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Indigenous and Young People's Poetry

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Table of Contents

1. Introduction	1
2. Theoretical Background	6
2.1 Ecopoetics	6
2.2 Cognitive approaches to fictional minds in poetry	11
2.3 Place attachment.....	17
3. The Recycling Metaphor in Perez's Poetry	22
3.1 Metaphors of Unity in "Love in a Time of Climate Change"	23
3.2 Kinship in Perez's "Thirteen Ways of Looking at a Glacier"	30
4. Kane's Poems on Losing Place	41
4.1 A "Rocky Marriage" in Kane's "Epithalamia"	42
4.2 "Hyperboreal": Defamiliarizing The Far North	49
5. Jewel Cao and Alice Brooker's poems on "Feeling Hollow and Static" .	57
5.1 Climate Anxiety in Jewel Cao's "Translations in Survival"	59
5.2 "Silence" in Alice Brooker's "Are Your Words Empty, or Am I Hollow?"	63
6. Conclusion	71
7. Works Cited	73
Abstract.....	79
Zusammenfassung	82

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1. Introduction

In *The Great Derangement*, internationally acclaimed author Amitav Ghosh addresses humanity's "failure of imagination" in responding to climate change. Ghosh argues that literature, particularly fiction, has largely evaded the subject of climate change and its ongoing and future consequences (7). When fiction does depict the violent consequences of climate change, such works are often categorized as science fiction; in other words, climate change fiction is rarely taken seriously (7). Ghosh points to authors like Arundhati Roy, who does so outside the realm of fiction while engaging with climate issues. This dismissal, Ghosh suggests, reflects a broader cultural reluctance to confront the realities of our destabilized planet. This failure of the "imagination" contributes to a broader lack of urgency in addressing climate change and inspiring action to mitigate its effects.

Over a decade earlier, ecocritic Lawrence Buell offered a similar observation in *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*, asserting that the roots of the environmental crisis lie in cultural problems (vi). Similarly, in *The Ecopoetry Anthology*, Ann Fischer-Wirth argues that we are "living out a colossal failure of heart, will, and imagination" (xxxv). Expanding on this, social theorist Michael Thompson examines how Western cultural attitudes contribute to this "failure of imagination," suggesting that "narcissism and self-importance" fuel unsustainable practices and foster unawareness of our surroundings (138). Using the metaphor of the interstate as an ecosystem, Thompson illustrates how individuals often behave as if they are the only organisms on the road rather than viewing it as an ecosystem in which the interests of others are not secondary (140). For Thompson, unsafe driving occurs because people fail to imagine the consequences of a collision for others and are unaware of the limitations of their surroundings (140). This inability to conceive our environment as shared with other organisms' interests mirrors a broader inability to shift to sustainable practices that could mitigate climate change (140).

This brings forth a challenge: how can literature, particularly poetry, address this failure of imagination when handling portrayals of our Earth in the climate crisis? Buell advocates for art, story, images, and artistic performances as tools for cultivating a "climate of transformed environmental values, perception, and will." (vi). Thompson

highlights the importance of "ethical deliberations" in understanding the consequences of unsustainable practices (137). "Ecopoetics," a term Kate Rigby defines as "the incorporation of an ecological or environmental perspective into the study of poetics," underscores the potential of poetry to reshape our cognitive processes, enabling us to recognize our environment's limitations (81). Indeed, scholars and poets are increasingly turning to "ecopoems," which, according to Ann Fischer-Wirth and Laura-Gray Street, is a term used to designate poetry that "in some way is shaped by and responds" to the environmental crisis with an ecocentric perspective that respects the nonhuman world (xxviii). Fischer-Wirth and Street argue that ecopoetry can reawaken our dimmed perceptions of the natural world, offering a language through which we can rethink our relationship with nature. They suggest that extensive environmental degradation results from the lack of knowledge of our places, allowing for their destruction (xxvii). John Felstiner in *Can Poetry Save the World?* argues that "poetry could prompt new ventures, anything from a thrifty household, frugal vehicle, recycling drive, communal garden, or local business going green, to an active concern for global warming" (xiii). While Fischer-Wirth acknowledges that we cannot know the extent to which ecopoetry and poetry as a whole might influence people to take action to preserve our planet, she emphasizes that ecopoems have the power to "break through our dulled disregard, our carelessness, our despair," drawing our attention to the "beauty of nature" (xxxv). This thesis examines ecopoetry, where poets use imaginative language to address the climate crisis in ways literature has often overlooked. Through the green lens of ecopoetics, the poetry readings in this thesis examine how ecopoetry is a powerful medium to foster environmental empathy and ethical engagement with our planet.

While fiction has been the predominant literary genre engaging with climate change, poetry is increasingly recognized for its capacity to respond to the crisis creatively and innovatively. A range of recent anthologies underscores the engagement of many poets with the climate change crisis. The already mentioned *Ecopoetry Anthology*, edited by Fischer-Wirth and Street, showcases poetry that, for Robert Hass, illustrates how American nature poetry shifted toward an ecopoetics "toward the necessity of imagining a liveable Earth" (I xv). In *Big Energy Poets: Ecopoetry Thinks Climate Change*, published in 2017 and edited by Heidi Lynn Staples and Amy King, the editors illustrate how the poets in this anthology "think climate change" by "unthinking" what it means to be human in the Anthropocene, acknowledging humanity's role in systemic exchanges (14). This assertion challenges human exceptionalism and highlights how humans are

part of a complex ecological system. Melissa Tuckey's anthology *Ghost-Fishing*, published in 2018, explores eco-justice through North American poetry, featuring poets from various cultural backgrounds. Tuckey's collection is particularly noteworthy, as it represents poetry that recognizes how marginalized groups are disproportionately impacted by environmental problems (3). Tuckey's selection of poems stimulates the reader's curiosity about the multiplicity of perspectives on global environmental and social crises.

In the context of climate change literature, certain voices, such as Indigenous people and young people, are frequently marginalized despite their unique insights on the climate crisis. Russell McDougall, John C. Ryan, and Pauline Reynolds, in *Postcolonial Literatures of Climate Change*, argue that Indigenous perspectives are often excluded from climate change discussions, even though Indigenous communities manage "76 percent" of the world's tropical forests and possess knowledge of sustainable practices beneficial for mitigating climate change (8). This exclusion is mirrored in political and cultural spheres, where Indigenous people frequently lack representation in decision-making processes, even though a sustainable future lies in their local knowledge (8). Marginalizing Indigenous perspectives prevents "Indigenous Traditional Knowledge," also known as TEK, from being shared globally.

