their hills and performs a series of denials towards the end of the song. He denies the offer of seeds, buffaloes, and mangoes, metaphorical suggestions to the material gains that the company and state offered in the name of "development" and progress. The narrative voice in the song realizes and communicates the indispensability of the *dongar*. Similar to Bhagban Majhi, Praska communicates that mining their *dongar* would herald a breakdown, destroying the slow and prolonged elemental bind of the mineral that has formed the ecology of eastern India. The continuity of seeds, and consequently of his community depends on the continuity of the mountain.

Conclusion:

> They cannot tolerate the existence of trees
> for the roots demand land. (Kerketta, 168)

In a visionary couplet written in Hindi, in her second anthology *Jadon Ki Jameen* (*Land of the Roots)*, Oraon poet Jacinta Kerketta engraves the existential "stakes of the Anthropocene" (David and Todd, 767). As the titular poem to this anthology, a two-line afterword that appears on the last page, she says that the reason *they* cannot tolerate the presence of trees is because the roots demand *jameen* (land). This form of non-human need is unimaginable and therefore unaccommodated within human systems of legality and ethical practice. In this couplet, she effectively articulates that to comprehend our present crisis necessitates re-formulating the question of land rights, evoked here as the rights *of* the land.

Through a literary reading, I situated the recurrence of *jal, jangal, jameen* as climate vocabularies to explore the Adivasi literary tradition's response to the

climate crisis. The paper was limited to the context of east-Indian geographies. What are the other possibilities of imagining climate vocabularies, and how will these literary readings support work on micro-histories of particular geographies and documentation of specific Adivasi philosophies? Similar to the "fleshy philosophies" of earthworms and seeds, present in the songs of Dambu Praska and Bhagban Majhi, what are the ways to archive and read similar connections to the material and vegetal? This further raises the question of what are the various forms that climate vocabularies can take in different Indigenous traditions and languages? In a paper titled "Inventing Climate Consciousness in Igbo Oral Repertoire: An Analysis of *mmanu eji eri okwu* and Selected Eco-Proverbs" by Dr. Chinonye C. Ekwueme-Ugwu and Anya Ude Egwu, the two Nigerian writers present a climate consciousness embedded in Igbo proverbs. Similarly, Nicole Furtado's evocation of "Ea", a concept stemming from Native Hawaiian epistemology, informs the climate vocabularies framework.[30] In the panel discussion titled "Climate Change, Infrastructure and Adivasi Knowledge", panelists Akash Poyam, M. Yuvan, Archana Soreng, and Raile R. Ziipao shared some of their ongoing documentation of Indigenous knowledge traditions, ecological vocabularies, and sustainable practices (Poyam, Soreng, et al.). These methods—for instance, M. Yuvan's Instagram handle titled "A Naturalist's Column"—are innovative archives and a necessary glossary for ecological education. Similar work can help uncover literary recurrences that have served as a "common organising concept" (Todd, 5-6) in diverse contexts and languages.

I hope a transnational glossary on climate vocabularies can channel further comparative work that connects the climate histories of India with settler colonial nations, and Indigenous literary responses in the respective contexts. Similar to India, ENSO occurrences have impacted Australian geographies resulting in severe drought conditions in the nineteenth century. Settler colonialism's lasting impact on North American and Australian land through forced removals, disease, and

genocide radically altered ecologies. The global industrial complex further impacts Indigenous communities in all three contexts. The raging bushfires of Australia in 2019, the wildfires of California in 2020, and the recent forest fires on the Similipal reserve, eastern India, in 2021 are some of the many symptoms of insurgent eco-systems. Here, Indigenous communities are affected by climate change and ironically held responsible. In India, the conservation narrative excludes Indigenous participation and sustainable practices and penalises Indigenous communities for environmental encroachments on their own land. Adivasi peoples are displaced to "protect" wildlife and habitats. Kharia climate activist Archana Soreng, therefore, demands that Adivasi communities lead the narrative and efforts on conservation, rather than be made "victims" (Poyam, Soreng, et al.). Forthcoming discourse on climate, conservation, and the pandemic may need to reflect on the role of authoritarian nationalism and racism in abetting already fragile conditions. Indigeneity and land rights of Adivasi communities are oppositional to the Hindu nation and aligned corporate and industrial interests. Here, Adivasi and other minority communities become dispensable bodies in their lands as well as in urban centres where they work as migrant labourers. The exodus of migrants from urban metropoles following the Indian state's overnight lockdown during the Covid-19 pandemic in 2020 was an authoritarian measure. In so far as the pandemic is indicative of the climate emergency, the exodus was also a climate-induced displacement.[31] How to rethink and safeguard Indigenous climate justice in authoritarian nation-states? This concern is not limited to the Hindu nationalist state. Appropriations of Indigeneity in Europe and Britain has led a rise in xenophobia claiming indigeneity of the "original white" population. Claiming such indigeneity, the Far Right draws a dangerous analogy between immigration of minority populations to UK and colonialism in settler nations.[32] This ideology can influence conservative anti-immigration policies. At a time when climate-induced displacements and violence within authoritarian regimes of the Global South render

Indigenous and minority populations homeless, these policies, if realized, will deprive alternatives of safety to climate refugees.

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Notes:

[1] "Imperial copy" is defined in reference to Pratt's discussion on how the colonies and the colonial subject were documented through "imperial eyes" of a "global classificatory project" (1-36) and Linda Tuhiwai Smith's discussion in *Decolonizing Methodologies* (49-65).

[2] A. K Pankaj similarly writes, "Because tribal discussions in the present times are organized only by the non-tribals and in these the voice of the tribal is absent. The basis of these discussions are on the fictions (fictional literatures) written by non-tribals like Mahashweta Devi on Tribals […]" (9). Similar concerns are echoed by

Poyam, who writes, "A quick web search for 'Adivasi books' will show that most books about Adivasi communities have been and are still written by non-Adivasi, upper-caste writers" ("Ten Voices").

[3] In the context of Australian First Nations literatures, Waanyi writer Alexis Wright conceptualises a "sovereignty of the imagination" as paramount for Aboriginal sovereignty and which can be understood as analogous to re-imagining a sovereign and "responsible" form of literary fiction (the Indigenous novel, in Wright's case) that is rooted to the "powerful, ancient cultural landscape of this country", ("The Ancient Library").

[4] Simon Ortiz's 1981 essay "Towards a National Indian Literature: Cultural Authenticity in Nationalism" was a founding work on "literary sovereignty" in Native American national contexts, a precursor to Robert Warrior's publication of *Tribal Secrets: Recovering American Indian Intellectual Traditions* (1995) and subsequent scholarship on literary nationalism. Wright defines a sovereignty of the "imagination" and "sovereign thinking" for Australian First Nations communities in her speeches and essays archived in *Sydney Review of Books*, *Meanjin* and *Overland*.

[5] A note on terminology: my use of the term relies on the critique of the Anthropocene in the works of Heather Davis and Zoe Todd (761-780), and Vineeta Damodaran (93-116).

[6] Indigenous communities were made "unthinkable" through elimination and erasure; in the Australian context declaring Indigenous First Nations land as terra nullius, for instance, erased Indigenous existence, as well as laws and access to the land as archive. Moreover, colonial constructions influenced by nineteenth-century scientific racism has further rendered Indigenous intellectual productions "unthinkable" which persist in discourses on Indigenous communities in dominant institutions in the postcolonial state. This is a subject of related enquiry in my doctoral work, and I draw my ideas from Linda Tuhiwai Smith, Patrick Wolfe, and Michel-Rolph Trouilliot's conception regarding the Haitian slave subject.

[7] Amitav Ghosh describes his experience of a tornado in Delhi as "uncanny" and points out that the word has recurred significantly in the discourse related to climate change to describe the "freakish" and "improbable" events. He writes that they appear uncanny because it is a moment of "recognition" (a *re*-cognition as he explains) of the "presence and proximity of nonhuman interlocutors" (30-31).

[8] As Damodaran mentions in the paper, a "series of regional histories" has been written in India since the 1990s, focusing on the "local", namely by Richard Grove, Mahesh Rangarajan, Rohan Dsouza, Vasant Saberwal, and K. Sivaramakrishnan.

[9] On voice, translation and "telling stories" on behalf of Indigenous communities, see Wright ("What happens", np), and Muecke and Shoemaker's discussion on "Repatriating the Story" (Unaipon, xi-xliii).

[10] Similarly, Kyle Whyte argues that the vocabulary of the Anthropocene or "anthropogenic climate change" are "not precise" terms for Indigenous communities (Whyte "Indigenous Climate" 159).

[11] On the deep connections between words, and ecology, M. Yuvan's glossary documented in his social media handle *A Naturalist's Column* has particular relevance to direct similar forms of research in the Indian context, ("A Naturalist's Column"; "Speaking River").

[12] I draw from the discussions on temporalities and scale, planetary and historical, from Davis and Todd, Damodaran, and Ghosh; further, on poetry and the "scalar challenges of the Anthropocene" from Lynn Keller's critique of the varied perceptions of human and non-human agency, disparate temporalities, and how this defines the condition of the "self-conscious Anthropocene" (Keller 1-60; 136-173).

[13] Kimmerer writes that the English name for "pecan" derives from the Indigenous word *pigan* which could mean any nut. The names, along with the trees, and land around Lake Michigan, writes Kimmerer, were lost to settlers during the Trail of Death (*Braiding* 12-13), linking a history of language and landscape acquired from a history of violence.

[14] Given that the processes I chart in this section have affected Adivasi communities in what are parts of present-day Odisha, Jharkhand, Chhattisgarh, West Bengal, and Telangana (east and south-east India), which were earlier parts of princely states and provinces like Chottanagpur, Gondwana, Santhal Parganas, etc., I draw from a wider source of histories of these regions, rather than limiting myself to the geography of present-day Odisha.

[15] Mike Davis delineates two forms of drought: a meteorological one that depends on natural rainfall and local climate, and a hydrological drought which he notes, "always has a social history" (52).

[16] I acknowledge the conversations and references suggested by Richard Mohapatra.

[17] A significant limitation in my archival research from the early twentieth century is that some texts are accessible only through translations in English in collections by Verrier Elwin and Shamrao Hilvale. Further fieldwork in vernacular languages may challenge this reading and provide a more informed analysis.

[18] While the idea of mountains as assets was tied to existing ideas of co-dependence between human and non-human species, the state's interest in mineral-rich mountains as resource and capital was adapted to negotiate Adivasi rights. The beginning of the Jharkhand Province Movement, to demand a separate state for Adivasis of Chotangapur and Santhal Paragnas, was also built on Adivasi ownership of "resource" to claim statehood. Jaipal Singh Munda claimed that the "deficit area" argument could be easily countered, given Jharkhand was

"unquestionably the richest mineral area in Hindustan". He further adds, "We have mountains of bauxite. We have a monopoly of mica and lac. Besides we have gold, silver, asbestos, manganese, […] coal, valuable forests and an admirable climate" (Pankaj, 58).

[19] My comparative readings of "sacred" to situate Adivasi epistemologies around *jal, jangal, jameen* is a section of my doctoral research informed by Native American philosophy of sacrality as ethical kinship with land as expressed in the writings of Kiowa writer N. Scott Momaday (*The Man Made*, 45), Simon Ortiz (Ortiz et al, 365) and Leanne Betasamosake Simpson ("Land as Pedagogy", 151).

[20] Akash Poyam talks about how in Adivasi "social structures, there's an obligation to protect and take care of non-humans", and make claims to rights based on the protection of "sacred groves" and "village spirits" (Poyam, Soreng, et al.); Damodaran similarly writes, "Adivasi identities and beliefs are based on ancient linguistic, religious, and literary conceptualizations and on cultural origin myths in which important deities are believed to be present in the distinctive mountain and deltaic landscapes and especially in the sacred woodlands" (109).

[21]Jharkhand Chief Minister Hemant Soren claimed recently, "Adivasis were never Hindus and never will be", (qtd. in Angad "Adivasis were", np).

[22] While scanning and documentation of these hills feature in early twentieth-century geological surveys, the Memorandums of Understanding, signed by the Odisha State government in the 1990s, allowed access to private mining companies like Vedanta for mineral extraction, claiming it would help "development" in Adivasi regions.

[23] For details of the movement, see Ratha, B., et al., Padhi and Sadangi.

[24] The prayer can be read as acknowledging the sisters, Baplamali and Palangamali, characters in one of the Kondh mythologies of the region. The two sisters played in moonlit-drenched water and turned into *malis* (hills) as they ignored the warning cries of a bat – bat meaning *bapla* in Kui (Das and Padel, 71).

[25] Das and Padel further note how people of Kashipur refer to themselves as "frogs and fishes" (102), presenting themselves as part of an undivided human-non-human ecology.

[26] An earlier version of this section of the song in its English translation was produced as a recording (Mishra "Of Mountains").

[27] Dambu Praska's song filmed by Surya Shankar Dash is translated in Hindi by Madhu B Joshi and Gorakhpur Film society. An English translation and subtitles of the video is by Jitu Jakesika.

[28] An oral translation from Kui-Oriya by Arna Majhi has been transcribed by Rabi Shankar Pradhan, and then adapted into Oriya language and form by Devidas Mishra. My translation into English has been aided through this process across two languages, as well as the previous translation by Jitu Jakesika.

