"We are fighting": Global Indigeneity and Climate Change

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Recently, numerous islands across the South Pacific have appeared in headlines for their increasingly acute vulnerability to our global climate crisis.[1] The most recent climate models predict that if the Earth warms by two degrees Celsius, many low-lying islands (such as Tuvalu, Solomon Islands, Kiribati, and the Maldives) will disappear beneath the ocean's rising water levels. Signs of this possible future have already started to manifest: today, these island communities face an onslaught of environmental problems linked to climate change, such as fresh-water shortage, unpredictable and intensified storm patterns, flooding, coral degradation, and the destruction of crucial foodways. Even though these island nations have done little to set the global climate crisis in motion, they are in many cases the first to feel the blowback of climatological breakdown.

In response to the magnitude of this crisis, islanders from the South Pacific have developed numerous forms of aesthetics-based activism, drawing on creative expression to advocate for climate justice. Their work emphasizes the necessity of bolstering climate change discourse with questions of social justice and Indigenous sovereignty. This can be seen, for instance, in the poetry of CHamoru poet, activist, and scholar Craig Santos Perez. Over the past decade, Perez has emerged as one of the leading voices from the Pacific for navigating the Anthropocene's submarine futures. His work is often inspired by his ancestral and personal ties to Guåhan (Guam), and he has received several prestigious literary awards for his writing, such as the Pen

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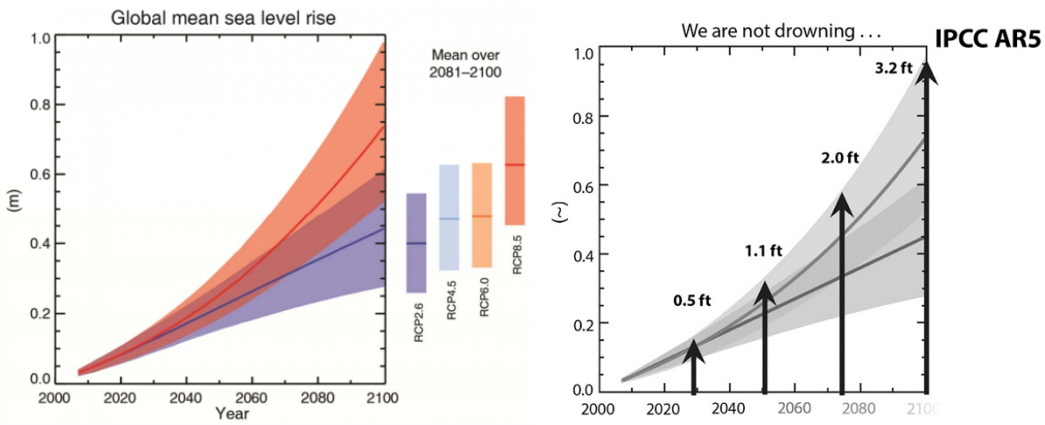
Center USA/Poetry Society of America Literary Prize (2011), the American Book Award (2015), and the Hawai'i Literary Arts Council Award (2017).

Across his oeuvre, Perez draws on and experiments with poetic form to explore the intersections of colonialism, climate change, and Indigeneity. His excellent 2020 collection, *Habitat Threshold*, serves as a useful case in point. In this collection, he draws on a range of poetic forms (such as odes, sonnets, haikus, and elegies) to frame, unsettle, and invigorate numerous environmental issues, including species extinction, plastics pollution, nuclear toxicity, and food sovereignty. His poems toggle between local and global scales, allowing for a diversity of perspectives to emerge. As Eric Magrane writes in his review of *Habitat Threshold*, "this is a vital book of ecopoetry: Perez is an essential voice in the face of the ongoing and relentless intertwining of ecological and social calamities of the Anthropocene/Capitalocene" (393).

As an example of his climate justice based approach to Anthropocene discourse, we can turn to the climate change visualization that launches *Habitat Threshold*. Perez begins his collection of poems with a seemingly straightforward climate graph. This graph, charting global sea-level rise, is based on the fifth assessment report developed by the Intergovernmental Panel on Climate Change (IPCC)—an organization that has deeply influenced the direction, tone, and outcome of policy and public debates surrounding climate change.[2] At first glance, Perez's reproduction of the graph appears to simply echo the information found in the IPCC's fifth assessment report. His graph presents readers with information pertaining to the issue of long-term sea level rise, based on scenarios of greenhouse gas concentrations. Following the conventions of a standard bar chart, the horizontal "X" axis functions as a timeline, starting in the early 2000s and ending at the year 2100. Meanwhile, the vertical "Y" axis measures sea level rise in meters. Reading these two axes in relation to each other allows us to visualize sea level rise as it is *projected* to occur in the future.