This thesis analyzes climate change poems from acclaimed contemporary Indigenous ecopoets, such as Craig Santos Perez and Joan Naviyuk Kane. Their poems present unique portrayals of humans cognitively and physically interacting with their environments, concerned for the continuity of their places. Their work encourages readers to reflect on the roles humans can play in our shared ecosystem. Perez, a Chamorro poet, essayist, scholar, environmentalist, and political activist from the western Pacific Island of Guam, has extensively engaged with climate change in his poetry. His achievements include being long-listed for the 2021 PEN America Literary Award, and his poetry collection *Habitat Threshold* received the 2021 ASLE-UKI book prize for the best work with an ecological theme. His ongoing book series, titled *From Unincorporated Territory*, has now reached its fifth collection and engages with his homeland's history related to colonialism, militarism, migration, and environmental injustice.

Perez's environmental poetics are known for their creative use of form and language. Anne Mai Yee Jansen, who analyzed his work, contends that it exhibits a "creative

originality" through the avant-garde experimental forms he employs (5). Eric Magrane's review of *Habitat Threshold* demonstrates how his experimental poetics blend a range of moods, registers, and forms, intertwining ecological disasters with social crisis and juxtaposing affection for family with environmental disaster (393). In his collection, *Habitat Threshold*, published in 2020, Perez recycles famous poems, modifying their content to address the climate change crisis. Two of his poems from *Habitat Threshold* examined in this thesis, "Love in a Time of Climate Change" and "Thirteen Ways of Looking at a Glacier," are creative riffs on famous poems, imbuing them with ecopoetics. Perez's poetics in this collection is made clear in his epigraph that references Donna Haraway's work on "staying with the trouble," which Perez interprets as the necessity of engaging with our current places and the complexities and uncertainties of our times and their changes in their meanings (Perez 1). Perez "stays with the trouble," maintaining a tone of urgency and tenderness (Magrane 394). Perez engages with the changing landscapes of glacial regions, warning humans of the uncertainties accompanying environmental degradation in these places.

Joan Naviyuk, an Inupiaq from King's Island, Alaska, has similarly garnered critical acclaim for her poetry. Her work has received various honors, including recognition from the Association of Writers & Writing Programs (AWP), the Donald Hall Prize, and the Whiting Writers' Award. Her poetry and essays, featured in *The Hopkins Review*, *The Yale Review*, *Slowdown Poetry*, and *Poetry Daily*, frequently address the rapidly changing landscapes of her Alaskan homeland. Kane has published several poetry collections, including *Ex Machina*, *Another Bright Departure*, *Milk Black Carbon*, and *Hyperboreal*. Shari M. Huhndorf's review of Kane's *Hyperboreal*, published in 2013, argues that the poems in this collection convey the loss of "Arctic landscapes" and portray the "colonial transformations of Alaska Native communities" (149). In another review of *Hyperboreal*, Suzanne Smith highlights Kane's concern for the habitability of our world due to the ongoing crisis. Smith argues that *Hyperboreal* confronts the threat of the "cultural and biological extinction" of the Inupiaq people and the "contested place" of the human and the lyric subject on Earth (75). For Huhndorf, Kane's poems act as "instruments of memory, recalling ancestors and places that provide the foundation of community" (149). Through images of "fragmentation, silence, and barrenness," Kane effectively conveys her sense of loss, as evidenced in the opening poem, "Hyperboreal" (149). The poem "Epithalamia" from *Milk Black Carbon*, published in 2017, invokes images of a broken relationship between humans and their

environments, underscoring the need to reconnect with place to prevent further loss. "Epithalamia" and "Hyperboreal" provide insight into how ecopoets articulate loss in the northern latitudes.

Young poets like Jewel C. Cao and Alice Brooker also provide crucial perspectives on coping with the drastic changes occurring in our places, yet young people's poetry remains underrepresented in scholarly work. Growing up amid the climate crisis, these poets articulate climate anxiety, reflecting the emotional pressures of our era. In her work on youth literature, Rachel Conrad emphasizes the importance of children's rights in discussions of young poet's participation in literature creation, publication, and scholarly criticism. She asks whether "children have the right to participate in literary practices as writers rather than solely as consumers of adults' literary productions?" (196). Conrad draws on a part of the United Nations Conventions on the Rights of the Child that states that all children have the right "to be heard and taken seriously" (General Comment No. 12). Conrad argues that this right to participation remains ungranted to young writers (197). As Conrad asserts, young poets should enjoy equal rights to publication and critique, similar to adult poets. The *Young Poets Network* is an online platform that is an example of work that strives to represent young people's voices. This website issues challenges and competitions for poets up to the age of twenty-five. Several of their challenges address climate change. For instance, in 2017, it issued the challenge "I Am the Universe: Writing Climate Change." In this challenge, the poet Helen Mort encouraged participants to write about the transforming landscapes resulting from human activities. In 2020, they issued a challenge called "The Climate Crisis and You," in which organizers asked young participants to "write a poem reflecting your [their] feelings about the climate emergency." These challenges allow young people to express their feelings about climate change and enable public recognition of their creative language.

This thesis analyzes two poems that won this challenge. Jewel C. Cao won second prize with her poem "Translations in Survival," and Alice Brooker won first prize with "Are Your Words Empty, Or Am I Hollow?" Both poems display the anxiety of having a "large" environmental footprint. Cao, a Chinese Canadian student based in Vancouver, Canada, has published work in the *Asian American Writer's Workshop*, *Room Magazine*, *Sine Theta Magazine*, and *Poetry Northwest*. Brooker, based in the UK and an undergraduate at the University of Oxford, writes frequently about mental health and the environment. For instance, her contributions to *The Oxford Blue*, an award-winning

online newspaper, demonstrate her engagement with eco-literature, as evidenced in her article "The Hills are (Actually) Alive: Ecocriticism and its Moral Implications."

The analysis of these six climate change poems by underrepresented voices underscores the importance of diverse perspectives in climate change literature. The poems convey a new environmental reality starkly different from previous decades through innovative language and form. They expose the inadequate ways we live in our world and present how we might inhabit our vulnerable ecosystem differently. The poems emphasize the importance of a strong connection to our places on both local and global levels, urging readers to recognize the global-scale deterioration of our planet. Thus, the poems serve as ethical calls for action.

2. Theoretical Background

Concepts from cognitive approaches and place attachment are drawn on to guide the study of climate change poems from an ecopoetic perspective. By drawing on cognitive approaches, this thesis examines environment-oriented thinking and place attachment, highlighting the importance of a deep emotional connection to our places for acting to protect them. This approach enhances our understanding of how the poem urges readers to reflect on their relationship to the world.