[29] Whyte synthesizes scientific and policy literatures alongside Native scholars' definitions of TEK, ("On the role of" 2-12).
[30] Both papers delivered at CRASSH *Climate Fictions/ Indigenous Studies Conference*, University of Cambridge, 24-25 January 2020.
[31] A recent exploration of the non-human in climate studies historically situates the emergence of the COVID-19 virus in the long history of unstable relations between humans and pangolins. Shivasundaram writes that zoonotic transfers are inalienable from the climate emergency and the unequal pasts on which it is built. In the paper, he reads the descriptions of pangolins found in Sri Lankan Indigenous literatures to historicise this frontier of relations ("The Human", 1-30).
[32] For discussion on Indigeneity as co-opted by the European and British Far Right, see Introduction and chapter 3 by Mackay and Stirrup 1-24; 59-83.

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Educating for Indigenous Futurities: Applying Collective Continuance Theory in Teacher Preparation Education

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Introduction

In the United States, as well as elsewhere around the globe, K-12 classrooms are important sites for anti-colonial and Indigenous critiques of the settler nation, neoliberalism, and globalization. All of these lived realities undermine Indigenous futurities while simultaneously fueling climate change and perpetuating settler-colonial violence. Because Indigenous children predominantly attend public schools, we have chosen Western education systems as places to contribute to the ongoing work of Indigenous survivance (Sabzalian; Vizenor). We have also chosen to use the term 'Indigenous' as we feel that it directly connects people with their homelands, with their more-than-human relatives, and with the responsibilities that we have to each other and our places—and that these connections and responsibilities are an important part of the work we are doing. As Indigenous peoples, and in our work as Indigenous teacher educators, we seek to be good ancestors, to teach in ways that provide connection to Land and our more-than-human relatives, and to promote the collective continuance of Indigenous peoples as a method of broadening and supporting Indigenous futurities for our future generations.

We—Indigenous peoples and Indigenous teachers—are contemporary and hopeful; we persevere, and we change and adapt using our cultural knowledges. An integral part of the knowledge that is currently needed in our schools is the concept of connection. Connection between people in communities as well as peoples across the globe, but also connection with our more-than-human relatives, the Land, our places,

the air and water. This is important because as Indigenous people, we understand our Land differently than mainstream understandings of land within settler colonial institutions. As Robin Wall Kimmerer writes, "in the settler mind, land was property, real estate, capital, or natural resources. But to our people, it was everything: identity, the connection to our ancestors, the home of our nonhuman kinfolk, our pharmacy, our library, the source of all that sustained us" (*Braiding Sweetgrass* 17). Tuck and Gaztambide-Fernández agree with Kimmerer, and strengthen her argument when they write that for "settlers to live on and profit from land, they must eliminate Indigenous peoples and extinguish their historical, epistemological, philosophical, moral and political claims to land. Land, in being settled, becomes property" ("Curriculum, Replacement, and Settler Futurity" 74).

Indigenous teachers can challenge misguided conceptions of, and relations with, Land by supporting their students' knowledge of the Land as a sacred relation, and this can open possibilities of multi-level changes throughout society that make it possible to mitigate climate change.

As we teach, live, work, and learn within and against the backdrop of settler colonialism, it is important to remember that it is "the specific formation of colonialism in which the colonizer comes to stay, making himself the sovereign, and the arbiter of citizenship, civility, and knowing" (Tuck and Gaztambide-Fernández 73). This means that as Indigenous teachers, both at the university and K-12 levels, we must continue to recognize and resist multiple forms of the violence brought about by settler colonialism. This includes the way we consider our connections and responsibilities to one another as well as how we think about Land as our relative to whom we have responsibilities. The loss of this connection with Land is a major contributor to the global climate crisis we currently face. With settler colonialism we must also keep in mind that the "violence of invasion is not contained to first contact or the unfortunate

birthpangs of a new nation, but is reasserted each day of occupation" (Tuck and Gaztambide-Fernández 73). In working with future teachers, Indigenous teachers, we believe that we can broaden and strengthen the work of decolonization and Indigenization and by doing so, have a positive effect on our future generations of Indigenous youth and our/their relationship with Land and climate.

In the process of recognizing and resisting settler colonialism at work within our schools and our classrooms, "critical examinations of colonialism will help educators consider alternatives to colonizing ways focusing on strategies of resistance and survivance through writing and cultural production" (Pewewardy, Lees, and Clark-Shim 49); Indigenous teachers are in a position to do this work most effectively with their Indigenous students. We, as university educators, must be critical of the colonial institutions within which we work, and we must provide future Indigenous teachers with an example of what this can look like. Violence in the form of "forced assimilation of Indigenous peoples through public schooling began a clear pattern of government efforts to enact school policies that advanced efforts of settler colonialism" (Lees et al. 5), which continues in the present. Public schools are still in the process of advancing the ideologies and the violence of settler colonialism. By teaching in Indigenous ways and with Indigenous knowledges, "we bring settler colonialism to the center of neoliberal critiques to contend with its aftermath, which permeates all we do in school"(Lees et al. 5). Practicing resistance and survivance through centering Indigenous teachers and Indigenous epistemologies, ontologies, and axiologies "is situated within broader intergenerational processes of Indigenous persistence, resilience, and community agency committed to strengthening the next generation of nation builders" (Anthony-Stevens et al. 3).

We must also remember and honor that Indigenous ways of knowing are interdisciplinary. Humans are not separate from the natural world, so why would we

make distinctions between school subjects? "We are collectively looking for the right and responsible ways to weave TEK (Traditional Ecological Knowledge) into our education, research, and practice, trying to find a path through a profoundly new educational landscape for mainstream universities" (Kimmerer, "Searching for Synergy" 318). This path includes both the humanities and the sciences connecting and intertwining through culture and stories, and Indigenous teachers can further this work with their students and communities. "Indigenous thinkers for their millenia of engagement with sentient environments, with cosmologies that enmesh people into complex relationships between themselves and all relations, and with climates and atmospheres as important points of organization and action" (Todd 6-7) show us what this path can look like. This way of thinking, of knowing and being in the world, is crucial for our Indigenous students, and it is also important for all students and peoples. We can use this knowledge to teach and to combat climate change—for collective continuance.

We, as Indigenous professors, use critical Indigenous pedagogical frameworks with our students because they are "central to the organization of curriculum and instruction methods classes, student teaching practica, and other coursework or programmatic experiences" (Kulago 240). We do this because within "these frameworks, there are similar components that include the disruption of curricular materials/resources so that truthful histories and multiple perspectives are included: the centering and valuing of Indigenous knowledge systems and languages, and the goals of nation building and strengthening of Indigenous communities and families" (Kulago 240). We also do this to show our future teachers a way forward in their work that supports their, and their students, Indigenous futures. This critical Indigenous consciousness allows these future teachers to "acknowledge, respect, and embrace the role they would hold as advocates, nation builders, and leaders in their communities

with their continued service to Indigenous communities and people" (Kulago 242). We hope to provide examples of, and support for, our future teachers to "critically examine curriculum, instructional methods and other educational practices, call out assimilative/colonizing aspects, and forefront Indigenous perspectives and knowledge systems" (Kulago 242). Indigenous pedagogical frameworks allow us as teachers to decolonize and Indigenize our educational practices, to support Indigenous knowledges and worldviews, to practice collective continuance as well as being good ancestors.

As Hollie Kulago points out, "in Indigenous teacher education, we are committed to Indigenous futurity but must work through educational programs committed to settler futurity." ("In the Business of Futurity" 243). To be clear, settler futurities are not the same as Indigenous futurities. But what do we mean by 'futurities'? They are not just a set of ideas or concepts about what the future may hold, but instead refer to "styles of thinking about the future, the types of practices that give content to a certain future, and the logics behind how present actions are legitimized or guided by specific futures" (Kulago 243). Indigenous futurities are a way for Indigenous peoples to imagine and then implement a future that is meant for them and their children, that honors their ancestors and their ways of knowing and being, and that respects the connections to and responsibilities for the Land and more-than-human relatives with whom Indigenous peoples have been in relation with since time immemorial. As Megan Bang writes "a fundamental aspect of seeing anew is in cultivating our abilities to see remembered places and newly made places while we learn to move and be differently in the world, collectively" (441). Indigenous teachers working with Indigenous students can and do make possible the inclusion of Indigenous futurities within public schooling institutions, in fact, having "community-based Indigenous educators to serve Indigenous youth is paramount for helping Tribal

nations and their citizens to build both a strong and present future" (Anthony-Stevens et el. 19). As Kulago writes "having a critical Indigenous consciousness can challenge the structure of settler colonialism and promote resistance and survival…education through and with the goals of cultivating critical Indigenous consciousness can become a weapon against settler colonialism" (248). By providing future teachers with the skills and the support to be critical Indigneous scholars and teachers, we are helping them to resist settler colonialism and promote Indigenous futurities.

We draw from our experiences as Indigenous university educators, and from the experiences of our students who are training to become elementary and secondary classroom teachers in the US. We do this work in order to show how education can be one way to better understand our ancestral Indigenous teachings. These teachings "can create a synergy between teacher education and the field of practice and support educators developing consciousness… as they commit to decolonization and Indigenous futurities" (Lees et al. 15). By better understanding these teachings, we aim to deepen our, our students', and their students' connection to our/their Indigenous identities and knowledges. By connecting deeply with our Indigenous identities and knowledges, we become better ancestors, better teachers, and better learners, more connected to our places and Land, more cognizant of our relationships and responsibilities, stronger in our efforts to promote collective continuance, and champions of Indigenous futurities.

Climate Change, the Anthropocene, and Settler-Colonial Violence

Our world is currently experiencing a crisis: climate change caused by humans; caused by humans' lack of connection with place and their more-than-human relatives; caused by humans' loss of recognition of their responsibility to be good ancestors and good relatives; caused by heteropatriarchy, capitalism, and settler-colonialism. Our

Indigenous communities are experiencing climate crises at disproportionately higher rates than whites living in the US, and this is not accidental. Indigenous peoples are experiencing poverty, loss of traditional homelands, rising sea waters caused by warmer temperatures, lack of clean drinking water, and loss of access to traditional foods. These issues are all linked and many are the result of climate change and warmed global temperatures: "As an environmental injustice, settler colonialism is a social process by which at least one society seeks to establish its own collective continuance at the expense of the collective continuance of one or more other societies" (Whyte, "Settler Colonialism" 136). This is happening across the globe today, and we see and feel its presence in our classrooms and communities.

In order to truly address our climate issues, we must name the problems and their origination. Davis and Todd "argue that placing the golden spike at 1610, or from the beginning of the colonial period, names the problem of colonialism as responsible for contemporary environmental crisis" (763). The connections between colonialism, particularly settler-colonialism, and the Anthropocene need to be explicit in order to expose the violence of colonization: "By making the relations between the Anthropocene and colonialism explicit, we are then in a position to understand our current ecological crisis and to take the steps needed to move away from the ecocidal path" (Davis and Todd 763). This then allows for a recognition of Indigenous ways of knowing and being, of the necessity for Indigenous input and governance. This shows a way forward that is hopeful.

Kyle Powys Whyte tells us that "settler colonialism works strategically to undermine Indigenous peoples' social resilience as self-determining collectives" ("Settler Colonialism" 125). However, if we connect the Anthropocene with colonization,

> it draws attention to the violence at its core and calls for the consideration of Indigenous philosophies and processes of Indigenous self-governance as a necessary political corrective, alongside the self-determination of other communities and societies violently impacted by the white supremacist, colonial, and capitalist logics instantiated in the origins of the Anthropocene. (Davis and Todd 763)

In order to address social issues and the current climate crisis, we must acknowledge the violence caused by settler colonialism, and recognize that Indigenous peoples across the globe can be, should be, and are sovereign nations and have continued their relationship with Land and more-than-human relatives through the violence. We know that Indigenous "people have endured the pain of being bystanders to the degradation of their lands, but they never surrendered their caregiving responsibilities. They have continued the ceremonies that honor the land and their connection to it" (Kimmerer, "Searching for Synergy" 319). We can teach these concepts in our schools, and in doing so become better ancestors as well as better caretakers of our Lands.

By recognizing the climate crisis that is currently raging, naming and acknowledging the colonialist causes, and by affirming the inequitable effects of this crisis, we potentially build a foundation for change. With this groundwork laid, it may be possible to begin to move toward a restorative pathway forward. We believe that our future teachers see this possibility and the hope that the students in their classrooms bring to Indigenous communities across the globe and can support collective continuance in their communities by holding and passing on Indigenous knowledges and values to their students.

Collective Continuance and the Importance of Interdisciplinarity to Address Climate Change

As Indigenous university educators, we assert and affirm the importance of Indigenous educators who are learning to become good ancestors for future generations. We work with future teachers, and part of the work we do with them is to better understand their/our ancestral Indigenous teachings for the purpose of deepening our Indigenous identities and knowledges, which allows these teachers to do the same for the students in their classrooms. This type of work is a vital part of what Whyte calls collective continuance. Collective continuance is "an Indigenous conception of social resilience and self-determination" ("Settler Colonialism" 125) and "refers to a society's capacity to self-determine how to adapt to change in ways that avoid reasonably preventable harms" (131). Teachers, particularly Indigenous teachers, can be part of this process by supporting and broadening students' confidence with their Indigenous knowledges and identities. Indigenous peoples reclaiming our/their sacred relationships and responsibilities for caretaking of the Land is an important first step in environmental justice and addressing climate change.