(Original) (Reproduction by Perez)

Upon closer inspection, however, we begin to notice how Perez has made crucial changes to the graph's content and form, pushing readers to re-think the graph's significance.[3] This is clear, for example, through an examination of the graph's (re)titling. While the IPCC's visualization of sea-level rise is titled "Global mean sea level rise," Perez instead opts for a very different header: "We are not drowning…" Those familiar with climate justice movements in the South Pacific will immediately recognize this phrase as the rallying cry of the Pacific Climate Warriors, whose Oceania-based activism protests the ongoing violence of Western climate imperialism. As stated in an article by 350.org, climate activists deploy this phrase to combat the "common perception that the Pacific Islands are drowning from sea-level rise" and to remind people that "it's not yet time to give up on the Islands" (Packard, "We are not drowning"). The effect of Perez's re-titling is thus deeply significant: through this new (and anti-colonial) title, Perez's graph challenges the reductionist tendencies of the IPCC's official climate visualization, which reduces the complexity of interactions between climates, environments, and societies in order to predict a singular—and typically apocalyptic—climate-changed future (Hulme, "Reducing the Future to

Climate" 247). (This is what geographer Mike Hulme has characterized as "climate reductionism," which might be viewed as a variant of climate determinism.) Rather, his graph insists on the importance of recognizing that the future is not foreclosed and that struggles for life are still of paramount importance.[4]

Through this formal innovation, then, Perez points toward the disruptive and empowering potential of Indigenous activism in the movement toward climate justice. His poem does not denounce or deny the insights offered by positivist models of knowledge production (this would be a dangerous maneuver in our current political climate), but it does push back against the overriding tendencies toward extinction that so often characterize graphs on climate change.[5] The poem thus demonstrates the potential that can come from "entangling epistemologies": that is, integrating Eurowestern positivism with "ways of knowing based in speculation, multigenerational experience, social relations, metaphor and story, and the sensing and feeling body" (Houser 5).[6] These "other ways of knowing," Perez suggests, are crucial for combating climate injustice and for preserving the lifeways of frontline communities in the South Pacific.

Of course, Perez is not alone in seeking climate justice for Indigenous communities across Oceania. Numerous poets from the region have highlighted the simultaneous risk and empowerment of Pacific Islanders when faced with "sinking islands." In 2014, Marshallese poet and activist, Kathy Jetñil-Kijiner, was invited to speak on the imperiled position of the Marshall Islands for the opening ceremony of the United Nations Secretary General's Climate Summit. During her opening remarks, Jetñil-Kijiner argues that we "need a radical change in course" if we hope to tackle the global climate crisis (1:43). She powerfully elaborates on this point through a reading of her poem "Dear Matafele Peinam," an ode to her seven-month-old daughter and their vanishing home island. As another example, during the UN Climate Conference in

Paris, four spoken word poets—Terisa Siagatonu, John Meta Sarmiento, Isabella Avila Borgeson, and Eunice Andrada—performed creative pieces that called attention to the everyday realities of climate disaster, while demanding a global response to the issue. In her poem "Layers," Siagatonu asks her audience why "saving the environment rarely means saving people who come from environments like mine, where black and brown bodies are riddled with despair" (1:01).

While poetry has been a particularly rich site for climate justice advocacy, artists from the South Pacific have worked across the spectrum of aesthetic forms. This includes theatre and performance-based awareness projects (as seen in the performance *Moana: The Rising of the Sea)*, film and documentary (see *Anote's Ark*), and other modes of literary expression (Keri Hulme's short story "Floating Worlds," for instance). Rather than fulfilling the victimization narrative desired by the traditional media, these cultural interventions highlight the simultaneous risk and empowerment of Pacific Islanders when faced with "sinking islands" (Ghosh "Poets Body as Archive"). And they foreground the values and insights offered by Indigenous communities in combating the climate crisis. Through their work, then, these artist-activists challenge, nuance, and re-write narratives about the climate crisis—their work has become crucial for navigating what Elizabeth DeLoughrey terms "the submarine futures of the Anthropocene" ("Submarine Futures").