2.1 Ecopoetics

The poems discussed in this thesis employ innovative forms and language to express an ecopoetics of how humans are deeply interrelated and embedded in their ecosystems. Perez's recycled poems "Love in a Time of Climate Change" and "Thirteen Ways of Looking at a Glacier" utilize naturalist-apocalyptic and love language to convey the interrelatedness and kinship between humans and glaciers. Kane's poems "Epithalamia" and "Hyperboreal" treat the glacial landscape and the planet as a living body to highlight its suffering. Through combining the wedding song genre and defamiliarization techniques, Kane's speaker demonstrates an awareness of the scale of climate change's impacts on the planet and the erosion of human connections to place. Similarly, the works of Cao and Brooker incorporate climate-anxiety writing to portray the immense emotional consequences of climate change. By framing the analysis within ecopoetic

principles, this thesis illustrates how poets embody environmental ethics connected to our places, using creative language to mediate a bond between humans and their environment. This exploration responds to what scholars call the "failure of imagination" in confronting the climate crisis.

The term ecopoetics is not simple to define. However, scholars often draw on Kate Rigby's definition of it as an "ecological or environmental perspective into the study of poetics" (81). Others define the term by considering its etymology. "Eco" originates from the Greek word *oikos*, meaning "house" or "dwelling place," and "poetics" goes back to the Greek word *poiein*, which means "to make." Thus, the scholar Jonathan Bate proposes that "Ecopoetics" means the making of a "dwelling place" (75). Julia Fiedorczuk and colleagues, in their introduction of *The Routledge Companion to Ecopoetics*, clarify Bate's "dwelling place." They draw on Jonathan Skinner's phrase that defines the dwelling place as "the house we share with several million other species, our planet Earth" (1). Angela Hume and Gillian Osborne, editors of *Ecopoetics: Essays in the Field*, assert that our "home" can be made through ecopoetic practices encompassing poetry or literary criticism (2). Nevertheless, Bate argues that poetry, through its unique "rhythmic, syntactic, and linguistic intensifications," helps draw our attention to our "dwelling-places" (75-76).

Distinguishing the term ecopoetics from ecopoetry is sometimes challenging, as they are often used interchangeably. Fiedorczuk and colleagues clarify the differences between these two terms, asserting that ecopoetry suggests a "thematic focus," whereas ecopoetics refers to the "compositional process" (1). For Fiedorczuk and colleagues, ecopoetics is a broader term than ecopoetry as it encompasses the range of creative approaches to making place, extending beyond poetry alone (1). This emphasis on the compositional process aligns with Hume and Osborne's description of "ecopoetics" as "extended critical practice." Concerning ecopoetry, Scott J. Bryson describes it as poetry that is "ecocentric" and "leads to a devotion of specific places and to the land itself, along with those creatures that share it with humankind" (6). For him, such poetry conveys human "humility" to nonhuman life and expresses skepticism toward our "overttechnologized modern world" (6). Although the poems in this thesis are classified as ecopoems, the term ecopoetics as "extended critical practice" allows for a more expansive focus on how the poem's formal elements embody ecocentric and ecological themes.

Ecopoetics as an extended critical practice involves examining how poets innovate language and adopt creative poetic forms, often called experimental poetics, to convey environmental ethics. Fiedorczuk and colleagues, in their survey on scholarly work on literary ecopoetics, observe how poets have "expanded the scope" of their experiments, engaging with the nonhuman world through a poetics of ecological relationality and reciprocity and a poetics that convey planetary consciousness (2). Hume and Osborne note how historical developments shaping contemporary literature, including the global dependence on fossil fuels and intensified natural resource extraction, contributed to modernization and new lifestyles. They claim that these changes in our "material realities" produced new "forms of consciousness" and "practices for poetry" (3). Poetry "renovated" its form by experimenting with "composition by field" or "projections" to register its evolved ecological sense and humanity's existential anxieties about the future and the consequences of our footprint on the planet (4). Hume and Osborne report how Johnathan Skinner asserts that an experimental poetic form can "constitute an environmental ethics" (8). Ecocritical scholar Timothy Morton posits that literature has the potential to convey an "ethical attitude we might call existentialism," which recognizes an "ethical entanglement with the other" (47). By analyzing the speaker's relationships to places, we gain insight into how climate change poems form an ethical relation to the nonhuman world. This focus on environmental ethics aligns with Hume and Osborne's interpretation of how poems enact what Jed Rasula terms "a stance towards the living planet" (xi).

The poems in this thesis enact an ethical stance to the environment through innovative expressions and forms that embody ways of cognitively processing environmental degradation and thinking about how to coexist within our ecosystem more ethically. Fiedorczuk and colleagues observe that poets like Kane and Perez, discussed in this thesis, employ experimental language to convey profound ecopoetic thought, reflecting on our "scalable entanglements" with the nonhuman world (2). In their view, ecopoetics helps "forge" ecological language and thought, inspiring a sense of care for the places we inhabit (4). Scott Knickerbocker similarly argues how language in poetry fosters meaningful connections with the natural world through what he terms a "sensuous poiesis," a process in which language "rematerializes" as a response to the nonhuman world (2). He argues that this process occurs when poets embrace figurative language and rhetorical devices (3). Some Scholars have, however, pointed out how language has limitations in urging people to care for their places. Kate Rigby, for instance, argues that

language "fails" to speak for nature as it cannot capture the embodied experience with the non-human world (437). While Knickerbocker acknowledges these limitations, he contends that language remains a tool for understanding the world and connecting language and land (7). He contends that scholars and poets do not need to position poetry in opposition to embodiment, as language can be embodied through sensuous poesis.

There are several ways poets can transmit ecological content to the reader in a way that will affect them. Poets can use a sensuous poesis through language's "flesh," that is, its "sound" (7). In other words, Knickerbocker says that when poets experiment with aural, visual effects, and other textual aesthetics, they can signal material embeddedness in the world of things (7). Metaphor, one of the main characteristics of poetic language, is another way this sensuous poesis can be conveyed. Metaphors arise from our experiences in nature and indicate how we think, making it part of our nature to think in metaphors (Knickerbocker 4). Although some view the aesthetics of poetry, such as defamiliarizing figurative language and rhetorical devices, as "artificial," having little effect on the reader, Knickerbocker argues that these aesthetics are based on our experiences in the physical world, have "emotive and rhetorical power" (9). Perez, Kane, Brooker, and Cao's work contains various forms of "sensuous poetics." Perez's "Love in a Time of Climate Change" employs many rich metaphors, compelling the reader to think of loving the Earth as one does a romantic partner. Cao's "Translations in Survival" extensively draws on rhetorical questions to illustrate nature's vitality and human entangledness in the world. Kane's "Hyperboreal" defamiliarizes the north to shatter long-held images of the Arctic as a pristine, permanently frozen place. This sensuous poetics greatly contributes to the broader nature of the ecopoetics in the poems.