Collective continuance connects the three concepts of: interdependent relationships, systems of responsibilities, and migration (Whyte, "Settler Colonialism" 126). All three of these concepts are foundational in our Indigenous students' journeys to become teachers in their communities. These concepts are needed more broadly in today's schools and education, particularly for Indigenous students, and more generally for all students, in that they provide students with a sense of their own identities, the value of their relationships, the need for them to be connected to and responsible for their human relatives, their more-than-human relatives, and their air, waters, Land and place. These connections and relations are more important than ever to understand

and to honor in the current climate crisis we all face and that these students will have a large part in addressing.

Interdependent relationships are important in thinking about our interactions with, and considering our impact on, not just other humans but also our more-than-human relatives and the Land, air, and water. Whyte explains that the concept of interdependent relationship "includes a sense of identity associated with the environment and a sense of responsibility to care for the environment. There is also no privileging of humans as unique in having agency or intelligence" ("Settler Colonialism" 127). He goes on to state that interdependence "highlights reciprocity or mutuality between humans and the environment as a central feature of existence" (128). We understand, recognize and honor this concept, as do our future teachers. These future teachers take this concept to their students and affirm as well as promote these students sense of responsibility to their relatives and their Land.

Current and future Indigenous teachers have a responsibility, in our cultural teachings, to prioritize relationships and systems of accountability / answerability / responsibilities that differ from settler sensibilities. Terry Cross has led the way in articulating how systems can be structured and led in order to fulfill an Indigenous understanding of respectful relationship building, noting this work should take place "at all levels—the importance of culture, the assessment of cross-cultural relations, vigilance towards the dynamics that result from cultural differences, the expansion of cultural knowledge, and the adaptation of services to meet culturally unique needs" (83). Likewise, Whyte encourages focus to be placed "on the qualities of the responsibilities that have developed over time, which foster interdependence. These qualities include consent, diplomacy, trust, and redundancy" ("Settler Colonialism" 132). Teaching with and for these concepts allows for a different way of learning and growing, and a different way of viewing the world compared to the dominant views in

settler-state educational systems. As Leilani Sabzalian recommends, teachers who wish to contest colonial discourses in education can "start with place" (130). Daniel Wildcat writes that Indigenous knowledge systems are indeed an important form of ingenuity, as reflected in his term, indigenuity, which he defines as "Earth-based local indigenous deep spatial knowledge" (48). A view that we foster and share with our students holds our more-than-human relatives and our Land and place as just as, if not more important than, our human relatives. Such relational views disrupt the commodification of Land and natural resources that have fueled climate change and are a necessary starting point for mitigating the climate crisis we all currently face, as well as a more sustainable way of life in the future. By providing space for this kind of view and approach in Western education systems, Indigenous teachers can carry this forward with their students, opening up possibilities that have not existed, and in doing so Indigenous teachers are reconnecting and reclaiming our cultural teachings that prioritize the importance of place and relationships. Or as Sabzalian eloquently states, "Places are pedagogical" (199).

As Kimmerer writes, "each person, human or no, is bound to every other in a reciprocal relationship. Just as all beings have a duty to me, I have a duty to them… An integral part of a human's education is to know those duties and how to perform them" (*Braiding Sweetgrass* 115). As educators, it is our job to support Indigenous students' knowledges that they are in relationship with, and responsible for, all other beings. It is also our responsibility to teach others about these relationships, to promote with all our students their connection to Land and the environment. Additionally, as humans we have an obligation to "find ways to enter into reciprocity with the more-than-human world. We can do it through gratitude, through ceremony, through land stewardship, science, art, and in everyday acts of practical reverence" (Kimmerer, *Braiding Sweetgrass* 190). Kimmerer gives us ways to bring our responsibility into focus through

education—and we are in a position within schools to educate young people in ways that promote thinking of our Land and places as our relatives that deserve our respect and our care.

In thinking of how we, as educators and as Indigenous people, can positively affect the current human induced climate crisis, we agree with Kimmerer that "the transition to sustainability must be a cultural one, a shift in the fundamental relationship between people and land, from the dominant materialist mode of exploitation to the indigenous notion of returning the gift; of reciprocity" ("Searching for Synergy" 318). We as university educators, and our students as future K-12 educators, are in a good position to do this beneficial work. We can help our students either return to and/or strengthen their Indigenous knowledges and sense of connection or help them begin to see these connections and to understand that they have a relationship with and responsibility to the Land. This is true of both our Indigenous students as well as our non-Indigenous students. As teachers we can talk about different types of energy, of the climate crisis, of why it exists, and about how to begin to change. We can talk about energy sources, but more importantly about how the Land takes care of us and of how we need to also take care of the Land. As Kimmerer writes,

> the wind blows every day, every day the sun shines, every day the waves roll against the shore, and the earth is warm below us. We can understand these renewable sources of energy as given to us, since they are the sources that have powered life on the planet for a long as there has been a planet. We need not destroy the earth to make use of them. (*Braiding Sweetgrass* 187)

Another piece of collective continuance that connects to both our future teachers and the climate crisis is the idea of migration, and the fact that this is a natural

part of our ecosystems, of which humans are just one humble and dependent piece. Whyte speaks to the idea that:

> Migration suggests that relationships of interdependence and systems of responsibility are not grounded on stable or static relationships with the environment. Rather, these relationships arise from contexts of constant change and transformation. A key idea is that relationships that are constantly shifting do not sacrifice the possibility of continuity. (Whyte, "Settler Colonialism" 129)

Our identities as Indigenous people and Indigenous teachers are not static and are grounded in relationship to each other as well as place. That we are thinking of Indigenous knowledges and ways of being in connection with climate crisis and education in a colonialist setting should not be viewed as incongruent, but rather part of this constantly shifting idea of migration which, while changing, are still continuous and connected to our ancestors. Whyte tells us that our identities can and should vary, that our ancestors teach "that was just that person's identity at that place and that time of year. Identity was always shifting" ("Settler Colonialism" 129). As Indigenous educators we, as well as our future teachers, can and should change while at the same time maintaining continuity with our ancestral teachings.

As Indigenous educators, we center collective continuance for Indigenous communities by supporting our future teachers to do good work in US public school systems. We must adapt to our current reality while at the same time maintaining, honoring, and valuing our ancestors, their values and knowledges, and the next generation of teachers whom we have the honor and responsibility of guiding.

Reclaiming Indigenous Ways

We are not arguing here that the answer is for Indigenous people to simply be included in the Western conversations and Western solutions. While such approaches do contain some benefits regarding raising awareness, which often can lead to heightened visibility of Indigenous struggles and voices, the downside is that the mainstream perspectives continue to stay intact. We are hopeful for a deeper solution: we are arguing for Indigenous self-governance, collective continuance for Indigenous peoples and ways of life, and for Indigenous communities to live in conditions in which we are fully empowered to enact our own solutions to climate change. We agree with Dhillon that "meaningful inclusion within dominant climate science is not merely a matter of increasing Indigenous presence but of reclaiming inclusive Indigenous governance." We are not asking for simple inclusion which does not create substantial change in the current system. Inclusion of Indigenous knowledges and self-governance is crucial as this "decolonizes how climate science is done so that Indigenous peoples can conduct science in ways that further empower their communities" (Dhillon 1-2). We believe that Indigenous teachers, as well as non-Indigenous allies—if they support a centering of Indigenous collective continuance—are critical to this work. Our future teachers are beginning to do this work, and in so doing, providing opportunities for further change in their work with the next generation of students.

Indigenous peoples, including students training to become teachers, have real input in solving the climate crisis we are currently experiencing. By focusing on Indigenous futurities, we are reminded that "we must learn to remember, dream and story anew nature-culture relations—and importantly this issue reminds me to emphasize how those relations are always on the move and always layered and shaping the present" (Bang 440). Indigenous contributions are based in knowledges that have been built upon since time immemorial and are just as valid as Western science and

colonial law. Indigenous epistemologies and ontologies offer a way to imagine a future that is sustainable for all as they "represent legal orders, legal orders through which Indigenous peoples throughout the world are fighting for self-determination, sovereignty" (Todd 18). Having Indigenous teachers in classrooms supports our teachers, students, and communities in deepening our Indigenous identities and knowledges, which in turn reinforces our sovereignty and sense of collective continuance.

As Indigenous feminist scholars, we know the power of hope and the ability of our knowledges and ways of being to create alternatives and support transformation. We believe this applies to education, particularly science education, as well as the broader field of science. The use of Indigenous feminisms "provide analytic concepts often left out of environmental science efforts that intend to empower. At stake are how the reclaiming of traditions can give rise to entrenched forms of power wrought through colonialism, including heteropatriarchy and racism" (Dhillon 2). By reclaiming Indigenous knowledges through our educational systems, we empower our students, and their students, to embrace their ways of knowing and being, to celebrate our/their relationship with Land rather than domination over it, and to create better relationships with Land that have the ability to ameliorate the climate crisis. The damage being done to our earth right now is a result of disrespecting the land, of not understanding properly our relationship with Land—a very similar concept as to how settler colonialism deals with Indigenous peoples. However, Indigenous feminisms bring us hope because "Indigenous feminisms refuse patriarchal notions of tradition and counteract pervasive attempts to dominate Indigenous bodies, places, and sovereignties" (Dhillon 3). By turning to Indigenous traditions, which are also contemporary knowledges, we can support our students to honor themselves and their Lands. As Kimmerer tells us,

> traditional ways of knowing builds capacity for students in regaining a relationship with ecological systems which is based on indigenous principles of respect, responsibility, and reciprocity. It also builds an appreciation for intellectual pluralism, respectful consideration of other ways of framing, and addressing a question which is an essential skill in an increasingly globalized economy. ("Searching for Synergy" 319)

Tuck and Recollet help us to understand that "Native feminist theories bring together critiques of settler colonialism with critiques of heteropatriarchy" and that "Native feminist scholarship has attended to the ways that settler colonialism and heteropatriarchy are mutually informing structures" (17). The critique of both settler colonialism and heteropatriarchy found within Indigenous feminisms are important to imagining a future that is different, that honors and respects Indigenous epistemologies, that recognizes humans' responsibility to the Land and more-than-human relatives, and that begins to decolonize and indigenize classrooms. This work must include "our lived experience, rich with emotional knowledges, of what pain and grief and hope meant or mean now in our pasts and futures" (Million 54). In doing this work, in honoring of the lived experiences of Indigenous peoples, in using Indigenous feminist ways of thinking, we "strive to recover our former selves and push toward creating better future selves by reclaiming Native values" (Goeman and Denetdale 9-10).

Reclaiming Indigenous knowledges is also a decolonizing and Indigenizing move, one that can be based in Indigenous feminist perspectives and worldviews. If we consider that "to 'decolonize' means to understand as fully as possible the forms colonialism takes in our own times" (Million 55), then by working with future teachers we can work to decolonize the lives of the students they work with, as well as our own, within the education system that is, in itself, a settler-colonial institution. In this work,

"we affirm the usefulness of a Native feminism's analysis and, indeed, declare that Native feminist analysis is crucial if we are determined to decolonize as Native peoples…for Native women there is no one definition of Native feminism; rather, there are multiple definitions and layers" (Goeman and Denetdale 10). Teaching in decolonizing ways, using Indigenous feminist thought to guide that teaching, allows us to change the way we view our relationship with Land and our more-than-human relatives, to return to and reimagine Indigenous futures, and begin to work toward mitigating climate change.

As we face this climate crisis, we hold on to the power of hope and believe that, in this case, hope is intimately connected with restoration. Resoration is critical because it is "a powerful antidote to despair. Restoration offers concrete means by which humans can once again enter into positive, creative relationship with the more-than-human world, meeting responsibilities that are simultaneously material and spiritual" (Kimmerer, *Braiding Sweetgrass*, 328). Teachers have the ability to explain and demonstrate what good relationship with our more-than-human world looks like and to support students in their journeys to becoming good ancestors as well. Teachers also can influence how their students understand Land and relatives, both Indigenous students and non-Indigenous students alike. We know this is important, because as Kimmerer explains, "how we approach restoration of land depends, of course, on what we believe 'land' means… restoring land for production of natural resources is not the same as renewal of land as cultural identity. We have to think about what land means" (328). Teachers have the position, and Indigenous teachers the ability as future ancestors, to teach what Land is and what it means, and how we should think about caring for our Land.

Working with University Students: What Collective Continuance Looks Like on the Ground

We now turn to an analysis of student journals in which future teachers documented what they were learning, reflected on how a university course on decolonization was shaping their understanding of their own K-12 educational experiences, and articulated aspirations for their own future teaching practice. As a way for us to show respect to the participants in this study, as well as to center Indigenous voices, we gave them the option of remaining anonymous or having their names used. The names that you will see in the following sections are the real names of the participants, used in conjunction with their words, at their request.