I begin with this quick overview of recent Oceania-based climate activism and artistic uprisings as they speak to the motivating concerns at the heart of this special issue of *Transmotion*. Around the world, Indigenous communities are leading movements to redress and counteract the violence of anthropogenic climate change, along with its driving forces of colonialism and capitalism. These movements critically reflect on how Indigenous peoples define their relationships to the land and water, to

other humans and non-humans, and to history and time in order to push back against the genocidal wave of ecological violence. As Jaskiran Dhillon puts it,

> Indigenous peoples are challenging structures of contemporary global capitalism, standing up and speaking out to protect the land, water, and air from further contamination and ruination, and embodying long-standing forms of relationality and kinship that counter Western epistemologies of human/nature dualism. Indigenous peoples are mapping the contours of alternative modes of social, political, and economic organization that speak to the past, present, and the future—catapulting us into a moment of critical, radical reflection about the substantive scope and limitations of "mainstream environmentalism" (1).

This issue of *Transmotion* builds on these insights, focusing on the innumerable and profoundly consequential ways that Indigenous peoples have shaped and contributed to debates surrounding the Anthropocene, particularly through forms of storytelling and cultural production.

Our focus on stories resonates with Donna Haraway's claim that "it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties. It matters what stories make worlds, what worlds make stories" (12). In the spirit of this sentiment, our contributors examine stories from a plurality of aesthetic forms, such as literature, photography, film, and other related modes of creative expression. Drawing upon their knowledge as scholars of literary and cultural studies, our contributors tease out the ways in which Indigenous storytelling depicts the complex negotiations of "nature" and "culture" in the Anthropocene. This special issue thus takes seriously the Anishnaabe understanding that "stories are vessels of knowledge" and that, as such,

they "carry dynamic answers to questions" posed by various Indigenous communities (Doerfler et al.)

Given the global scope of the climate crisis, this issue of *Transmotion* focuses on the significance of Anthropocene narratives in a global Indigenous arena. In operationalizing a trans-Indigenous framework, we support Chadwick Allen's assertion that we must undertake Indigenous-centered scholarship that reads Indigenous texts in comparative terms, rather than in relation to a Eurowestern canon. Following Allen, our aim is "not to displace the necessary, invigorating study of specific traditions and contexts but rather to complement these by augmenting and expanding broader, globally Indigenous fields of inquiry" (xiv). Across disparate locales, we consider the potential that an anti- and decolonial Anthropocene discourse can hold for transnational solidarity and global Indigenous sovereignty. Our contributors reflect on how Indigenous artists and activists reconcile the local exigencies of their environment with the global discourse on climate change. Through our deployment of a trans-Indigenous methodology, we hope to offer a thought-provoking venue to explore the diverse and interrelated forms of Indigenous creativity from across the globe.

In what follows, I begin by overviewing some of the main interventions Indigenous thinkers have made in relation to Anthropocene discourse, emphasizing their strategies for decolonizing, problematizing, and unsettling dominant perspectives in this growing field. This is not a comprehensive summary of the field, rather it is a survey featuring *some* of the voices that have contributed to this vibrant conversation. With this context established, I turn to the growing dialogue between eco-critical and Indigenous literary studies to consider how these fields have increasingly dialogued since the acceleration of Anthropocene thinking, and I provide an overview of the scholarly contributions that comprise this special issue.

Decolonizing the Anthropocene

The central theme of this issue has inspired a significant amount of critical interest in recent years. Before discussing how aesthetic works, in particular, have responded to discourse on the Anthropocene, it's useful to map out how Indigenous scholars from a variety of disciplines have productively engaged with and problematized discourse on the Anthropocene. The term "Anthropocene" was coined and popularized by ecologist Eugene Stoermer and atmospheric chemist Paul Crutzen at the turn of the 21st century. In their initial formulation of this term, the Anthropocene designates a newly proposed geological epoch in which humans are considered a collective geophysical force, responsible for drastic changes to the planet's overall habitability. For the first time in Earth's history, humankind had altered the planet's deep chemistry—its atmosphere, lithosphere, hydrosphere, and biosphere—in massive, long-lasting ways. Crutzen and Stoermer dated this rupture to the late eighteenth century beginnings of the industrial revolution, when unprecedented developments in trade, travel, and technology resulted in a drastic increase in global concentrations of carbon dioxide and methane (which are evident in recent analyses of air trapped in polar ice). Along with this important historical moment, they further identify a "Great Acceleration" in the mid-twentieth century, when human population, consumption, and greenhouse gas emissions all skyrocketed. For these reasons, they argue that the "impact of human activities on earth [across] all scales" has made it "more than appropriate to emphasize the central role of *mankind* in geology and ecology" (17).