The poetry discussed in this thesis reflects two key types of ecopoetics: the "self-conscious Anthropocene" and "kinship." The "self-conscious Anthropocene" is a concept Lynn Keller developed to examine intellectual and cultural transformations that arise from the "pervasive awareness of the dramatic environmental changes evident in our time" (9). Keller argues that this cultural condition emerged in 2000 when scientists first employed Anthropocene. The Anthropocene is a scientific concept used to designate a recent geological epoch significantly influenced by human activity (9). Characteristics of this ecopoetics include acknowledging humanity's entanglement with nature and an awareness of how human actions have disrupted our biosphere and destabilized seasonal cycles (9, 10). Another characteristic of the self-conscious Anthropocene is the exploration of discrepancies in scale and the entanglement of

different scales (10). Keller notes that this poetics also reflects scalar dissonance, which is the tension between recognizing human's significant impact on planetary systems and feeling powerless as individuals in the face of impending ecological disasters (10). Another feature of this poetics is its focus on the emotional impacts of the climate crisis, often informed by data-driven knowledge and the use of technical or scientific language (10). Writers of the self-conscious Anthropocene frequently challenge or expand formal and linguistic conventions to capture the pressures of the environmental crisis (11).

The concept of kinship, another central theme in ecopoetics, is especially prominent in Perez's two poems analyzed in this thesis. Linda Russo defines kinship as a concept that "expresses relatedness to, respect of, and reciprocity between humans and places and other beings," emphasizing the importance of sustaining long-term ecological relationships (28). This concept is closely linked to Indigenous principles, as illustrated by Robin Wall Kimmerer in *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* (28). Russo explains how Kimmerer's writing encourages readers to adopt an Indigenous worldview in which nonhuman beings are considered kin (28). Such a perspective of kinship elicits an affective response, sensitizing us to the "disappearance" of both Indigenous people and the nonhuman elements and beings that coexist with them (28). Further, Russo suggests that writers like Kimmerer advocate for an ethic of balance and respect, in which the lives and experiences of nonhuman beings are as meaningful as our own (29). In this way, kinship studies emphasize Indigenous perspectives, which regard places as inherently relational and meaningful, calling for an ethical engagement with our places and accountability (29).

Analyzing the speaker's relationships to place through a cognitive approach in these poems reveals the varying nature of human bonds to their places. The concept of place attachment, also known as "topophilia," a term coined by human geographer Yi-Fu Tuan, refers to the emotional bonds one forms with a place. By combining literary cognitive approaches with the concept of place attachment from Human Geography, this ecopoetic analysis reveals the content and state of the speaker's mind and the strength or fragility of their attachments to their changed and degraded environment. This aspect of the poems raises questions about how the speaker's place attachment is impacted by climate change and how these attachments influence their responses to the crisis, ultimately affecting their mental and physical well-being.

2.2 Cognitive approaches to fictional minds in poetry

By applying cognitive theories to poetry, the poetic analyses in this thesis shed light on the poetic speakers' internal processes and mental states as they confront life amid the climate crisis. The cognitive approaches most relevant to the analysis of climate change poetry draw primarily on three research fields that have been developing since the cognitive turn in literature studies in the 1990s: cognitive narratology and cognitive poetics. Scholars who use a cognitive approach to literary studies argue that it is key to understanding characters in literary texts. For instance, Alan Palmer suggests that a cognitive approach to literature "is the basis of all the others" as it provides evidence upon which critics can base their judgments (7).

Peter Stockwell's work in *Cognitive Poetics: a New Introduction*, published in 2022, elaborates on this approach, defining "cognitive poetics as "reading literature." As the term suggests, the "cognitive" aspect concerns the mental processes engaged during reading and the "poetics" aspect relates to the "craft" of literature (1). Stockwell argues that because cognitive poetics literature is made from language, understanding it and deriving meaning requires understanding language, the mind, and knowledge of the text's context, emotions, beliefs, and circumstances (2, 5). In this way, cognitive poetics provides a systematic framework for describing the knowledge and beliefs embedded in a literary text (6). For Stockwell, "cognitive poetics" is about the "science" of reading, which involves intellectualizing about the text, understanding how it is crafted, and thinking about "what we are doing when we read" (3). This thesis adopts a similar approach to the reading of poems, examining how climate change poems elicit specific thoughts, mental states, and emotions. Further, the readings in this thesis try to "account as rigorously as possible for the effects and features that are fundamental" for everyday readers (11). In Perez's "Love in a Time of Climate Change," the conceptual metaphors reveal what elements Perez recycled from the original poem. In Kane's "Epithalamia," the poem's genre is central to conveying its meaning, while in Brooker's "Are Your Words Empty, or Am I Hollow," the dialogic nature and contrasting perspectives between two minds create the poem's core effect. This active form of reading is guided by the fundamental principles of cognitive poetics, which include the notion that the mind is "embodied" and that cognitive states arise from "physical conditions" (12).

Furthermore, the readings focus on making creative effects “describable” and emphasize that “Cognition includes feeling and experience” (12). Stockwell illustrates several cognitive poetic frameworks in his book; one central concept guiding the readings in this thesis is “mind-modeling.”

Mind-modeling, as a cognitive poetic concept, helps identify what stylistic techniques poets use to compel readers to empathize with poetic speakers and nonhuman entities. Stockwell, in “Mind-modelling literary personas,” defines “mind-modeling” as the cognitive “capacity for building, elaborating, maintaining and engaging with other minds in our environment” (134). Mind-modeling enables readers to simulate the feelings of fictional characters or nonhuman entities. (133). Stockwell argues that the process of mind-modeling is a powerful mechanism in the reading process, as it is responsible for “characterization,” “empathy,” “hostility,” and “engagement” (131). Through bodily responses, while reading the text, readers assign emotions to the author, fictional mind, or nonhuman entity (133). In this way, through mind-modeling or re-enacting emotions in the text, readers can connect to the characters or speakers in a literary text, stimulating empathy. Stockwell draws on David Miall’s argument that empathy is partly rooted in our tendency toward “animism.” Stockwell, interprets Miall’s discussion on animism as human’s broader ability to ascribe consciousness, dispositions, and perspectives to elements in the natural world (133). Stockwell suggests that certain stylistic devices can be employed to animate fictional minds or the nonhuman world, lending them qualities of consciousness and placing them on a continuum of greater or lesser empathy (133).

In order to gain the sense of an imagined character or nonhuman entity and the emotions or states they are in, the mind-modeling process is only possible through actively taking “richly suggestive cues” from the text (Stockwell 179). Stockwell states that certain stylistic patterns can give minds consciousness and agency, which in turn enables rich mind-modeling. Some of these stylistic patterns include the “representation of thought, beliefs, and intentions,” “the reactions of other characters,” and the “social relationships defined by deictic marks and social register” (179). Perez’s “Thirteen Ways of Looking at a Glacier” and Kane’s “Hyperboreal” use several stylistic techniques to animate the glaciers and the northern landscape and thus prompt the reader to empathize with these nonhuman objects. Cao’s “Translations in Survival” uses metaphors to portray a person under great mental distress, urging the reader to empathize with them. Mind-modeling the speakers in the poems and examining how they mind-model others and nonhuman

entities in their environment provides insight into how speakers are thinking, feeling, and responding to their places in a time of climate change.