In working with Indigenous students who are training to be classroom teachers, we frame education as part of the larger project in which we/they can better understand our/their ancestral Indigenous teachings for the purpose of deepening our/their Indigenous identities and knowledges. Inherent in these teachings is a responsibility to our human and more-than-human relations, to the waters, air, Land, and place. We assert the importance of recognizing and honoring that "Indigenous peoples possess many, many years of living methodologies learned and passed on from generation to generation with the full belief that they were given to us by the Creator to help take care of our people, families, communities, and the generations to come" (RunningHawk Johnson et al. xiii). Our future teachers understand this concept, can and do pass this knowledge and way of being on to their own students, and, by doing so, honor their ancestors. This is an act of collective continuance and can be the beginning of healing ourselves, our communities, and our lands.

Teaching in Indigenous Ways for Connection

The work we engage with in educating future teachers emphasizes the importance of interdisciplinarity. This is something Indigenous peoples have always known and that has been part of their knowledge systems since time immemorial. Connecting math and science to culture and art and humanities will be critical for addressing climate change, and these future teachers are uniquely positioned to provide this interdisciplinary way of learning and thinking to their students. Within Indigenous cultural teachings, it makes no sense to separate the so-called hard or natural sciences from the humanities. Why would humans see themselves as separate from the natural world? Why would our/their histories not be interwoven in teaching and understanding sciences?

Using an interdisciplinary lens to work with future teachers and their students, to show them the connections that exist between all persons in this world, is one way to address the climate crisis. This framework of how to be a good ancestor reinforces that we are all in relationship with one another as well as with our Land. "The sustainability crises we face are less about resource degradation and species extinction than of degradation of our relationship with the living world and the extinction of an ethical responsibility for the land which sustains us" (Kimmerer, "Searching for Synergy" 317), and by recognizing and teaching about our responsibilities, we may begin to address and redress the damages caused by settler colonial values and actions. As Indigenous educators, we know that "using Indigenous teaching and learning methods in our classrooms can help us counter the settler colonial violence that is an integral structure in western society. This work is necessary to imagine the possibilities of decolonizing our institutions and our lives" (Jacob et al. 2). By both doing teaching work that is focused on decolonizing and Indigenizing as well as teaching students in interdisciplinary ways that they are connected to the world around them, we can

strengthen Indigenous students' identities, practice being good ancestors by reminding students of their relations and responsibilities, and begin to mitigate the climate crisis.

We know that "decolonization is a long-term project and process. It is only sustainable if done with a spirit of hope and in ways that build community" (Jacob et al. 4). The future teachers we work with know this too, and they plan to address it within their teaching and interactions with students. One of these future teachers explained how she plans to incorporate this type of teaching and learning in her classroom. Cecelia states,

> I will also work to combat the euro-centric discipline divides. I will use my position as a Native teacher to look at how we can overlap disciplines of natural sciences and social sciences. I will look to implement math lessons that include culture and history. I think that this is how Indigenous children have been learning since the beginning. This is one way I want to decolonize my math and science classrooms.

Cecelia's quote demonstrates that Indigenous identity is critical to her liberatory plans as an educator. Note that Cecelia does not just refer to herself as a "teacher" but rather she claims her role as a "Native teacher" and intertwines this identity with the history and legacy of Indigenous ways of knowing and being—in this example, interdisciplinary teaching and learning—and Cecelia notes that Indigenous children have been learning that way "since the beginning."

Another future teacher, Breezy, told us that she wants her

> students to feel not like a member, not like just an individual, but a crucial piece to the world that they're in, the community that they're in. It's one thing where we have individualism in Western society, so people very early on learned that they alone have some sort of value, but I want my students

> to know that they matter to me and they make my life better and help me, and I hope to help them as they help their peers and their parents and make that interdependence and that web of just relations.

In this quote, Breezy is articulating the importance of education in reclaiming relationality and collectivism. Western education systems are built upon individualized notions of progress, with individual report cards, test scores, etc. Such systems perpetuate an individualistic mindset that feeds capitalist modes of destroying the environment. From an Indigenous perspective, such assumptions destroy not only communal identities generally, but Indigenous identities tied to land/place. Within Indigenous kinship systems, individuals understand themselves as in a web of relations with responsibilities to one another (Jacob *Huckleberries*; Beavert *The Way it Was*; Beavert *The Gift of Knowledge*).

Breezy also commented on her responsibility as a teacher to lead forms of education in her classroom that purposefully affirm students' identities as individuals who are in a web of relationality and responsibility with those around them. Such teachings are aligned with Indigenous Elders' instructions that education be values-based, upholding Indigenous cultural teachings around "Respect, Inclusivity, Responsibility, Self-Awareness, Listening, Healing, and Unity" serving as the basis for youth learning "how to be" (Jacob *Yakama Rising* 45). In her own words, Breezy writes: "I think that's what my students can gain from me, is that this understanding of that… I will always do my best to uplift and maintain their sense of self but also their relationship with others."

These university students can see, understand, and support their students as connected beings within a related ecosystem, both locally and globally. They recognize a need to work with Indigenous populations on solutions to climate change and other

local and global issues. This cannot be done through a disciplinary lens but needs to happen through connections and relations.

Contemporary Indigenous Teachers and Knowledges

The future teachers we work with understand that they can be agents of change; they can see and feel the enactment of their work on and with their students. Part of the reason that they are effective with their students, as well as why they can be powerful as agents of transformation in combating climate change, is that they can and do integrate different disciplines in the way that their ancestors did. These students draw on their traditional knowledges for teaching and learning, for ways of being in and with the world, and do so in contemporary times. They are practicing Whyte's collective continuance in their classrooms and teachings.

While Whyte may not write about perseverance specifically, we believe that it is an integral part of practicing collective continuance. Indigenous peoples have been applying their skills of perseverance since time immemorial and continue to do so today. De Mars and Longie write that "without perseverance, the Dakota would not have survived the world they lived in. Their perseverance is one of the main reasons why their descendants are here today" (114). We believe this to be true of most, if not all, Indigenous peoples. Education is part of perseverance and "is important to Indigenous peoples, has always been part of our lifeways" (RunningHawk Johnson et al. xii).

In thinking of education within US public schools, Indigenous educators often still must work within the context of 'subjects' even though their teaching is interdisciplinary in nature. Specifically addressing science classes, part of the work to be done is in "changing our science curriculum so that it is based in Native philosophies and rooted in TEK and place" (RunningHawk Johnson 87) because this

can "be an effective way to actively engage Native students in science classrooms while affirming their identities and making connections to their learning at home and in their communities" (RunningHawk Johnson 87). This type of teaching and curriculum honors Indigenous students, their communities, and the knowledges they bring to school with them. The progression of Indigenizing our 'science' curriculums "must start with the process being non-linear and focused on the connections between, and the relatedness of, all beings" (RunningHawk Johnson 91). By centering these connections and relations, teachers empower Indigenous students, and all students, to treat the Land differently and to change their relationship with it, potentially resulting in a change to viewing the climate crisis and hopefully action towards a more sustainable way of life.

Education continues to be important for Indigenous peoples, and as we adapt and attempt to address our current climate crisis, we "use the current educational system as best we can, to promote a better life for our youth, to create better opportunities for our communities, and to grow our capacity for self-determination" (RunningHawk Johnson et al. xii). We know that it is important for our Indigenous youth, and for all our young people, to have teachers who can help them learn to persevere. Part of the way that we do this is by teaching Indigenous values and teaching in Indigenous ways. We know that "teaching traditional values, particularly perseverance, can impact Native American student achievement through increased effort" (De Mars and Longie 129), and, as university faculty working with future teachers, we support and honor these traditions, and promote them in contemporary classrooms.

Despite centuries of colonization, oppression, degradation of our homelands and ways of being—the very roots of climate change—Indigenous peoples remain resilient and hopeful. We continue to draw from the teachings of our Elders to guide

our work in caring for each other and our precious homelands. Kari Chew and colleagues inspire us to remember the importance of hope and love as a basis for Indigenous education; they instruct, "[e]nacting both hope and change is an intergenerational process" (132). Indigenous peoples recognize that their relationships and responsibilities exist in change and within transformation. We are contemporary, we are agents of change in the here and now, and our Indigenous teachers are on the leading edge of intergenerational learning and hope. We need to decolonize science and science education in order to empower Indigenous communities and students, as well as to have a global impact.

Our students grasp the importance of acknowledging the wisdom that Indigenous peoples have been stewarding since time immemorial, yet at the same time recognize that this is contemporary knowledge held by/with/for contemporary people. They also see how it can and should be used in a global context.

Holly talked about her experience in class as she became more aware of how essential it is to consider Indigenous knowledges as contemporary. "Essentially, yes we are learning how colonization affected the Indigenous population as a result of Manifest Destiny, but after the Zoom class I realized that it was also recognizing that the current population is still very active in our society. It is about being more involved in incorporating Native education into my curriculum as a future educator and the importance of furthering it." Holly is talking about her role as a teacher, specifically an Indigenous teacher, and how she takes up the position of teaching in Indigenous ways as well as pushing that learning forward with her students. This requires a knowledge of the past, an awareness of settler colonialism, but at the same time seeing a way forward that supports interdisciplinary learning which can affect our world, can be a way to effectively deal with climate change.

Vanessa also talked about connecting ancestors and traditional knowledges with her current teaching practices. As she learned about a field course titled People of the Big River (Black and Jacob), which takes high school students on a two-week experience across eastern Washington and connects them with "tribal elders, scientists, and natural resource managers for a unique study that blends Western science with TEK" (152), she told us that she "was able to see the way the field experience connected history with the current lives of students now. Those connections brought students closer to seeing the way of life for many of their ancestors and the impact their lives have on today's teachings." The ability to make these connections and to support them in our youth is needed now more than ever, and Indigenous teachers are uniquely positioned to do this work.

Whyte tells us that collective continuance is "able to connect to more complex, intersectional, and globally integrated accounts of ecological domination within, before, and beyond US settler colonialism" ("Settler Colonialism" 126). We see the evidence that our students understand this to be true, and we can use this knowledge to bring about change within their classrooms at local, national, and global levels. Nicole told us that

> I kind of thought of that, a while ago, in my classroom I would like to have pictures of the traditional, so like for traditional Indigenous, some sort of picture and then have information on that, talk about the traditional life but then do like life now and show how we still connect to the traditional lifestyle but we are also more modernized in a way.

Nicole is demonstrating here that connections to traditional knowledges are important and need to be continued in classrooms while at the same time using those traditional knowledges in contemporary ways and to address contemporary local and global issues.

Conclusion: Indigenous Teacher Leaders as Key for Addressing Climate Change

Indigenous knowledges are important, and Indigenous peoples need to lead this work. Indigenous teachers are crucial for many reasons, not the least of which is because of the dominance and importance of Western education systems on Indigenous homelands. As Indigenous teacher educators we seek to

> challenge and transform higher education to secure a reality of degreed community based educators through a commitment to honor and strengthen the knowledge and experiences Indigenous teacher candidates bring with them to teacher education and a commitment to transformative educational leadership which affirms and legitimizes Indigenous students' desires to serve their communities, people and lands. (Anthony-Stevens et al. 2-3)

Indigenous teachers can lead the reclamation of our knowledges, and in doing so shift the institutional cultures in our lives. Non-Indigenous peoples need to respectfully learn from and support this work to be in good relations with our peoples and homelands.

The larger goal of our work is to center Indigenous knowledges within the K-12 public education system. To do so, we call upon Indigenous peoples to be in front of the classroom and lead within our elementary and secondary schools, to teach about caring for Lands and relations and connecting this learning to addressing climate change caused by colonial practices. We also call upon non-Indigenous people to be our allies in this work, to support Indigenous teachers and to be part of the process of collective continuance for Indigenous peoples.

Whyte writes that "theories of collective continuance have moral implications for Indigenous communities themselves… many of us have experienced oppressive forms of self-determination and revitalization, where our own people seek to bring back types

of relationships without attending to qualities of relationships… examples like these ignore the moral significance of qualities of relationships in the operation of emerging responsibilities or persisting responsibilities" ("Settler Colonialism" 141). As teacher educators we must pay attention to the quality of the relationships we have with our future teachers, so that they may have good relations with their students, their communities, and their Land. This gives us the opportunity to re-create relationships and knowledges with our Land and to address the ongoing climate crisis in ways that are responsible and sustainable.

As teachers, as educators, as Indigenous people, we have an ethical responsibility, one that is dismissed and pushed aside, erased, in a settler-colonial way of thinking and being in the world; a responsibility that Christine Nelson and Natalie Youngbull discuss in their concept of "warrior scholars" ("Indigenous Knowledge Realized" 93). We must follow Nelson and Youngbull's calling to fulfill a responsibility to students and their/our communities as a basic expression of respect for Indigenous youth and for our Land, both local and global. Taking this type of relational approach "means that my reciprocal duties to others guide every aspect of how I position myself and my work, and this relationality informs the ethics that drive how I live up to my duties to humans, animals, land, water, climate and every other aspect of the world(s) I inhabit" (Todd 19). By centering our relationships to each other, to our more-than-human relations, and especially to Land and place, we can change the way people think about caring for our earth and make strides toward ameliorating the effects of climate change. We are responsible for doing this work, and we need these future teachers to carry out this work with future generations. Doing so will address the great harm settler logics and systems have brought to Indigenous peoples and lands, a violent process that Beth Rose Middleton Manning describes as "decision-making that

continues to reinforce inequalities and exclude both Indigenous populations and the range of Indigenous ways of being in relationship to the land" (*Upstream* 15).