Since its early formulation, the term has become the subject of ever-growing critical debate. In particular, numerous critics have taken issue with the term's tendency for generalization and abstraction: Crutzen and Stoermer's hypothesis frames climate change as a problem caused by the human species writ large (this is evident in the line referenced above). Moreover, their framework obscures the ways in which

environmental violence is disproportionately created and differentially distributed, particularly along the lines of race, class, and gender. To counteract these tendencies, scholars across disciplines have theorized spinoff "-cenes," ones that more closely inspect the historical processes and epistemologies that directly contributed to anthropogenic climate change. Jason Moore's notion of the "Capitalocene" identifies the global capitalist system—with its prioritization of limitless growth and "cheap nature"—as the primary culprit in the creation of climate vulnerability. Another influential alternative, the "Plantationocene," links climate change to the transatlantic slave trade and its afterlives. Developed by Sophie Moore and collaborators, this term confronts the enduring legacies of plantations and unpacks the ways that these integral sites were produced through processes of intensive land usage, land alienation, labor extraction, and racialized violence (first indentured servitude, and later slavery). These terms thus highlight the reality that "we may all be in the Anthropocene, but we are not all in it in the same way" (Nixon 8). And, moreover, they speak to the crucial implications of how we define, delimit, and narrate our ecological and climatological crisis.[7]

Writing from an Indigenous studies framework, Zoe Todd (Métis) and Heather Davis have offered one of the most compelling reconceptualizations of the term. In their article, "On the Importance of a Date, or Decolonizing the Anthropocene," they examine the ways that climate change discourse might productively shift if we reconsider the Anthropocene's origin point. Challenging the typical mid-20th century start-point, Davis and Todd propose linking the Anthropocene to the Columbian exchange (1610). This is an important historical flashpoint, they explain, for two reasons:

> The first is that the amount of plants and animals that were exchanged between Europe and the Americas during this time drastically re-shaped the

> ecosystems of both of these landmasses, evidence of which can be found in the geologic layer by way of the kinds of biomass accumulated there. The second reason, which is a much more chilling indictment against the horrifying realities of colonialism, is the drop in carbon dioxide levels that can be found in the geologic layer that correspond to the genocide of the peoples of the Americas and the subsequent re-growth of forests and other plants (766).

In other words, this moment is significant because it offers the kind of "evidence" that geologists and scientists need for determining the onset of a new geologic epoch. When large-scale events have occurred in the earth's deep history (such as global cooling events), they leave a geologic marker that is visible in the earth's sedimentary strata—this is referred to as a "golden spike." In order to determine if the Anthropocene constitutes a new epoch, scientists have endeavored to trace and locate a new golden spike within the earth's geologic bedrock (and indeed, multiple "golden spikes" have been proposed). As Kathryn Yusoff notes, this method operates as a disciplinary endeavor to geologically map the material relation of space and time according to stratigraphic principles and scientific precedents—and it is therefore grounded in the distinctly positivist values inherent to a Eurowestern scientific system (Yusoff, Chapter 2).

Todd and Davis find the aforementioned moment to be significant for other reasons, however. Using a date that coincides with colonialism in the Americas, they explain, allows us to understand the nature of our ecological crisis as inherently ascribed to a specific ideology that is animated by proto-capitalist logics based on extraction and accumulation through dispossession. This process also entailed the disruption of the kin relations that characterize Indigenous perspectives and forms of knowledge. As they put it, the Anthropocene registers "a severing of relations between

humans and the soil, between plants and animals, between minerals and our bones" (770).

These logics of accumulation and dispossession, however, are not sequestered to a remote past. As Todd and Davis observe, they continue to shape the present day, producing our current era of growing climate destabilization. Today, the economic infrastructures of settler-colonies around the world depend on extractive industries: natural resources are transported to international markets "from oil and gas fields, refineries, lumber mills, mining operations, and hydro-electric facilities located on the dispossessed lands of Indigenous nations" (Coulthard "Thesis 2"). In many cases, cooperation between the federal government and private businesses paves the way for these extractive processes, further cementing settler control over the land while undermining Indigenous authority and sovereignty.[8] In recent years, this has led to the frightening manifestation of what Ashley Dawson describes as "extractivist populism," wherein the bigotry and repression of authoritarian populism has combined with and amplified the ecocidal intensification of resource extraction—both in the name of "progress" and the "people's good" (Amatya and Dawson 6). These ongoing instances of energy and resource extraction consistently highlight the recursive or cyclical nature of climate violence, which cuts across linear conceptions of time and straightforward notions of progress. To adapt the words of Patrick Wolfe, settler colonialism as climate change is a structure and not an event (388).