Conceptual metaphors, a key focus in cognitive poetics, are also important for understanding the minds in the poems. Since metaphors reflect the "basic pattern in the way the human mind works," examining metaphorical patterning and their role in cognitive processes has led cognitive disciplines such as linguistics and psychology to better understand the mind (Stockwell 119). George Lakoff and Mark Johnson, in their work *Metaphors We Live By*, argue that our conceptual systems are inherently metaphorical (3). For them, identifying what metaphors we are using to communicate conceptual systems helps us better understand how we perceive, think, and what we do (4). Stockwell explains that conceptual metaphors can be distinguished between their superficial realization in linguistic metaphors and their underlying conceptual content (119). For example, different expressions, such as, you are a star, you shine like a star, and you are my guiding light, may all stem from the same underlying conceptual content. These metaphors sit in our subconscious, arise from embodied experiences, and are central to human cognition (Stockwell 124).

According to Stockwell, understanding a metaphor requires mapping two conceptual domains: the target and the source (121). For instance, in the expression you are the apple of my eye, the target is you, and the apple of my eye is the source. The reader interprets the metaphor by mapping the source onto the target, thereby structuring the target domain using concepts from the source (122). Stockwell notes the variety of stylistic techniques to express metaphors, which can be overt (e.g., you are my sunshine) or subtle (e.g., the ray of sun warmed my spirits) (122). Importantly, Stockwell argues that metaphors are not fixed objects; they become metaphors only when readers interpret them as such (120). Sometimes, certain conceptual metaphors are repeated, becoming what Stockwell terms "megametaphors," leading readers to form a "macrostructural mental representation" in their minds, which in turn supports the interpretation process (127). Working out the conceptual content of the metaphors and describing the mental image that the central conceptual metaphors create in the poems elucidates the speaker's state of mind, beliefs, and attitudes the speaker holds toward their environment. For instance, Perez's "Love in a Time of Climate Change" uses metaphors that build an image of how loving a partner is like loving the Earth, a union that requires nourishment and unity for the relationship to work.

Since this thesis considers the minds of poetic speakers much like characters in fiction, it also draws on knowledge of the mind from cognitive narratology, which Stockwell explains, instead of focusing on how readers process poetry, it focuses on how readers comprehend narrative through the mind's monitoring of "episodes, characters, and events" (6). Prominent scholars, such as Peter Hühn and Jens Jörg Schönert, have applied narratological approaches to lyric poems arguing that lyric poetry represents a "reduced" form of narration (3). Hühn and Schönert identify key aspects of narration in lyric poetry, including "sequentiality" and "mediacy," focusing on the "happenings" or the mental or psychological processes within the text (5). It goes beyond the scope of this paper to discuss whether the poems analyzed in this thesis are lyric poetry. However, I assume they are reduced forms of narration, as they contain speakers who, like characters in novels, are also carefully crafted to conjure a sense of a person's personality and contain mental events that readers can track.

There is consensus among scholars that cognitive narratology can offer valuable insights into the mental functioning of characters, and modern views of the mind in fictional texts enhance understanding of the minds in poems. Core concepts include David Herman's exploration of the new "geography of mind" in modernist and postmodernist narratives, Alan Palmer's examination of social minds, and his theories of attribution and characterization. Herman's discussion of mind representation in modernist and postmodernist narrative texts provides a foundation for understanding how poets represent thought in contemporary poems. He argues that these narratives did not "radicalize" a Cartesian "inward turn," a movement that views the mind as isolated from the material external world and confined to the mental domain (250). He contends that these narratives created a "new geography of mind," depicting mental functioning as "interwoven with rather than separated from situations, events, and processes in the world" (254). This perspective aligns with enactivist frameworks, which emphasize how minds shape and are shaped by their interactions with their local contexts through the "affordances" for action that arise from the environment (250). According to this framework, perceptions are intricately linked with possibilities for action, resulting in minds that embody their environments (257). This new geography of the mind is observable in contemporary poetry, where the mental functioning in the poems is deeply connected to the climate change-related events in the speaker's external physical environments. Perez's "Thirteen Ways of Looking at a Glacier" represents a speaker who carefully observes an Arctic landscape, noticing polar bears "starving" and glaciers

“calving.” Their scientific-like observations show how their perceptions and understanding of the world evolve, viewing humans and “glaciers” as “kin.” In Kane’s “Epithalamia,” the poem implies how the speaker’s negative experiences and harmful interactions with the environment due to their use of “diesel” caused them to lose their “love” for the planet. Kane’s poem illustrates how the current human-nonhuman world entanglements are nonreciprocal. The young people’s poems show how their negative emotions arise from their entanglement with their social and physical contexts.

This new view of the mind underpins Palmer's work in *Social Minds*, which provides a comprehensive framework for understanding fictional minds in literary texts. Palmer’s approach relies on several arguments. First, he argues that classical methodologies for studying consciousness, such as the “speech category approach,” are insufficient for fully capturing the dimensions of a fictional mind (8). Second, Palmer suggests that traditional narratology has overemphasized internal or solitary thought, neglecting other forms of mental functioning (9). He contends that scholars reconstructing fictional minds should consider both the “internalist” and “externalist” perspectives. The internalist perspective presents minds as “private, solitary, and inaccessible” (3). The externalist perspective, which shares similarities with Herman’s new “geography of mind,” emphasizes how the mind is “social, embodied, engaged, and specific” (8). Palmer situates mental functioning within the story-world’s social and physical context, distinguishing between social and individual fictional minds, intramental and intermental thoughts, and internalist and externalist perspectives. Adopting the externalist view shows how thoughts are often intermental, that is, “joint, group, shared, or collective” (4). Palmer emphasizes that fictional minds are inherently social. People in populated literary texts, like real minds, are constantly trying to read other’s minds, attributing states of mind to others (20). Palmer’s externalist perspective thus calls for understanding the mind as social, interwoven in social and physical interactions (8).

Another argument addresses the typical dichotomy between action and thought, where Palmer suggests that thought and action are best viewed on a spectrum (9). This argument is based on his belief that thought processes, including beliefs, desires, and reasons for action, frequently accompany descriptions of action. This interrelated understanding of action and thought posits that readers gain an understanding of a character by tracking their reactions to certain events. Indeed, Palmer observes how readers usually focus on the character’s reactions to events rather than the events themselves. Thus, to understand fictional minds fully, Palmer suggests scholars should

consider both actions and the mental functioning surrounding them (9). This view is applied in this thesis. For instance, in Brooker's "Are Your Words Empty, Or Am I Hollow," the speaker reacts to various actions, such as "ceasing" to "drain electrics," enabling an understanding of their beliefs that these small actions are insufficient and that they desire more adequate responses to climate change. Paying attention to the sequence of actions and their surrounding thoughts, including "the intentions, purposes, motives, and reasons for the actions," allows the reader to construct fictional minds, contributing to an understanding of the literary text (9).