Our future teachers and our students are thinking about their own identities and how they too can do this work. Marissa told us that the "readings this week made me dive critically into reflection on my positionality, and I think it requires further reflection. I am part of an underrepresented group in STEM majors, and the readings made me curious about cultural influences behind this. At this point, I feel conflicted between an identity of being the colonizer and also being the colonized." She exposes a sentiment that many of us who identify as Indigenous peoples in STEM feel, that pull between our Indigenous identities and the unrelenting assault of settler colonialism on our being. We believe that our Indigenous future teacher leaders can help to show their students that their identity, their traditional knowledges, their ways of knowing the world can be a valuable part of their science. This allows these future teachers to see science in a way that includes relationship and connections and therefore gives them the ability to address climate change in new and reclaimed ways. Their identities are an important part of this process. Connecting with their ancestors and teaching science in wholistic interdisciplinary ways are important parts of this process. This is part of the practice of collective continuance, taking care of our Land and world and creating a future that focuses on Indigenous futurities.

The beautiful work being done by our future teachers and their students provide us with a hopefulness, and hope "helps us to name the persisting elephants in the room—settler colonial hegemony, White supremacy, and institutional racism—as threats that constrain and contort the wellbeing of hope. Naming these unsettling threats holds collaborating non-Indigenous scholar-educators accountable to the roles played in perpetuating, or interrupting, the erasure of complex Indigenous narratives" (Chew et al 144). As Chew and colleagues suggest here, we also call upon non-

Indigenous educators to educate themselves about Indigenous knowledges, and the histories of settler state violence that has traumatized and dispossessed Indigenous peoples. In engaging these counternarratives, non-Indigenous educators demonstrate a commitment to Indigenous collective continuance and to an educational system—and broader society—that ensures Indigenous futurities.

We must all work together, and Whyte helps us to begin this conversation by writing that TEK "should be understood as a collaborative concept. It serves to invite diverse populations to continually learn from one another about how each approaches the very question of 'knowledge' in the first place, and how these different approaches can work together to better steward and manage the environment and natural resources" ("On the Role" 2). This understanding of TEK can be the basis of bringing Indigenous and non-Indigenous allies together, particularly in the field of education and around the topic of climate crisis, which affects us all, although not equally. And while this is not an easy process to embark upon, it is important and must be done with respect: "Rather, it is an invitation to become part of a long term process whereby cross-cultural and cross-situation divides are better bridges through mutual respect and learning, and relationships among collaborators are given the opportunity to mature" (Whyte, "On the Role" 10). As Indigenous knowledges have known since time immemorial, relationships must be recognized, built, honored, and considered essential.

We know that "settler colonialism is damaging to everyone—it fractures and divides us; healing is needed so we can be whole people in our collective work to decolonize" (Jacob et al. 4). This healing needs to be led by Indigenous peoples and to include everyone. We agree that "Indigenous and non-Indigenous people benefit from processes the support narratives crossing geographic, disciplinary and membership borders. Furthermore, these crossings enable us, as co-authors, to enact

relationships across difference as well as bring into relief distinct epistemologies and histories that define our differences" (Chew et al 135). We believe that working with Indigenous educators we can further this effort and continue to bring hope to Indigenous people, to nurture Indigenous futurities, to begin to mitigate the climate crisis by strengthening our relationships with Land, and to strengthen our collective continuance.

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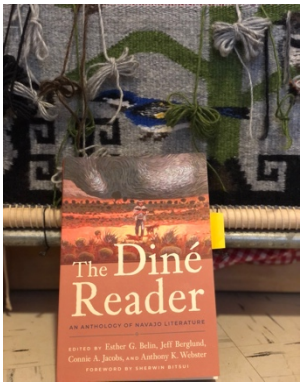
https://uapress.arizona.edu/book/the-dine-reader

Strands of wool hung from my loom –
łighai,
dootł'izh,
łitsoi,
łizhiin
– like unfinished sentences awaiting its final composition.



The arrival of *The Diné Reader* in the mail caught my bluebird's song mid-chorus. My husband handed these voices to me as I wrote another sentence in wool. I paused to receive the words, thoughts, images, histories, and hopes of Navajo writers, young and old, many known to me, some whose homes are still within the Navajo Nation and others who are replanted far from our mountains, ones who were birthed with our language on their tongue and others who dream of it. I then placed them alongside my loom and continued to listen to Dólii's song. Once I finished the woven crest of Dólii's head, I covered my loom with red material, gifted to me at a sing before COVID closed our cage. I turned my attention from my writing in wool to the print on the pages.

Jinii of this compilation of Diné poetry, short stories, essays, and novel excerpts preceded its arrival to our home in Tsaile. The confirming news brought me back to my time as an Associate Instructor teaching Native American Literatures at the University of California, Davis. In 2011, Dr. Inés Hernández Ávila (Nez Perce/Tejana), who led an eager group of Native American Studies graduate students through their first-year experiences teaching composition at the university level, approved my syllabus for a class on Navajo literatures. Commencing that semester, I began introducing undergraduate students from a range of ethnicities to the works of Diné writers like Gracey Boyne, Esther Belin, Della Frank, Sherwin Bitsui, Luci Tapahonso, Roberta D. Joe, Berenice Levchuck, Hershman John, Irvin Morris, and Marley Shebala. More

intimately, I shared chapters written in wool by my Nálí, Ida Mae McCabe, who taught them the metanarratives inherent to our cultural arts. These stories told to our weavings, pottery, baskets, leatherwork, and jewelry as they were given shape still serve as threads holding them together.

łibá łibá ch'ilgo dootł'izh łibá łibá

As I glimpsed over the table of contents, names of those voices from my time teaching Navajo literatures undergraduate courses returned to visit by way of this anthology, forming what could be considered a stalk of the Diné literary cannon. These stalk writers delve into the world of reconciling clashes of cultures, the memories of home, boarding school, and reservation life, the reemergence of traditional philosophies, stories, and songs, and, ultimately, the realities of life, death, and the unseen entities that guide us through this journey.

It is this writing of life and death that caught my attention – not merely for my practices and studies of Diné traditional sheep butchering nor for its clear affront of the Diné "taboo" surrounding discussions of death amongst the living. Rather, this anthology embraces death's integral relationship to our cycle of life—of our corn, sheep, ways of knowing. Grey Cohoe's (Kinłichinii) "The Promised Visit" reveals natural and supernatural levels of death with doorways of cultural teachings, including that of sealed hogans. "Within Dinétah the People's Spirit Remains Strong" by Laura Tohe (Tsé Nahabiłnii) transports stories of near-death to highlight resilience in our existence. Della Frank (Naakai Dine'é), with her imagery of a corralled sheep ready for sale, reminds us of impending deaths of human and non-human alike in "I Hate to See…"

The most prominent overture of death is that of Shonto Begay (Tódich'iinii), whose artwork also provides the cover image of this anthology. In "Darkness at Noon," he canvases a solar eclipse experience from his youth. Akin to many of the pieces in this collection, this story merges with my own memories, in particular that from 2017, sitting mid-day in a deafening silence, curtains closed, with my husband and a hungry newborn. As I read, I re-live the trepidation for the life that my husband and I had just brought into this world which was on the verge of ending. But just as the sun comes back to Begay and to us, *The Diné Reader* reminds us to embrace the day and live with prayer, gratitude, and actions that will see us into the next world.

łitso łibá ch'ilgo dootł'izh łibá łistso

A harvesting of new voices emerges from this stalk. Notably, these new ears find their voices budding through English and Creative Writing M.F.A., M.A., and Ph.D. programs. This demonstration in academic achievement answers the literary call to action made by Joy Harjo (Muscogee) and Gloria Bird (Spokane) to reinvent the enemy's language: "Many of us at the end of the century are using the 'enemy language' with which to tell our truths, to sing, to remember ourselves during these troubled times…But to speak, at whatever the cost, is to become empowered rather than victimized by destruction" (Harjo 1998, 21). The youth included in this compilation attest to that empowerment by way of their dismembering and remembering of the English language into a rain cloud demanding its place in academia.

As this new corn feasts on the rain which both encourages and challenges their growth, I hear the echoes of Native American Studies lectures, I share in their self-realizations of cultural gaps, and I celebrate their daring voices that contest trends in academia. They too speak of death. Bojan Louis ('Áshįįhí) sheds light on the death and violence inherently associated with decolonization. Shinaaí, Byron Aspaas (Táchii'nii) pushes past stagnant roles of victimization to reveal us as our own monsters. Venaya Yazzie (Hooghanłání) calls for the death of feminism's cling to our matriarchal way of understanding the world.

y á g o d o o t ł ' i z h

In addition to the archetypical literary demonstrations within the anthology (poetry, essays, short stories, etc.), the text includes additional resources to assist the readers with cultural references, linear timelines, and analytical suggestions. One example is a re-printing of the "Diné Directional Knowledge and Symbolic Associations" by Harold Carey Jr. that postulates symbolic cultural contextualization present in many of the writings of this anthology. The "Introduction" provides an exemplary demonstration of the literature review academic exercise, addressing key literary productions by Diné people, rationale for this compilation, justification for its Westernized linear format, and statement of Sa'ah Naagháí Bik'eh Hózhóón's influence to the editing process. Most of the selected 33 authors are introduced through interview excerpts, allowing readers to glimpse their world(s), influences, and words of advice for new generations of Diné writers. *The Diné Reader* concludes with appendix-like "interventions" to address the systemic erasure of nonwhite voices and experiences within national and local curriculum designs (15). Renowned Diné historian, Jennifer Denetdale (Tł'ogi), contributes a chronological portrait of Diné political and literary events for Diné and non-Diné readers alike. Michael Thompson (Myskoke Creek), retired member of the

Navajo Nation Teacher Education Consortium, suggests pedagogical frameworks for instructors and intrigued minds wishing to contemplate the philosophical brilliance within these pages.

Shhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhh
Thup

I placed this tremendous exposition of Diné voices aside, removed the red material covering my loom, picked up my baton, and carefully opened pockets of rain. It was time to digest—not only for this book review but also for the growth of my own creative thinking.

"How should I evaluate this work as a Diné academic, teacher, and mother, Dólii?" I asked my bluebird as I started the feet of a flicker with whom Dólii would soon be at war.

"Ah, yes—time to assess. Don't you remember the first time you made me?" Dólii responded. "Nálí hastiin told you I was beautiful, and he was so proud of you. Nálí aszdaan agreed, smiling. And after she finished the dishes, she sat down next to you and told you that I looked like I had eaten a lot and I needed to go on a diet. Then she told you that you needed to learn songs to keep working with birds to protect yourself. We are not mere blessings; we can be dangerous."

dump dump dump dump dump

"Yes, my angry birds with chubby bellies. I remember," I giggled as I patted down a sentence of color with my comb. "How scared I was to bring that rug to their house for that critique! Everyone celebrated my piece, proud that I was continuing the traditions. But I didn't want celebration for mere continuation, I wanted to tell better stories with wool. My Nálí lady, she was a weaver – prolific. Showing her took courage and letting her know it was okay to help me be better made me stronger. With her critique, she provided me with cultural re-orientation and technical skills. And now look at you, Dólii!"

"You know what to do then. Celebrate the accomplishments of this unique compilation of Diné voices bound together by a group of individuals who have dedicated themselves to seeding new Diné writers. What these writer and editors did took

courage, and their own people should make the strongest critique. Consider where they overseeded and underweeded."

"I wonder about accusations of lateral oppression and cultural gate keeping that I may receive … we, as Navajo writers and academics, want to create, publish, be read, we say we want to re-learn, re-member, re-vitalize but … are we ready to be reviewed by our own people in all its celebrations and critical feedback? It's hard, but I learned from my Nálí that not all criticism is a micro- or macroaggression of cultural bullying. More often than not, it is an undoing and rethreading of a misplaced line of wool to reconnect us with our traditional teachings."

"True… people will tell me that I have no place on this stalk nor on this loom. That I am from across the sea, brought here by way of a global market and through the dictation of non-Native traders on the Diné weaving aesthetic. And they are right—partially. But let them feel my songs early in the morning in the winter during Yeii bi cheii. I'm more than just an acculturated style of writing with wool; I am even more than just a model for a flour bag. *You have heard those songs, Christine*. So, embrace the critical feedback you receive and give. Is that not the purpose of the engagement of sih hasin in our way of knowing according to Sa'ah Naagháí Bik'eh Hózhóón? If we don't honestly self-assess, then how do we know that we have angry birds on our loom? Now be careful, you've made my neighbor, the flicker, a bit heavy."

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I broke our silence by removing the batten from between the wefts.

"*The Diné Reader* presents a formidable stalk of Diné literature albeit without field. While each contribution is testament to re-inventing the enemy's language, the overall text lacks incorporation of Diné epistemological or methodological encompassing. Moving beyond the kitsch, which overspins the living being of Sa'ah Naagháí Bik'eh Hózhóón into mere stages of 'thinking,' 'planning,' 'living,' and 'reflecting,' literary and cultural devices utilized at the presentation level of these voices may have provided an ontological pathway through which readers could breathe in Diné ways of knowing – like the fourfold inhalation of pollen and air after a long morning's prayer, or of smoke from a pipe during a blessing of our mountain bundles, or of the scent of metal and stone after receiving a new piece of jewelry."