Beyond identifying capitalism and colonialism as the core problematics of the Anthropocene, Indigenous scholars have also stepped forward as central figures in providing alternatives to climate colonialism, offering "both knowledge and leadership in understanding and addressing environmental crises" (Deloria et al. 13). The Potawatomi scholar and activist Kyle Whyte has dedicated much of his work to crafting what he calls "Indigenous climate change studies," an Indigenous-based approach to

climate change. His formulation of Indigenous climate change studies is supported by three basic tenets. First, climate change is an intensification of the ways colonial structures of power have always shaped environments. Second, Indigenous communities can better prepare for climate change by renewing Indigenous knowledges, including languages, sciences, and forms of human and nonhuman kinship. Third, the perspectives of Indigenous peoples who are already adapting to the postapocalyptic conditions of colonialism changes the ways these communities imagine futures affected by climate change. Together, these elements yield a mode of praxis wherein one "perform[s] futurities that Indigenous persons can build on in generations to come. [It is] guided by our reflection on our ancestors' perspectives *and* on our desire to be good ancestors ourselves to future generations (160).

Instances of Indigenous climate change studies have proliferated as climate breakdown has accelerated, signaling the salience and necessity of this approach. In one example, Whyte describes a collaborative encounter between the state of Alaska and Koyukon people of Koyukuk-Middle Yukon region in the Arctic. In order to navigate unprecedented climatic shifts in the region, the state proposed hunting regulations on moose that would hamper Indigenous harvesting practices. As an alternative, Koyukon youth and elders drew upon their traditional knowledge of the seasonal round to create an alternative system that displayed their own understanding of seasonality. Ultimately, their seasonal wheel demonstrated that "shifting the moose hunting season later so as to correspond with the Indigenous view of seasonality makes more sense than the date proposed by state and federal regulators" (218). The Yukon example thus illuminates the promising potential of Indigenous climate change studies, and it illustrates the central role that Indigenous self-determination must play in planning for climate change adaptation.

Importantly, Whyte and other Indigenous scholar-activists, have cautioned that these practices should not be utilized as tools for last-ditch efforts at climate recovery. Numerous attempts at "integrating" Indigenous knowledge systems (such as the work found in the "Our Common Future" report) have often been reductive and appropriative in their approach. As Leanne Simpson observes, Eurowestern environmentalists often believe that "traditional knowledge and indigenous peoples have some sort of secret of how to live on the land in a non-exploitative way that broader societies need to appropriate" ("Dancing the World into Being"). This kind of approach has the tendency to romanticize Indigenous knowledge, reproducing stereotypes of the "ecological Indian"—the "traditional" Native who lives in harmony with the untouched environment. Moreover, Eurowestern approaches to Indigenous knowledge often operate through a logic of intellectual extraction, in which knowledge is removed from its context, from its originary language, and from traditional knowledge holders. To counter the extractive and fetishistic tendencies of mainstream environmentalism, it is crucial to cultivate a model of "responsibility"—an environmentalist approach founded on respectful, long-standing relationships with Indigenous people and with place ("Dancing the World into Being").[9]

Finally, it is crucial to recognize that decolonizing Eurowestern environmentalisms is only part of what is necessary for advancing an ecological model grounded in responsibility and humility. As Eve Tuck and K. Wayne Yang explain (and as is suggested by both Whyte's and Simpson's emphasis on place), decolonization must agitate for practices of restorative land justice. In their article "Decolonization is not a metaphor," Tuck and Yang argue that "decolonization in the settler colonial context must involve the repatriation of land simultaneous to the recognition of how land and relations to land have always already been differently understood and enacted; that is, *all* of the land, and not just symbolically" (7). For Tuck and Yang,

decolonization cannot function as a stand-in for "the discourse of social justice"; instead, it must aim to recover the Indigenous lands that were stolen by settlers through numerous and ongoing appropriative strategies. In turn, land recovery would then allow for the resurgence of "Indigenous political-economic alternatives [that] could pose a real threat to the accumulation of capital in Indigenous lands…" (Coulthard "Thesis 2").[10] Such insights are crucial for developing an anti-colonial approach to the Anthropocene: these scholars help us understand that implementing Indigenous modes of environmental knowledge—which are tethered to place—necessitates the dismantling of extractive capitalism and the repatriation of Indigenous lands. Ignoring this reality impedes the restoration of the life-ways, practices, and kinship networks that are necessary for living responsibly in the midst of profound ecological change.

As this overview suggests, Indigenous studies has already proven to be a pivotal site of exchange for conversations surrounding the Anthropocene—and this critical work is only continuing to grow and evolve as the climate crisis spins further out of control. The various activists and intellectuals I have discussed above allow for a fuller (and more accurate) picture of our current geological epoch to come into view. Their work powerfully demonstrates the numerous ways that capitalism and settler colonialism have ushered in our warming world—and they illustrate how these violent logics are ongoing and evolving. Just as importantly, however, these thinkers also emphasize how efforts for resistance and resurgence are being led by Indigenous communities around the world. In doing so, they push for an honest conversation regarding how we have found ourselves in the throes of global environmental catastrophe—and, possibly, how we can imagine a future freed from domination, and built instead on a foundation of climatological justice.