A description of the events or mental episodes and the thoughts surrounding them termed the "plot," is enacted by the reader through attribution (9). Thus, Palmer argues that Attribution Theory is crucial for "following the workings" of the mind (9). Timothy Wilson defines "Attribution Theory" as the study that examines how speakers attribute states of mind to themselves and others. This theory builds on the Theory of Mind, which describes the ability to be aware of other people's thinking, helping to interpret behavior (Palmer 20, 24). This awareness enables readers to attribute mental states, such as "emotions, dispositions, and reasons for actions," to the people in the literary text (20). Rooted in the externalist perspective, Palmer argues that readers can follow and understand other fictional minds in the storyworld; they can observe who feels what, who desires what, and who thinks what (21). Within this thesis, the poems also illustrate how the mind is embedded in the external world. The speakers in the poem employ the Theory of Mind, attributing states and qualities to their environments. Sometimes, the poems present the speaker attributing mental states to themselves, as in Cao's poem, where the speaker says they became "static," at other times, the speaker, like in Kane's "Epithalamia," attributes their habits as poisonous. Palmer states that the stated and implied attributions encountered in the text allow the reader to attribute states of mind to the characters in the text (160). Examining the attributions in the poems reveals the mental states of the speaker as attributions reflect emotional and cognitive states. Knowing the speaker's mental states helps understand their dispositions.

Palmer terms these mental or emotional tendencies as "dispositions," which he defines as "a person's abilities and inclinations to act in certain ways." Dispositions are a key notion in his work, as they are essential to understanding minds, linking enduring traits, such as "beliefs," "attitudes," "personality," and "self," with mental states and actions (Palmer 29). This relationship reflects what psychologist Gilbert Ryle says about the mind: "to talk of a person's mind is . . . to talk of the person's abilities, liabilities, and

inclinations to do and undergo certain sorts of things, and of the doing and undergoing of these things in the ordinary world" (190). He also references the anthropologist Clifford Geertz, who posited that the term mind "denotes a class of skills, propensities, capacities, tendencies, habits" (Geertz 58). Palmer posits that dispositions can be revealed by identifying characters' enduring mental states (30). Although poems are often shorter than novels, offering less evidence of mental states existing over time, the represented thoughts in them can still be viewed as representative snapshots of the speaker's mental, behavioral, or emotional tendencies. Indeed, Cao's poem, for example, emphasizes through container metaphors the endurance of a particular state of mind: being "static." Through identifying the speakers' mental states in the poems, the analyses illustrate how some of the speakers have the disposition to take on an environmental activist role, such as in Perez's two poems, while others indicate a lack of disposition to take an active role in mitigating climate change, such as in Cao's poem and Kane's "Epithalamia." Ultimately, the cognitive concepts and frameworks discussed in this section guide the interpretations of the speakers' thoughts, illuminating how the speaker's minds are oriented to their environment and offer indications of their mental processing and responses to their environment amid climate change.

2.3 Place attachment

The cognitive approach employed in this thesis, which incorporates both an externalist and enactivist view of the mind, reveals how the poetic speaker's minds are deeply embedded in their external social and physical environments. This approach emphasizes that the speakers' mental states are not isolated but dynamically shaped by their emotional and intellectual relationships to place; this thesis draws on the concept of place attachment, which Lynne C. Manzo and Patrick Devine-Wright define as the emotional bonds that humans form with places "at varying scales" that change over time" to explore how the poems convey varied relationships to place in a time of climate change. As climate change disrupts landscapes and entire ecosystems to which individuals are attached, climate change poetry highlights how these emotional bonds to places are strained, strengthened, or lost. Examining the speaker's attachments to place illustrates the dynamic nature of these bonds, showing how the climate crisis both shapes and is shaped by human relationships with place. The speakers display an overt

attachment to place in both of Perez's poems. For instance, in "Love in a Time of Climate Change," the speaker saves the "last seed." Kane's "Epithalamia" portrays a literal relationship between humans and the Earth. Cao and Brooker's poems implicitly indicate their attachment to place through their anxiety that they contribute to the degradation around them. Focusing on the nature of the emotional bonds to place and their role in actively engaging with climate change highlights the importance of an emotional connection to our Earth.

As a rapidly accelerating global phenomenon, climate change has thus heightened our awareness of the urgent need for action and raised the question of the role of attachments to place for caring for them. Eran Feitelson was among the first scholars to posit that voluntary actions on climate change could be encouraged by strengthening attachments to place on a global scale. He suggested that research on human responses to the climate change challenge has often neglected the role of people's attachments to places. Building on this insight, scholars across various disciplines are now exploring how to engage people in climate action and behavioral change. Emily Nicolosi and Julia Corbett highlight that recent approaches to climate change engagement emphasize the impact of people's relationships to place, suggesting that these attachments can influence their commitment to addressing climate issues (2). In their review, Nicolosi and Corbett analyzed whether place attachments can effectively motivate proactive engagement with climate change. Of the sixty-six papers they reviewed, forty-nine indicated that place relationships positively influenced climate change engagement, identifying two primary forms of engagement: expressing concern and taking action (5). Thus, this empirical evidence suggests that place attachment may be a key motivator for climate action.

In *Place Attachment: Advances in Theory, methods, and Applications*, editors Lynne C. Manzo and Patrick Devine-Wright underscore the importance of understanding place attachment, particularly in the context of the global climate crisis, highlighting how places are not a background in which society takes place, they are necessary for survival (1). They explain that place attachment highlights our "subjective experiences" within places, which are deeply connected to our emotions. Devine-Wright, in "Think global, act local? The relevance of place attachments and place identities in a climate-changed world," elaborates that place attachment, a concept linked to the broader concept of "place," emerged in the 1970s with human geographers like Yi-Fu Tuan, who coined the term "topophilia" to describe humans' capacity to form emotional bonds with places (62). In this view, scholars often perceive physical locations as having "ontological

importance" (Devine-Wright 62). This ontological approach draws on Heidegger's idea that there is no "being" without "being-in-the-world." Although "place" is a word we use in everyday language, its academic definition is complex. For example, Edward Cresswell explores this concept extensively, defining places as spaces that have become meaningful over time. In his book *Space and Place: The Perspective of Experience*, Tuan also understands place as "a break or pause in movement—the pause that allows a location to become a center of meaning" (179). John Agnew defines place using three elements: its location in geographical space, the social interactions, and the sense of place or the attachments people form to it. The poems in this thesis convey that the planet is a center of meaning and crucial for our existence; for instance, Perez's "Love in a Time of Climate Change" emphasizes the importance of "roots" and "compost" for enabling life and for providing nourishment.