"The editors declare their use of the paradigm of Sa'ah Naagháí Bik'eh Hózhóón in their individualized processes; just because you don't see it doesn't mean it's not there, Christine."

"Indeed, Dólii. Perhaps I superimpose my desire for a book like this to disorientate the reader like that of a good cleansing from a sweat. Instead, the book opts for a Westernized presentation in both mapping and linear timeline. And I understand; it makes the reader connected in terms of chronological influences, provides direct access to specific Diné authors, and neatly organizes work behind writer interviews."

Shhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhh
Thup

"What about the symbolic and physical maps? I felt it was an astute way to coherently taxonomize the imagery that readers will be exposed to in many of the writings."

"Certainly, they do. Predictably, *The Diné Reader* includes a physical map, indicating Native nation borders, state lines, and other significant geographical identifiers. Moreover, it embraces a symbolic map of the natural and supernatural geographies associated with Sa'ah Naagháí Bik'eh Hózhóón. However, the selected map, 'Diné Directional Knowledge and Symbolic Associations,' is a north-oriented map—a Westernized preference of presenting landscapes stemming from the Age of Exploration when 'discoverers' relied on the magnetic pull to the north to familiarize themselves. This north-oriented map sets a tone for accommodation (dare I say, colonization) through a Westernized mind set—instead of welcoming the readers with a sun-oriented map that moves, breathes, and every winter, threatens to leave us."

"Keep going. I think I am following you."

"For ceremonial practicing Diné people, our 'magnetic pull' is to the sun. Carey Jr.'s diagram, while obliging, warrants a 90-degree rotation left—or if we are going shabikehgo—270 degrees sun-rotation-wise. This re-centering, as I tell my students, is more than turning a page. It changes our perspectives and opens us to the time immemorial ways of knowing that greets the sun and penetrates our prayers. If *The Diné Reader* proposes to engross readers to and by way of Diné thought through creative writing, this would necessitate a change to their centering direction beyond the inclusion of excluded voices."

"Bíigah. In the same manner that baskets, pottery, or rugs are placed in our homes opening to the sun, you hope that this book, when it opens, allows sunbeams to enter us and that our experiences reading pull from that energy."

"Aoo'. In this way, the readers (re)connect not just to the words on those pages but also to our Diné ways of knowing. While the voices brought forth are remarkable and the endeavor embarked upon by the editors is enthralling, I challenge *The Diné Reader* to return to our philosophies of storytelling to engage in what Cherokee storyteller Marilou Awiakta (1993) would refer to as a compass story that connects the stalk and corn to the roots and pollen."

dump dump dump dump dump

"You sing of stalks, corn, and fields. Tell me more about roots and pollen?"

"Dólii, you are paying attention! I thought you distracted by this flicker's wingspan!"

"Wah!"

"Okay, then—the roots. While this text exemplifies re-inventing the enemy's language, I wonder where are our stories written in wool, mud, sand, stars, paint, leather, silver, stones? *The Diné Reader*'s introduction opens with the impact of poetry as a medium for release of our people's 'imprisonment of the language' following our introduction to boarding schools (4). But our stories have always been written. Many of the 33 contributors reference these written forms of Diné storytelling. And though many may no longer understand how to read those stories written in wool, mud, sand, stars, paint, leather, silver, stones, they are still very much alive, telling and receiving stories."

"I get it," Dólii responded. "They are the roots of this anthology."

"The introduction also claims that they wish to unearth forgotten and unrecognized Diné writers, but the anthology itself sets out to pollenate new Diné writers from within English and Creative Writing disciplines. What about other disciplines; what about those outside of academia? How do we hear their voices, which this anthology has weeded out, and plant their corn stalks in this same field? In this same manner, while there is a head nod to comics with Tatum Begay's (Naasht'ézhi Tábąąhí) work at the silk

of the corn, how do Diné fine artists, cultural artists, journalists, blog writers, and script writers break soil in this field?"

"Well, Christine, you are asking for a book that is a long as that flicker's tail!"

"I knew you were watching! Not a long book—but a field of books, Dólii."

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uuuuuuuuuuuuuuuuuuu
zzzzzzzzzzzzzzzzzzzzzzzzzz

"This field that you sing of, how many kinds of corn do you want to plant?" Dólii asked as I pulled my baton out and prepared another sentence of color.

"Many! Yellow, white, blue, red, and my favorite color of all, sweet corn. The "The" in the title presents a minor hiccup to that variety as *"The" Diné Reader* provides a superlative identifier which implies superiority and singularity. It is much the same read I give to Paul Zolbrod's title: *Diné Bahane': The Navajo Creation Story* (1984) as compared to Irvin Morris' (Tábaahí) title *From the Glittering World: A Navajo Story* (1997). Both are creation stories—but one title demands the ultimate compilation, while the other welcomes its individuality within the field."

"Now you are just nitpicking!"

"Am I? Our words—spoken, written, molded, fired, woven, planted—they have meaning. Our words are our medicine, directions, stories. The selection of the title for this compilation has a story; we just don't know it. I hope that the future of *The Diné Reader* is a field of plurality, reflection, strength, and hope. Just like you, Dólii."

I picked up the strands hanging from my loom
łighai,
dootł'izh,
łitsoi,
łizhiin
and finished my review with writing in wool.

Christine Ami, Diné College

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Molly McGlennen. *Our Bearings*. University of Arizona Press, 2020. 72 pp.
ISBN: 9780816540174.
https://uapress.arizona.edu/book/our-bearings

"It's not difficult / to draw a line between each mile marker: / city lake, / Manifest Destiny, / a southern AME church," writes Molly McGlennen in "Footbridge III" (9). *Our Bearings,* McGlennen's second full-length poetry collection, undertakes as its project "a poetic mapping of Indigenous urban space," a reconfiguration of "Western knowledge systems that rely on progressivist tellings of history and amnestic cartographies of disengagement and partition" (xiii, xiv). Moving through skyways and waterways, forests and archives, *Our Bearings* covers an impressive amount of ground. Evoking Guy Debord's "technique of rapid passage though varied ambiences," McGlennen's poems enact a psychogeographical drift through Minneapolis, offering alternative modes of poetic and physical circulation (Debord, 62).

Through its attention to the overlapping strata of time and human presence beneath the surface of the city's grids, *Our Bearings* seeks to expose the ideologies inscribed in the concept of public space, since "[g]eography only illuminates for some" (25). In a series of poems centered around Fort Snelling, headquarters for government troops during the Dakota War of 1862, McGlennen's speaker interrogates the rhetorics of authenticity and accuracy around the National Historic Landmark. With its terse imperative phrases, "Visitor's Guide" emphasizes the abrasive experience of Fort Snelling's slick simulacra:

> Locate map or not: it's never drawn to scale.
> How could it be.
>
> Look up: Actors greet you
> and reenact *the times.*
> Dressed appropriately.
>
> Salute each flag. Revel in accuracy. (24)

Poems like "Visitor's Guide" challenge the implied universality of public space with its "metaphors of *meeting-place*" and narrowing of experience to "*the times,*" particularly in these places dedicated to the public performance of memory (24).

The Fort Snelling poems create an interesting juxtaposition with the "Forewarning" sequence, which shifts the scene to Minikahda, the "*oldest country club west of the Mississippi*," on land appropriated from Oglala Lakota Chief Swift Dog (33). The golf course here is the ultimate wasted space: "Imagine walking these manicured fairways that stretch for hundreds of yards. Designed to avoid the / rough" (32). "Forewarning II" troubles the stability of the club's narrative of originality and authenticity, symbolized by Swift Dog's shield which "hangs in the clubhouse / now posing as an original artifact" (33). The speaker imagines Swift Dog reclaiming his shield, which has been annexed as the country club's logo, and this counternarrative haunts the "manicured fairways": "Swift Dog, beyond the fringe, eludes / the ghosts. Shadows the water, / the center—a shield, for stories. For protection" (34).

Our Bearings conceptualizes circulation as resistance, whether in terms of stories, letters from parents to a child forcibly removed to a state school, or bodies in motion along the skyway system and the Snake River. This idea of circulation makes its mark on McGlennen's poetic forms as well. In the "Snake River" sequence, for instance, the concluding line of each poem is taken up in a slightly altered form as the opening line of the next poem in the series: "the sweet ache of long days / that a body fragilely stores" becomes "[o]ur bodies store / river stories" (43-44). Through formal choices like these, McGlennen offers a vision of circulation as cyclical and drifting, "[a]lways moving toward home" in opposition to Manifest Destiny's and late capitalism's linear and expansionist motion (40).

While the city's public spaces in *Our Bearings* often conceal histories of erasure and violence, McGlennen also demarcates more utopian zones of circulation, like the commons described in "Ode to First Ave." Here, the iconic music venue functions as a point of confluence, carrying "the heat of gathering-places across years of resilience, / across generations of people folding the luminary of hope / into their purses or pockets and walking out into the night" (66). Throughout the collection, McGlennen emphasizes sociality as key for shared space's utopian possibilities. She draws sharp contrasts between solitary moments like the speaker's experience at Fort Snelling, mediated through visitor's guides and actors performing scripted reenactments, and other moments where social relations are reciprocal and communal.

One such moment appears in the "Bonfire" sequence which opens the "Fire" section. In "Bonfire I," the speaker invokes the echo as a figure for a shared body of cultural and poetic knowledge across time: "Cast these lines out / on the water— / wait for echoes" (57). Later in the poem, these echoes sound in the form of poetic citations:

> Recall all the story carriers before us
> when we tend to these lines:
> *The fish just all jumped*
> *and broke the surface*
> *at once,*
> one Shinob poet says,
> *if you're quiet enough,*
> *you see things like that.* (57)

Here, "Bonfire I" calls for quiet attention to the echoes, a living model of poetic circulation where, by "tend[ing] to these lines," the speaker enters an ongoing discourse below the surface of the city's map. This vision of circulation creates a sense of simultaneity and copresence across time in the same way that, in an earlier poem, pollen samples from the bed of "a city lake named / for one audacious secretary of war" can "detail a Dakota settlement of century past" (8).

In "Formulary for a New Urbanism," one of the founding documents of the Situationist International, Ivan Chtcheglov claims that "cities are geological. You can't take three steps without encountering ghosts bearing all the prestige of their legends. We move within a closed landscape whose landmarks constantly draw us toward the past" (2). *Our Bearings*' critical and capacious gaze drifts across the cityscape, attending to "traces / of cupmarks, tools, messages" from the past, but equally attuned to living presence (60). McGlennen's counter-cartography of Minneapolis offers a compelling model for engaging with urban space where

> the mnemonic pegs are how
> to recall the medicine of story
> encircle the node
> which is to say mode
> of learning observation (36)

Zachary Anderson, University of Georgia

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John Joseph Mathews and Michael Snyder. *Our Osage Hills: Toward an Osage Ecology and Tribalography of the Early Twentieth Century*. Lehigh University Press, 2020. 318 pages. ISBN: 9781611463019.
https://rowman.com/ISBN/9781611463019/Our-Osage-Hills-Toward-an-Osage-Ecology-and-Tribalography-of-the-Early-Twentieth-Century

Sharing co-authorship alongside John Joseph Mathews (1894-1979), Michael Snyder draws primarily upon archival research using the newspaper *Daily Journal-Capital* (Pawhuska, Oklahoma) to locate additional and lesser-known writings of Mathews, the Osage "author, historian, and naturalist" (1). *Our Osage Hills: Toward an Osage Ecology and Tribalography of the Early Twentieth Century* reintroduces Mathews to a new audience and firmly centers his writings to the growth and development of Indigenous intellectualism in the first half of the twentieth century. While Snyder does not draw these parallels or conclusions, one should place Mathews' literary work alongside the literary and cultural achievements of both D'Arcy McNickle and Ella Deloria who are contemporaries of Mathews. Snyder further reminds the reader that Mathews "was a brilliant intermediary between lower Plains Indian culture and mainstream North American readers, and an intrepid advocate for his Osage Nation" (1). The monograph draws upon a newspaper column, "Our Osage Hills," written by Mathews with companion essays, written by Snyder, each with their own italicized headings, providing historical, cultural, and literary contexts. Snyder explains: "my pieces tell a broader story of Osage cultural survivance, continuity, and the struggle for sovereignty" (2). Furthermore, Snyder explains that his intent was to loosely organize Mathews' writings chronologically; although, he does depart from a rigid timeline to group the writings according to theme. These eleven themes are as follows: Scene Setting, Birds of the Osage, Culture and Politics, Romance of the Osage, African Americans, Autumn, Man in Nature, Osage Women and Others, Conservation, Critique of Settler Colonialism, and Murder. These themes are given titles by Snyder, including the titles for each of Mathews' narratives which have a publication date but did not include a title other than the title of his column, *Our Osage Hills.*

Snyder uses the theoretical lens of "tribalography," a term he attributes to author LeAnne Howe which "entails synthesizing through narrative the collective experiences of individuals, families, clans, and ancestors into a meaningful form to inform readers about who, in this case, the Wahzhazhe people truly are" (8). Additionally, Snyder

draws attention to what he terms as the "Osage ecology" contained in the writings of Mathews. For example, in the first theme of the text, "Scene Setting," the reader is introduced to Osage ecology when Mathews writes, "The Osage is unique in its topography. Its hills can be seen from almost every direction from adjoining counties"; he continues, "One wonders if we who live here will ever grow to the stature of the Osage Hills. Man's environment plays a great part in moulding him, but he must come to an appreciation of that environment" (16). Clearly, Mathews had been "moulded" by his environment because he writes in his many observations about the natural world and the "balance of Nature. This was the status quo before the advent of the white man. In the struggle for existence, each animal, bird, fish, and insect played a role in the Osage" (25). Osage ecology is further explained in Mathews' narrative #49, found in the second theme, Birds of the Osage, and titled "Hawk and Quail: The Balance of Nature Before the White Man." In this narrative, Mathews writes about the hawk being a "flesh-eater and […] very fond of quail" (23). He continues at length to describe the "delicate balance" (25) between the hawk and quail: "To go back to the hawk, we find that the number of the hawks is limited by food supply, which really depends upon the ability of the quail to protect himself. But there is more to the balance of Nature than this" (24). Snyder also expands upon Mathew's observations of hawks and quails by writing, "Mathews knew hawks like the back of his hand, and he deeply loved this bird of prey. He described more than once gazing up at the circling red-tail hawk as a boy and literally crying tears of frustration at his inability to fly" (35). Mathews' use of "Osage ecology" also made him a conservationist, as when he writes of prairie chickens:

> the chicken is admirably adapted to the prairie of the Osage. There is no reason why there should not be thousands of them […] These gunners seem to feel vindictive; they, in a spirit of defiance of the law and its representative, the game warden, take pride in outwitting the latter and in shooting the remnant of the great flocks wherever and whenever they find them; it is a sort of determined action to exterminate this great bird. (38)

For Snyder, he sees a distinct Osage ecology emerge in the writings of Mathews – an Osage ecology that is rooted to the close relationship Mathews has with the land, his observations about the interplay between animals and "man," but also Mathews' call for the preservation of those animals against "man."