EH, Indigenous Aesthetics, and Climate Justice

The work of imagining futures anchored in climate justice has been a primary endeavor for scholars in the environmental humanities (and the subdiscipline of eco-criticism). As an interdisciplinary (and sometimes anti-disciplinary) field, the environmental humanities "envision ecological crises fundamentally as questions of socioeconomic inequality, cultural difference, and divergent histories, values, and ethical frameworks" (Heise 2). Rather than insist on the belief that science, data, or technology can awaken us to the severity of our climate's breakdown, scholarship in EH insists on emphasizing the political, social, cultural, and affective forms that the climate problem takes in different communities, cultures, and imaginaries (2). While scholars in EH acknowledge the importance of scientific understanding and technological problem-solving, they also remind us that these discourses are themselves colored by the disciplines that grant them power, and that they "stand to gain by situating themselves in [a] historical and sociocultural landscape" (2). The reality of this notion comes into clear view when we consider the ongoing nature of the climate change "debate," particularly as it has played out within the United States. As scholars such as Mike Hulme and Dale Jamieson have shown, doubling down on the insights generated by the scientific community does little to shift social and political opinion about the climate crisis, especially when these insights remain disconnected from the larger cultural contexts and histories that influence our ideas and experiences of the climate (3). To dream of more sustainable futures, then, we must tap into the capacities of narrative (and other humanistic disciplines) for reimagining "the environment" and humankind's place within it.[11]

This special issue approaches the environmental humanities from an Indigenous-oriented angle, combing EH's interests in climate and narrative with the kinds of questions and concerns I've outlined in this introduction's second section.[12]

Scholars working at this critical crossroads have already begun exploring some of the most crucial concerns raised by Indigenous creative work. Much critical analysis, for instance, has examined how different genres (such as the gothic, dystopian, or speculative) assist us in navigating the specific epistemological and ontological challenges posed by the jarring disruptions of the Anthropocene (Anderson, DeLoughrey, Dhillon). Other work has documented the ways that Indigenous narratives intersect with and inflect forms of environmental activism and protest (Cariou, Kinder, Streeby). A growing body of literature considers the archival function of Indigenous storytelling, tracing how these stories retain and transmit ecological knowledge across long swathes of time (LeMenager, Perez). Other work has discussed some of the ways that Indigenous narratives foreground questions of multi-species kinship, gender and sexual equality, anti-racism, and environmental justice in order to advance more equitable climate futures (Adamson, Goeman). And most recently, a collection of scholars encourage us to re-consider the utility of the Anthropocene metric in and of itself: "the Anthropocene is a narrative, one cooperatively composed and begging now for crowdsourced revision, with sequels that are not linear or conclusive but alternately recursive and speculative, plodding and precipitous, stale and untried" (Benson Taylor 10). These are only some of the issues and insights examined by an Indigenous-oriented ecocriticism—one that works toward the development of a decolonial climate movement on a global scale.

Our special issue aims to further explore such preoccupations and discover new points of critical reflection. We begin with an essay by Kasey Jones-Matrona on Jennifer Elise Foerster's *Bright Raft in the Afterweather.* In this essay, Jones-Matrona examines how Foerster's poetry draws on Indigenous scientific literacies (that account for both human and nonhuman knowledge) to re-map Creek lands, histories, and futures in the Anthropocene. Jones-Matrona then connects these re-mapped

cartographies to the prospect of healing, arguing that, even in works with catastrophic themes and settings, healing is a crucial aspect of Indigenous futurist work. In centering the significance of healing, Jones-Matrona elucidates and "amplifies an Indigenous-specific notion of the Anthropocene."

Through an examination of Ciro Guerra's *Embrace of the Serpent*, Holly May Treadwell explores and further develops the notion of the Capitalocence (as theorized by Jason Moore). As Treadwell explains, *Embrace of the Serpent* rejects the notion of the Anthropocene and its homogenous view of "human" activity, explicitly demonstrating that it is specifically capitalism as an extension of colonialism that is having such detrimental and violent effects on the climate. Treadwell focuses specifically on the way that the Capitalocence, as depicted in *Embrace of the Serpent*, paves the way for extinction on three fronts: "the extinction of people via forced labor, decimation of land, murder, and dispossession; the extinction of Indigenous cultures, comparing the personification, conservation, and kinship with nature, to capitalism's commodification, exploitation, and demonization of nature; and the extinction of nature itself via its domination and cultivation." Treadwell closes their essay by asking how Indigenous knowledge might challenge the wave of extinction propelled by the capitalization of nature.