In his contribution titled "Place-attachment" in *The Routledge Handbook of Place*, Devine-Wright summarizes the four dimensions of place attachment, reflected in the climate change poems. First, while place attachments are mostly positive, individuals may also exhibit negative or ambivalent feelings toward certain places (507). Manzo refers to this negative aspect of attachment as the "shadow side," where places such as the home can represent a "trap" or a "haven" (178). In the young people's poems, it is clear that there is a "shadow side" to attachment, as the speakers in these poems, who deeply care for the environment, display intense angst feelings. Although strong bonds to place are generally seen as beneficial, changes to place can disrupt these attachments and cause mental distress, as in Cao and Brooker's poems. For example, local climate changes can affect place meaning; a study by Ellis Neville and Albrecht Glenn of farmers worrying about the shifting climate patterns found that many experienced chronic forms of place-based distress and depression (161). Indeed, place attachment research emphasizes the critical connection between place, health, and well-being (Manzo and Devine-Wright 7).

The second dimension that Devine-Wright discusses is the malleability of attachments, where people can form attachments to places on varying scales, including global ones (507). Feitelson argues that to address climate change, people must envision the world as a place of meaning. In other words, attachments should transcend the local. This idea resonates with the poetry analyzed here, as the speakers often express attachment on a global scale, emphasizing the need for humanity to extend their concerns and feelings for the entire planet. The third dimension addresses the dynamic nature of attachments,

which can either strengthen or weaken depending on specific conditions (508). In Kane's poem, "Epithalamia," the speaker laments their loss of "love" for a place degraded by toxic fumes, reflecting how environmental degradation can erode place attachment. Finally, the fourth dimension highlights that people can simultaneously develop attachments to multiple places (508).

This extensive exploration of place attachment raises the question: why do people form bonds with places? One explanation is that there are positive aspects of place attachment. Devine-Wright emphasizes in his research that place attachment offers multiple benefits for humans, emphasizing that they are "good for you" (507). Marco Antonsich argues that places are important for people and contribute to our sense of self. Scannell and Gifford, in their article "The experienced psychological benefits of place attachment," argue that it provides a sense of "belonging," "self-esteem, and meaning." In addition, Scannell and Gifford suggest that enduring bonds arise because they serve various functions, including providing "survival and security" and "continuity" (5). People often remain near places that supply essential resources, such as food, water, and shelter, that offer comfort or security (5). The notion of "continuity" is especially relevant in climate change discourse, where the central concern is that humans are rendering Earth uninhabitable for people, animals, and nonhuman entities. Scannell and Gifford explain that this continuity function arises from "individual attachment to a place that is symbolically meaningful through memories and connections to the past" (6). Clare L. Twigger-Ross and David L. Uzzell use the term "place-referent continuity," which refers to how individuals use a physical environment as a reference for "past action and experience." By referencing place, people can maintain and develop the continuity of self (207). Twigger-Ross and Uzzell also note the psychological effects of having control or lacking control over the continuity of place. For instance, Marc Fried demonstrates that changes or disruptions in place continuity, such as those caused by environmental disasters, can lead to feelings of grief. Maria Lewicka further supports this view, noting that place attachment serves functions beyond continuity, including fostering belonging and positive emotions.

While there is scholarly consensus regarding the primary definition, ongoing debate continues about how place attachment should be studied and applied (Manzo and Devine-Wright 1). According to Manzo and Devine-Wright, part of the difficulty stems from its application across multiple contexts by scholars from various research fields (2). Geographers often focus on the characteristics and qualities of a place, while

psychologists examine the dynamics of the bond at the individual level, focusing on its emotional, cognitive, and experiential aspects (Manzo and Devine-Wright 2). Community psychologists and sociologists extend the focus beyond the individual scale to explore attachments at community and group levels (Manzo and Devine-Wright 2). To address these various interests, scholars have developed diverse frameworks to capture the multifaceted nature of place attachment. Some scholars have proposed concrete frameworks to navigate the broad range of conceptualizations surrounding place attachment.

One model referenced in this thesis is Leila Scannell and Robert Gifford's tripartite framework model, which considers person, place, and process. The first dimension, "person," explores questions like "who is attached?" and examines whether the attachment is based on individually or collectively held meanings (2). Manzo highlights in "For Better or Worse" that attachment is shaped by "experience-in-place," which imbues places with meaning (74). The next dimension, "process" or sense of place, encompasses the psychological aspects of place attachment, including "affect," "cognition," and "behavior" (3). For instance, affect refers to the emotional aspects of attachment, hence terms such as topophilia or place belongingness (3). According to Manzo, relationships with place can represent various emotions, from love and well-being to fear or hatred (67). Cognition involves the memories, beliefs, and knowledge we associate with a place (3). Behavior refers to actions that reflect attachment, such as "proximity-maintaining" behaviors (Carmen Hidalgo and Bernardo Hernandez 274). The final dimension, "place," examines a place's physical and social characteristics and how these influence the attachment (2). Physical attachment, or "rootedness," can be indicated by "length of residence, ownership, and plans to stay," while social attachment or "bondedness" "consists of social ties, belongingness to the neighborhood, and familiarity with fellow residents and neighborhood children" (4). Scannell and Gifford suggest that social elements are more vital than physical features in forming attachments (4). However, attachment to the physical features of places or nature is becoming more critical in light of climate change. Richard C. Stedman argues that people become attached to the features' meanings. For instance, the climate change poems address how our landscapes have been dramatically transformed, and the speaker's sadness, anxiety, and fear for the further loss and degradation of aspects of physical features of our places represent their attachment to the planet. Daniel Stokols and Sally Schumaker use the term "place dependence," which underscores how the physical characteristics of a place

are central to the attachment as it provides resources such as nourishment and amenities needed to live.

Maria Lewicka's typologies, based on David Hummon's work, further aid in understanding people-place relationships by characterizing these attachments through emotional valence (positive to negative), intensity (strong to weak), and activity (active and traditional). Traditional attachments differ from active ones in that traditional bonds are taken for granted, while active bonds involve a self-conscious attitude toward the attachment (Lewicka 677). Lewicka also proposes three typologies for nonattachment: "place alienation," which describes intense negative feelings for a place; "place relativity," which reflects ambivalent feelings toward a place, usually accepting the place under specific conditions; and "placelessness," a general disinterest and the lack of need for place-bonds (Lewicka 677).

The climate change poems analyzed in this thesis reflect a rootedness to place, with speakers expressing fear for their environments' continuity, reflecting the speaker's awareness that climate change threatens the "home" of humans and the nonhuman world. In this exploration of climate change ecopoetics, integrating cognitive approaches with perspectives from place attachment highlights how climate change poetry can effectively communicate anxieties, attachments, and ethical responses to our environments. By examining how poets express emotional bonds to place, this thesis sheds light on the psychological and ethical dimensions of climate change poetry, revealing the ways humans think about their relationships to place in a time of climate change and how these relationships shape our responses to the climate crisis.