In Snyder's companion essays, he follows through on his earlier statement that his "pieces tell a broader story" (2) by including discussions and deeper research into the historical change that came to Mathews and the Osage people in the 1920s and through the Great Depression. While the third theme of "Culture and Politics" speaks to these tumultuous changes, Mathews' *Our Osage Hills* column remains focused on landscapes, found within, for example, the narratives titled "One of Many Beautiful Places in the World," "Life Cycles," and "The Moon," all written beautifully in Mathews' style of prose. It is Snyder who writes and provides a deeper understanding of the tumult that those decades had upon the Osage people. For example, while Mathews writes about "How natural it was for primitive people to worship the moon," in narrative #20, titled "The Moon" (74), Snyder follows with a companion essay, "The Passing of Red Eagles" (75). This is not Snyder's attempt at Osage ecology. Rather this essay shares with the reader that "Three days after the preceding column ran ['The Moon' written by Mathews, dated May 13th, 1930], readers of the Pawhuska *Daily Journal-Capital* learned that the case of Ida Martin, a 'Pawnee farm woman' charged with selling wine to a party of fullblood Osages, had been submitted to a jury in the federal court" (75). Snyder continues to tell the darker history of the "Osage murders," a topic that Mathews was reluctant to write about. Snyder offers this: "Joe Red Eagle's death speaks volumes of the precarious period in which he lived. The 1920s and early 1930s were a violent and risky time to be a fullblood Osage" (77). Snyder would return to this topic in the last theme, entitled "Murder." Here, Snyder offers this important context, that Mathews was living overseas and that "One crucial fact has eluded writers covering the Osage murders: the victims were almost entirely of Mathews's own band, the Big Hill band, whose members mainly lived in the vicinity of Gray Horse Indian Village" (260). Thus, a fuller picture emerges, that Mathews was away from the community during the times of the Osage murders and that he would reluctantly write about them in other published works.

This monograph is an important contribution to the field of American Indian Studies because it brings attention to the writings of John Joseph Mathews. Alongside his fellow Indigenous intellectuals, McNickle and Deloria, all three represent the scholarly and literary achievements that create a deeper understanding of "tribalography," and the collective experiences of Indigenous peoples can be traced through their writings. Finally, the sharing of co-authorship by Snyder re-centers and gives primacy to the

work of Mathews, thus giving credit to Mathews and bringing his lesser-known writings to a new audience.

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Angeline Boulley. *Firekeeper's Daughter*. Henry Holt and Company, 2021. 494 pp. ISBN: 9781250766564.
https://us.macmillan.com/books/9781250766571/firekeepersdaughter

Toward the end of Angeline Boulley's riveting YA novel *Firekeeper's Daughter*, Perry, the young cousin of protagonist Daunis Firekeeper, worries about her "auntie" Daunis going off to college. "Is college like a boarding school?" Perry wonders (484), declaring that at the "boarding schools for Anishinaa*bem*… the government took kids even when moms and dads said no," and the kids "got punished if they didn't follow school rules" (485). "Kids couldn't speak Anishinaa*be*mowin and they couldn't go to ceremonies," Perry announces with awe and horror (485). She then "points defiantly at her own chest as she declares, 'In*da*nishinaabem'" (485). Perry's defiance—her very ability to proudly declare "I speak Anishinaabemowin" in her language—is a powerful expression of what her relatives and generations of Anishinaabeg before her have made and continue to make possible for Anishinaabe children. Daunis's Auntie Teddie Firekeeper has just taught Perry and her twin about the trauma of the boarding schools; long before this lesson, she and other relatives have offered Anishinaabe teachings and language that enable the children to defy centuries of settler colonial attacks on their traditions, language, relations, and lives.

Though Daunis Firekeeper is *Firekeeper's Daughter*'s unforgettable protagonist, I begin this review with her young relative's capacity for power in relation to language and community because Daunis's force as a character accumulates by way of relationality. We first encounter eighteen-year-old Daunis during her pre-morning-run ritual, in which Boulley immediately introduces us to the forms of knowledge, carefully taught by her elders, that guide her. As she stretches, Daunis offers a prayer to one of the seven grandfathers: "teachings about living a good life"… "Humility. Respect. Honesty. Bravery. Wisdom. Love. Truth" (166). She then silently identifies each muscle she stretches: "I want an edge over the other college freshmen in my Human Anatomy class this fall" (5). The seven grandfathers, we learn later, guide her alongside the "seven steps of the scientific method" that her late Uncle David taught her: "observe, question, research, hypothesize, experiment, analyze, conclude" (202). She ends her morning run at EverCare, an elder-care facility which currently houses her grandmother on her white mother's side, GrandMary, whom Daunis visits nearly every day since her Uncle David died; GrandMary seems to slip further and further away. Here, she also regularly connects with many Anishinaabe elders. Her next stop is the ice rank, where as a former player for the idolized Sault Ste. Marie Junior A-league hockey team—the

Superiors or "Supes"—Daunis joins the team (including her brother, Levi) in their weekly open skate with local kids. Her nieces and Auntie are a part of the skating ritual; the kids' exuberant joy reverberates off the page as Daunis swings them around on the ice with her scarf, just like her late father used to do with her.

As the story progresses, Boulley peels back increasing layers of Daunis's intricate relationship to her family and community, a community that includes Anishinaabeg past, present, and future, as well as the lands and waters of Sugar Island and the Michigan Upper Penninsula (U.P.) that have been home to the Anishinaabeg for millennia and that ground Daunis in her tribe's history and future. If Daunis had a motto, it might best be elaborated by Michi Saagiig Nishnaabeg scholar and author Leanne Betasmoke Simpson's definition of "Indigenous freedom":

> I want my great-grandchildren to be able to fall in love with every piece of our territory. I want their bodies to carry with them every story, every song, every piece of poetry hidden in our Nishnaabeg language. I want them to be able to dance through their lives with joy. I want them to live without fear because they know respect, because they know in their bones what respect feels like. I want them to live without fear because they have a pristine environment with clear waterways that will provide them with the physical and emotional sustenance to uphold their responsibilities to the land, their families, their communities, and their nations. I want them to be valued, heard, and cherished by our communities.
>
> I want my great-great-grandchildren and their great-great-grandchildren to be able to live as Michi Saagiig Nishnaabeg unharrassed and undeterred in our homeland. (7-8)

Though young and trying to determine the contours of her future, as well as facing layers of tragedy and deception in her community, Daunis remembers that her actions now have the power to affect many generations to come, and this thought increasingly guides her as she is thrust into a series of events that bring danger, loss, heartache, and intense romance. While Daunis carries the emotions that anyone who has been a teenager will recognize, she consistently evinces a keen, steady awareness of how to rein in her reactions to deceit and violence and to stay the course (or break the rules) in conversation with Anishinaabe thought and practice. Daunis's consistent rituals that connect her to place and kin are a choice, and they provide practical tools for determining what truth and knowledge mean when the stakes of uncertainty become increasingly high.

Such practices serve Daunis particularly well when she witnesses a tragic murder and is thrust into an FBI investigation. By centering the novel on Daunis as participant in a federal investigation, one chosen for her knowledge of both "science" and her "culture" (110), Boulley expertly and often subtly draws our attention to what Stephanie Lemenager has described as "Euro-Westerners' longtime extractive passion for Indigenous practices and thought" (103). Daunis quickly realizes that, although the investigation provides an opportunity to seek justice for her friend Lily and to help "Nish children," the investigators (despite being Native themselves) will never understand the depths of her community: "It's their investigation, but it's my life," she realizes, and at one point she chides undercover officers Ron and Jamie: "It's like… you haven't earned our stories" (170, 217). The separation between investigation and life becomes blurred by Daunis's shifting relationship with the young undercover officer who poses as a Supes player and goes by the name of Jamie Johnson. Throughout their relationship and the investigation, one of Daunis's most striking characteristics is her growing awareness of precisely when and how to share or hide information, as well as when to let down her guard and when to be tough. Following her late Uncle David's example, she organizes and documents, but she soon learns when scientific precision falls short of truth and when to offer only so much information to the FBI. By the end of the novel, Daunis learns more precisely how the investigation falls short of healing her community, something she has sensed all along. Floored by the lack of resolution that the criminal justice system brings to herself and her community despite the fact that some end up behind bars, Daunis attends a generational gathering involving hundreds of women that promises healing in the face of systemic lack of accountability.

Like Louise Erdrich's iconic Fleur Pillager, Boulley's Daunis Firekeeper sears the reader: I can't stop thinking about her. I find myself want to emulate her smoldering power, her immense care and thoughtfulness, her constantly looking to past and future to determine how to act. In *Tracks*, set in the early twentieth century, Fleur Pillager's storming desperation as the majority of her kin die of smallpox and their land is "sold and divided" ends with a careful, methodical calculation that brings revenge but ultimately forces her to leave her community (Erdrich, 290). Daunis seems almost an extension and revision of Fleur for the contemporary world. Daunis's approaches are methodical, scientific, patient: Uncle David, the high-school science teacher, taught her to "sequence the order of tasks" (201) so as not to become overwhelmed by seeming chaos. She walks on cedar at her best friend's funeral and offers tobacco to the river during the most turbulent crossings; these rituals likewise equip her to move deliberately, to slow down, to take time to assess and calculate, even in the face of

extreme danger and tender, consuming love. Anishinaabe methods are, Boulley suggests, scientific: it is no surprise that, by the end of the novel, Daunis has made plans to continue her education at both a renowned ethnobotany program and summer internships with the Traditional Medicine Program at home. She also handles her relationship with Jamie with immense care and love; this relationship binds her even closer to her values and community, rather than leading her away. Boulley drives home throughout the book that Daunis's clarity in the face of emotional turbulence is earned, carefully cultivated in ritual and relationality.

Boulley indicates that Anishinaabe kids and young adults, and particularly young women, need such methods at their disposal to handle the loss, death, violence, and drug use that are a part of this tribe's story, but importantly by no means the whole story. The novel's denouement and the investigation's end leave us wondering for whom justice was really sought. Attuned to Anishinaabe relational accountability in the face of the American federal law enforcement and judicial system's extractive, single-minded approach to holistic problems, *Firekeeper's Daughter* complements academic monographs such as John Borrows's *Law's Indigenous Ethics* (2019) and Sarah Deer's *The Beginning and End of Rape: Confronting Sexual Violence in Native America* (2015). It also joins a burgeoning world of Indigenous YA literature rooted in the power of relations, traditional teachings, and Indigenous languages, most notably Cherie Dimaline's *The Marrow Thieves* (2017).

I began this review by drawing attention to Danuis's young relative; I'll end it with attention to her elders. Two of the most moving moments in the novel occur when Daunis's elders combine forces to support her, in one instance by providing attestations to her tribal identity and in the other by assisting her as she attempts to escape life-threatening danger. In both cases, the elders team up to save the day, because they *know* Daunis, know her truth, in every sense of the word. Reciprocity carries a life-saving realism in this book that reminds readers how relations can mean survival. Boulley has given us a great gift in allowing us to get to know Daunis and all her relations, and has laid a path here to truth via ethical relationships. She has made a story of drugs, deception, and crime a deeply moving story of how to live with care. I can only hope for more stories of the U.P. from storyteller Angeline Boulley.