Abdenour Bouich's essay on Tanya Tagaq's novel *Split Tooth* looks at the ways in which Tanya Tagaq's formally inventive work critiques the destructive "developmental" ethos of colonial capitalist modernity, which targets Indigenous Inuit peoples of Canada. In particular, Bouich's reading focuses on the text's depiction of the ecological disasters provoked by resource extraction and global warming brought about by global capitalism and, in particular, Canadian capitalist expansionism in the Arctic region. While accounting for the scale of such petro-violence, *Split Tooth*, Bouich contends, also employs a variety of literary forms to catalyze the resurgence

and the recovery of "Indigenous ontologies, epistemologies, and politics that have long been dismissed by colonial discourses and narratives." In doing so, the text can be read as what Daniel Heath Justice calls an Indigenous "wonderwork"—a genre-crossing text grounded in the resilient worldviews of the Indigenous Inuit of Nunavut.

In their essay on Celu Amberstone's novella "Refugees," Fernando Pérez Garcia also considers the affordances of formal experimentation, focusing on the decolonial possibilities of Indigenous futurism. The article draws on Leanne Betasamosake Simpson's and Glenn Coulthard's work on Indigenous resurgence to explore how the novella comments on Canada's exploitative economic system, which relies heavily on the extraction of natural resources and the ongoing dispossession of Indigenous communities. According to Garcia, Indigenous futurist fiction not only provides "Indigenous meaning to past and ongoing colonial experiences," but it projects an Indigenous presence and epistemology into the future. "Refugees," in particular, acts as a channel for the expression of possible collective self-recognition through relationships based on reciprocity between human and non-human forms of life. Such an imaginative endeavor—which envisions sovereignty from Indigenous perspective—is central for conceptualizing alternatives to environmental collapse.

Similar concerns are taken up by Kyle Bladow, in their essay on Louise Erdrich's speculative novel, *Future Home of the Living God*. Bladow's essay assesses how "recent literary depictions of Indigenous futurity coincide with grassroots activism that has been ongoing for generations and that is finding new iterations in current movements for climate justice and against settler colonial resource extraction." Bladow coins the useful term "oblique cli-fi" to describe recent post-apocalyptic novels, written by Indigenous writers, which feature catastrophes that are not necessarily caused by climate change (but which have been considered under a cli-fi rubric due to the increasingly close relationship between climate change and catastrophe). Erdrich's

oblique cli-fi shows how responsibilities toward land and kin were never contingent upon permanent, unchanging ecologies but instead exist in states of dynamism and change, allowing for flexible re-creations of environmental stewardship. From this perspective, *Future Home of the Living God* envisions hopeful prospects for a reservation community in an otherwise dystopian narrative.

Finally, Isabel Lockhart's contribution considers the diverse work of Métis writer, scholar, documentary filmmaker, and photographer Warren Cariou as a formal counterpoint to dominant representations of the Athabasca tar sands. In contrast to the aerial aesthetics favored by Canadian photographers, such as Edward Burtynsky and Louis Helbig, Cariou favors literary and aesthetic forms that approximate the feel and smell of tar. Crucially, this "from below" perspective on the tar sands not only seeks to make sensible the impacts of the oil industry, but it also illuminates Indigenous presence against the settler social relations that underpin extraction in the region currently known as Alberta. Lockhart's essay thus concludes with an examination of how Cariou develops an alternate, Indigenous politics of action that switches, as they put it, from representation *of* bitumen to relationships *with* bitumen. "By intervening directly in the use and meaning of bitumen," Lockhart argues, "Cariou's practices offer us an alternative to the terms of urgency, visibility, and action that so often frame climate art."

These reflections, anchored in the rich field of Indigenous literary studies, can help re-signify and reorient interdisciplinary conversations about the Anthropocene, particularly when it is framed as a product of longstanding colonial violence. Moreover, these contributions seek to emphasize the necessity of centering Indigenous voices in conversations about climate justice, sovereignty, and environmental sustainability, while modeling generative approaches and methodologies for this endeavor. Such

work is crucial for attending to life-destroying and world-creating effects of the colonial Anthropocene.

Notes

[1] See, for example, the *New York Times* article "A Remote Pacific Nation, Threatened by Rising Seas" or the article *The Guardian* titled "One day we'll disappear: Tuvalu's sinking islands."

[2] Over its 23-year history, the IPCC has been presented as the authoritative voice of climate science and the global knowledge community (Hulme, "Meet the Humanities"). However, it is important to keep in mind that in constructing their assessment reports, the IPCC privileges literature produced in the natural science disciplines, especially the earth sciences, while the minority social science citations stemmed from economics. Literature from the humanities is left almost entirely unacknowledged. The framing of climate change thus constructed by the IPCC—and the framing that has thus circulated through societies and informed policy—contains a bias: it is dominated by positivist disciplines (which, for example, focus on geo-engineering our way out of climate collapse) and neglectful of interpretive ones (which might ask us to re-consider our patterns of extraction and energy usage).

[3] Riffing on his previous work with what Perez calls "poem-maps" (poems that reimagine authoritative Western mappings of the South Pacific), we might call these poems "poem-models." These poem-models present—and then formally experiment with—scientific graphs and models that visualize and predict climate change.

[4] And moreover, his title adds specificity and context to the graph—something that remains absent from the IPCC's placeless and contextless visualization. His graph, in other words, forces readers to confront the *specific* places and people most affected by global warming and rising water levels. As a result, we interact with the graph's contents in a more intimate and engaged manner.

[5] For a critique of extinction narratives in the context of the Pacific Islands, see Rebecca Oh's article "Making Time: Pacific Futures in Kiribati's Migration with Dignity, Kathy Jetñ il-Kijiner's *Iep Jaltok*, and Keri Hulme's *Stonefish*."

[6] In her eye-opening book *Infowhelm*, Houser argues that recent environmental art blends scientific information (the positivist epistemologies that have dominated environmental understanding and decision making in the Eurowest) with other (often marginalized) epistemological modes, reminding us that scientific information "is a representational device in its own right" (2). Her monograph builds on her previous work regarding climate visualizations, where she argues that "environmental visualizations, especially those addressing climate change, cry out for humanistic

interpretation because they are not realist translations of natural phenomena. Their representational features bear a great burden of signification, especially as the objects roam from their typical origins in specialized journals, to blogs and policy documents, and even into skeptics' arguments. The interpretive tools the humanities have honed are vital to getting beyond the perceived self- evidence, the transparency, of visualizations in climate discourse" ("Climate Visualizations" 358).

[7] Crucially, these theorists do not deny the significance of historical moments (such as the "Great Acceleration"), rather they seek to emphasize how such dates lose political and social import if they do not account for the very real differences between peoples, governments, and geographies in contributing to eco-system collapse. For instance, a 2013 study concluded that since 1751, a mere ninety corporations have been responsible for two-thirds of humanity's greenhouse gas emissions (Goldenberg 2013).

[8] As Jaskiran Dhillon notes, these political moves are "in direct violation of treaty relationships that actively produce settler state sovereignty over the land" ("What Standing Rock Teaches Us About Environmental Justice").

[9] In the essay, "Love and Theft; or, Provincializing the Anthropocene" Stephanie LeMenager further problematizes the "long-standing tendency of Euro-Western environmentalism, and its various iterations in the academy, to use Indigenous thought without fair attribution or sufficient understanding" (102). LeMenager's essay powerfully points out the "incomensurabilities" between Indigenous knowledge and fields like the environmental humanities (a field that, at times, risks treating Indigenous knowledge as a decontextualized tool kit). LeMenager asks, "is it possible for […] settlers to think alongside Indigenous scholars and writers, or merely to listen, without enacting theft in the form of translation and misuse?" (103-4).

[10] Coulthard argues that this threat would be triple-edged: first, land recovery would reconnect Indigenous people to land-based practices and forms of environmental knowledge (antithetical to capitalist accumulation); second, it would offer means of subsistence that would enable a departure from a capitalist market system, focusing instead localized and sustainable production of life materials; third, it would connect Indigenous modes of governance with "nontraditional economic activities."

[11] As Adeline Johns Putra writes in her study of climate fiction, "research at the interface of narratology and neurophysiology has shown that narratives have a greater impact than non-narrative modes of communication, because the experience which is simulated in reading them is a powerful means of forming attitudes" (245).

[12] This claim is reinforced by many of the author's cited above, such as Todd, Davis, and Whyte, who often draw on the discourse of storytelling (and genre fiction, such as science fiction) to make claims around the importance of telling new Indigenous stories

and imaginings in the Anthropocene. Whyte, for instance, writes, "Surviving the Anthropocene requires new ways of imagining, and Indigenous writers have led the way in this front. Indigenous imaginations of our futures in relation to climate change—the stuff of didactic science fiction—begin already with our living today in post-apocalyptic situation" (160). Todd and Davis similarly of fiction and speculation for engaging the colonial dimensions of the Anthropocene.

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