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David Heska Wanbli Weiden. *Winter Counts*. Ecco, 2020. 318 pp. ISBN: 9780062968944
https://davidweiden.com

Winter Counts by David Heska Wanbli Weiden (Sicangu Lakota) is nothing short of fantastic. With glowing praise from outlets like the *New York Times, Publishers Weekly, Los Angeles Times,* and *USA Today*, the novel has caught the attention and won the hearts of the mainstream media. With the plethora of awards, nominations, and accolades it has garnered—such as being named one of the Best Books of the year by NPR, winning the Anthony Award for Best First Novel (Weiden being the first Native American author to do so), and winning the Spur Awards for Best Contemporary Novel and Best First Novel—*Winter Counts* has also gained esteem in the critical literary sphere. Furthermore, the book has a global presence; it has been translated into French and released in France under the title *Justice Indienne* and is being translated into multiple other languages. Finally, and unsurprisingly, *Winter Counts* has also been optioned for film production. The unanimous acclaim this novel has received could fill up this whole review; clearly, Weiden's debut novel is widely regarded as excellent. The plaudits *Winter Counts* has received are not only notable because it is Weiden's first novel, but also because it shows promise in the public's potential to pay more attention to Native American literature, and subsequently more attention to issues that impact Indian Country. Because *Winter Counts* does such an excellent job of simultaneously entertaining *and* informing its readers, this mystery novel is far more important than most of us realize.

Set on the Rosebud Indian Reservation in South Dakota, the novel is told from the first-person perspective of Virgil Wounded Horse, the local vigilante-for-hire who is also the legal guardian of his late sister's fourteen-year-old son, Nathan. Virgil's profession springs from the absence of legal justice in Indian Country, a critical theme of the novel—a theme that also highlights Weiden's training in law. The opening scene depicts Virgil brutally beating up Guv Yellowhawk, the P.E. teacher at the local school who has been raping and assaulting his students. The school refuses to punish Guv because he comes from a prominent family; the tribal police are unable to do anything because the Feds prosecute all felonies committed on the reservation, and they typically refuse to investigate anything short of murder. The tangle of corrupt local politics and the jurisdictional nightmare that exists within Indian Country sit front and center right away.

The opening scene is also particularly interesting when analyzed within the context of the structure of the mystery genre. In many mystery, crime, detective, or thriller novels, the opening depicts a crime scene, a dead body, or a murder—something that relates to the greater puzzle that won't be pieced together until the very end. In *Winter Counts*, however, while the opening scene does depict a crime—Virgil beating up Guv—Guv Yellowhawk plays little to no role in the remainder of the book. Rather than being an oblique reference to the novel's main crime, the opening scene of *Winter Counts* serves a larger purpose. It introduces the reader to Virgil as well as operates as a metaphor for the atrocities that plague Indian Country today. Guv Yellowhawk is just one tiny example. The scene represents both the internal contemporary problems and the jurisdictional issues that stem from centuries of unabated settler colonialism. Indian Country is a place in which a P.E. teacher rapes minors, and people in official positions of power are either unwilling or unable to do anything about it. In this world, Virgil is a necessity.

The opening scene is also a good example of how Weiden takes a no-holds-barred approach when it comes to this novel. A Native man is raping and assaulting Native children and is not being stopped by the tribal school, while the Feds also look the other way. A Native vigilante is tasked with beating up the rapist. Virgil shares numerous other tragic anecdotes throughout: a man beating up his five-months-pregnant girlfriend so badly that she has a miscarriage and later kills her own cat and commits suicide; a two-year-old left in his car seat over a brutal winter night freezing to death; a man forcing his young niece into sexual activities; tribal council members embezzling money meant to be used to feed the community. There are no rose-colored glasses to be found here. No sugarcoating. I imagine some readers may take issue with these details and argue that Weiden's portrayal of life on Rosebud is too bleak, that the number of Native people portrayed as criminals is damaging, and that the novel doesn't do enough to blame settlers. I can see how some readers may have these critiques, but Weiden aims to portray both the good and the bad of life on the Rosebud reservation. Furthermore, Weiden underscores the past's role in creating these conditions, and the novel's core focus on criminal behavior and the subsequent lack of justice makes a strong call to action regarding serious reform of Federal Indian Law.

As an additional rebuttal to those who may take issue with Weiden's depictions, it doesn't appear that Weiden is interested in playing any sort of games with stereotypes—or negative. Part of what makes this book such a joy to read is the compilation of characters that populate this storyworld. They are deeply rendered,

complex, distinct, and simultaneously flawed and admirable – Virgil included. The cast of characters Weiden creates conveys both the difficulties and the pleasures of life on the Rosebud reservation. Another example is Virgil's buddy, Tommy: an ex-con who reads Vine Deloria Jr., drinks quite a bit, becomes a cook at the tribe's casino restaurant, and eventually finds romance toward the end of the novel. Tommy doesn't play any vital role in the crime or the investigation, but as a person in Virgil's life, the reader learns much about Tommy—which seems like a pretty smart move for future books in the series.

Another important theme embedded in *Winter Counts* is identity. Virgil is frequently bullied as a child, especially about him being an iyeska, a mixed-race individual. Virgil credits his success as the "local enforcer" to his experiences being bullied: "Yeah, I liked the fighting… Often I'd forget who it was I was pounding and begin to imagine I was back in junior high school" (93). Even though Virgil has been able to channel pain from his past into work he believes is for the greater good, he still struggles with his identity. For example, the reader learns that when Virgil's father passed away, Virgil had been in the woods fasting and praying, hoping to find ways to help his father's pancreatic cancer prognosis. When he returns to discover that his father died while he was gone, he loses all faith in traditional Lakota practices: "I knew then that Native traditions—the ceremonies, prayers, teachings—were horseshit" (17). However, as Virgil deals with the disappearance of his nephew, he is tested in ways he couldn't have imagined, and his relationship with traditional Lakota beliefs and practices evolves.

An additional layer that helps *Winter Counts* shine is its influence from Native writer Louis Owens. In "A Conversation with David Heska Wanbli Weiden," which is included in the paperback edition, the author states that *Winter Counts* "contains hidden tributes to a Native author and fairly well-known crime writer." Later in the conversation, Weiden is less oblique and explains that he was "heavily influenced by the Native crime writer Louis Owens, who wrote some terrific indigenous crime novels in the 1990s." While I did not locate all of the Easter egg references to Owens's work in *Winter Counts*, I couldn't help but observe the likeness in writing style. Owens's crime novels utilize taut, sparse, and no-nonsense prose. Weiden takes that style and kicks it up a notch, making for an addicting and fast-paced read. In addition, I see a lot of similarities between Virgil and Cole McCurtain—the mixedblood protagonist of *The Sharpest Sight* and *Bone Game*—particularly with regard to identity. Both characters wish to embrace the full spectrum of their identities, but struggle to figure out how. Overarching themes about history and place are also ways in which *Winter Counts* makes nods to Owens's work. Finally, in *Winter Counts*, as in Owens's novels, the

crimes at hand are only a small part of the much bigger criminal story of settler colonialism.

The only minor critique I have of *Winter Counts* revolves around some of the characterizations, like those of Virgil. No doubt he is a nuanced and thoughtfully molded character, but some basic details seem to be missing. For example, it is difficult to determine Virgil's age. The reader knows he's been out of high school for at least a few years, and since he's raising his fourteen-year-old-nephew, I guesstimated that Virgil was somewhere in his mid-thirties or early forties. However, this seemed a bit old, at least to me, since Virgil's girlfriend Marie (who is his classmate and thus his same age) is applying to medical schools. While it's certainly not unrealistic to apply to medical school in your mid-thirties, this was an aspect of the book I wish had been cleared up. How old is Virgil? Additionally, the descriptions of characters' appearances are sparse, especially that of Virgil. The physicality that defines Virgil's character—as a vigilante beating up "bad guys"—suggests that he is an imposing, strong man, but the lack of specific descriptions make picturing him difficult.

Overall, Weiden expertly melds elements from the mystery genre with Native American literature to tell a fast-paced and distinctly addicting story. As a first-in-a-series novel, *Winter Counts* leaves readers begging for more with its taut prose, distinct storyworld, nuanced characters, and the seamless inclusion of Lakota cultural details. Furthermore, the unanimous praise that *Winter Counts* has received suggests that this novel is a much bigger story than simply an entertaining read about Virgil investigating a supposed heroin ring on the reservation. *Winter Counts* and its influence have the potential to make notable changes on the ground in Indian Country.

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Abe Streep. *Brothers on Three*. Celadon Books, 2021. 349 pp. ISBN: 9781250210685
https://celadonbooks.com/book/brothers-on-three/

Any baller worth their salt will tell you the best coaches don't teach you about basketball, they teach you about life and about trust because the basketball will always follow. Abe Streep may not be a coach, but *Brothers on Three* passionately teaches its readers about the Arlee Warriors basketball team and the trust that empowered their back-to-back championship titles. This true story of family, resistance, and hope is the very definition of a page-turner. In his book, Streep becomes equal parts reporter and poet, painting the illustrious beauty of Montanan landscapes overlooked by mainstream America and the complex people intimately connected to these landscapes' past, present, and future. Rendering *Brothers on Three* as purely a basketball story would be a gross injustice to the perseverance of the young men who gave everything to fulfill their dreams in the wake of a community scarred by trauma and suicide clusters, what Streep calls a "darkness" (4) haunting the Flathead Reservation.

I found Streep's structural approach to be, at times, a little chaotic and loose, but I came to accept his choices as a reflection of basketball—where the line between chaos and order is often blurred or, at times, even nonexistent. The book is split into chapters defined by temporal markers, but because these chapters are sometimes rooted within the same temporal windows, it can prove difficult for a reader to pinpoint a precise chronological flow. I found these moments occurring more often towards the end of the text, when Phil and Will had graduated, and Streep was following their college careers. At the end of the book, Streep includes an epilogue that functions more like a continuation of the book's end than a separate structural entity, and it fails to deliver the same emotional gravitas. Despite these small faults, Streep is masterful in capturing the humanity, history, and individuality of the people within the Flathead Reservation and beyond. *Brothers on Three*'s dialectic purpose can best be described by a meditation Streep came to after speaking with John Malatare, father of Arlee star Phil Malatare:

> Over the coming years, when I got lost, when any concrete sense of time eluded me, or when I wondered what I was doing here, I came back to that: it was about

> these boys from Arlee. As people throughout Montana and the country asked the impossible of the Arlee Warriors, seeking bold-font answers where few existed, looking for some clean, bright redemption, John's words returned. It was about these boys from Arlee. What they had done and what they would choose. (53)

As a work of nonfiction, *Brothers on Three* reads like a biographical constellation: in between vignettes of basketball, geography, and history, Streep provides comprehensive detail into the "galaxy of interpersonal relations" (95) connecting the Warriors to their community. Streep's voice is poignant and piercing as it documents how Arlee's communal struggles reflect larger colonial systems terrorizing Indigenous bodies. One particularly powerful instance of this is a conversation Streep has with Phil's grandfather, Bear, who somberly recounts his days at the Ursuline Academy, a "re-education school" where he would be savagely beaten for writing left-handed and speaking his native Cree. Bear was beaten by the school's nuns so many times that, in his old age, he only knew "a few words and that's about it" (153). Sadly, Bear's story is just another example of American history repeating itself, the kind of history woven into the fabric of Native communities and those that call the Flathead Reservation home. I could not write this review without listing the names of the "boys from Arlee" (53) who made Streep's book possible: Alex Moran, Billy Fisher, Chase Gardner, Cody Tanner, Darshan Bolen, David "Tapit" Haynes, Greg Whitesell, Isaac Fisher, Ivory Brien, Lane Johnson, Lane Schall, Nate Coulson, Phil Malatare, Tyler Tanner, and Will Mesteth, Jr. After reading the number of times these boys ran seventeens until they puked, played games fresh off IV drips, and shouldered an entire reservation's expectations on their backs, I feel an ethical responsibility to list these names in honor of the sacrifice they made in order to give their community hope. If I gleaned one thing from Streep's text, it's that these young men are a testament to Native athletes everywhere, suffering in a society that refuses to see them.

Despite some minimal structural considerations, *Brothers on Three* is a must read. In his reporting, Streep is vulnerable, ethical, attentive, and committed. He takes great professional and personal care to consider the diversity of perspectives in tribal communities and to tell the Arlee Warriors' story in its appropriate geopolitical and ontological contexts. He is deft in uncovering how decades-old, asbestos-ridden school buildings can coexist with multimillion-dollar gymnasiums in a state responsible for centuries of settler violence. His respect for basketball as a sport is contagious, and he is honest in his intentions and approach. In a state with a reported Native American

population "between 5 and 7 percent, [whose] reservation teams comprised 18 percent of those competing for boys' state championships" (65), the Arlee Warriors fought to be respected as athletes competing at the highest level. In many ways, *Brothers on Three* functions like a playbook: you learn tendencies, motions, assignments, defenses, and sets. In one moment, the reader is engulfed by the thrills of seeing Arlee beat Manhattan Christian and the next distraught by the news of another suicide. With each page, I found myself increasingly drawn to long drives and pregame warmups, eagerly wondering which open shooter Will and Phil would find or which unfortunate player would be the next victim of an Isaac Fisher dunk. Above all else, *Brothers on Three* humanizes a group of high school kids, each struggling to find their identities and callings in life. To the residents of Arlee, basketball occupies "emotional terrain somewhere between escape and religion" (3), and, thanks to Streep's text, I can safely surmise the court is where the masses congregate for church.

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