3. The Recycling Metaphor in Perez's Poetry

In his poems "Love in a Time of Climate Change" and "Thirteen Ways of Looking at a Glacier," Craig Santos Perez grapples with climate change by "recycling" poems, including Pablo Neruda's "Sonnet XVII" and Wallace Stevens' famous "Thirteen Ways of Looking at a Blackbird." Perez explains what he means by "recycling" poetry in his 2023 article titled "Recycling Poetry in a Time of Climate Change," where he provides an account of the creation of the two poems. He reports that after learning more about climate change, he "started to notice changes everywhere," causing him to change how

he reads and writes poetry (Perez). The poems he read changed in his imagination; Stevens' "13 Ways of Looking at a Blackbird" became "Thirteen Ways of Looking at a Glacier," and Neruda's plants and flowers became pesticides and seed vaults ("Recycling Poetry"). His changed readings of poems inspired him to employ the form of various famous poems, including Stevens' blackbird poem and Neruda's "Sonnet XVII," while changing the poem's content. In other words, he "recycles" the poems, changing their content to reflect the changing climate. Although Perez points out how some people have critiqued the notion of recycling, as it does not address the root cause of increasing temperatures, which is fossil fuels, he argues that recycling on a literary level has had a positive effect ("Recycling Poetry"). Recycling encourages him to "look at our changing world in a new way" ("Recycling Poetry"). Perez's "recyclings" are an example of kinship studies. Perez bends the form of Neruda's sonnet and adapts Steven's naturalist poetic thought to advocate the perspective that the elements in our world, such as the Earth and glaciers, are kin to humans. Humans must become aware of the existence of nonhuman elements and their current degrading state if we want to preserve them. Thus, Perez's recycling represents an ecopoetics that inspires the reader to think of nonhuman beings as kin and thus reflect on a kinder form of relationship to place.

3.1 Metaphors of Unity in "Love in a Time of Climate Change"

In the broader context of Neruda's poems, Perez's recycling of "Sonnet XVII" adapts the traditional love metaphor to illustrate the speaker's deep attachment to place, encouraging the reader to think of loving the Earth as a romantic partner. While Neruda's sonnets are rooted in the human experience of love, often evoking love scenarios that draw on nature imagery, Perez reorients these metaphors toward environmental themes. According to Navarrete Lopez, the "universal Western model of love" underpins Neruda's love sonnets, which include conceptual metaphors such as "love as hunger" or "love as fusion" (84). The scholar says that Neruda's model of love frames love as unity, force, time, or a living organism, and Neruda ties these love frames to traditional cultural and societal schemas of intimacy, especially between men and women (121).

Inspired by Navarrete Lopez's work, we can ask: what "vision of love" or megametaphor and conceptual content underlies Peréz's recycling of "Sonnet XVII"? Although Perez retains the sonnet form and key metaphors of love as unity, he shifts the source and

target of these metaphors. Whereas Neruda's metaphors draw on natural resources such as "topaz," "salt-rose," and "hidden flowers," Perez's metaphors are grounded in images of environmental degradation, habitat loss, lack of seeds, plant growth, biogeochemical processes, and the destabilization of Earth's systems. In Perez's poem, these various environmental images become the source domain, mapped onto the target domain of romantic love, generating new conceptual metaphors based on common metaphors such as love as protecting, love as fusion, and love as a sexual union. This shift in the source domains of these metaphors creates a powerful parallel between nurturing a romantic relationship and caring for the planet. The love between two people requires attention, nourishment, and connection, so the Earth needs care and protection to survive the climate crisis. Through the sensuous figurative language, Perez helps us foster an ethical reflection on our relationship with the environment, showing how we might extend our knowledge of love from human relationships to our bond with the Earth. In this way, the poem reimagines the love metaphor and lends a moral dimension to the climate crisis.

Perez's "Love in a Time of Climate Change" emerged as the poet began to see shifts in how he read famous poems. He began to replace their content with climate change-related imagery. Perez observes how Neruda's "Sonnet XVII" employs the natural world as a metaphor for the human body and its experience of love, desire, and sex ("Recycling Poetry"). Scholars often interpret Neruda's sonnets as featuring a male speaker addressing a female, which I also assume is true in "Sonnet XVII." In Neruda's sonnet, the speaker articulates his profound love for his muse, exemplified by his affection for her "as the plant that doesn't bloom but carries / the light of those flowers." Perez reinterprets this imagery, presenting a speaker who "loves the most vulnerable," "the last seed saved," and loves "organically, without pesticides." While Neruda's sonnet portrays love in the context of human relationships, Perez's poem reconfigures this by exploring how love for a partner can also symbolize an attachment to the Earth. However, as the speaker indulges in the metaphors of plant growth and soil and environmental processes, it becomes more apparent that the human "body" of the addressee symbolizes the Earth itself. The poem's settings, where seeds have become rare and people work to save them, suggest a broader concern for environmental preservation. This adaptation of themes from Neruda's work extends the notion of love to include ecological commitment.

Leila Scannell and Robert Gifford's tripartite framework of place attachment offers a lens for analyzing how the metaphors in the poem express place attachment. Their

framework encompasses three dimensions: person, place, and psychological process. The first dimension refers to who is attached to a place, either an individual or a group (2). Personal meanings are attached to a place through significant experiences, while group-level attachments involve shared symbolic meanings (2). In the poem, it is clear that the speaker's attachment to place is based on their meaning of place, as there is only one speaker in the poem. For instance, the poem's first line introduces a singular subjective speaker, "I don't love you." The psychological process dimension of place attachment involves social psychological concepts such as "affect," "cognition," and "behavior," which explain how individuals or groups relate to meaningful places (2). Yi Fu Tuan's concept of "topophilia" refers to the emotional bond one feels towards a place (3). This dimension also includes cognitive elements such as "memories," "beliefs," and "knowledge" that enhance the personal significance of a place (3). Turning to behavior, place attachment manifests in actions like "proximity-maintaining" behaviors (Hidalgo and Hernandez 274). The third dimension, place, involves examining what physical or social aspects make a place meaningful to us (Scannell and Gifford 4).

One striking aspect of the sonnet is the speaker's active pro-environmental behavior in the poem. The second stanza starts with a simile: the speaker tells the addressee they love them "as one loves the last seed saved." This line maps the image of loving someone to the source domain of a future dystopian scenario where seeds are rare, and the speaker "saved" the "last seed" (lines 5-6). Because the "seed" is precious, the speaker puts it into a "vault," this choice underscores the seed's rarity and importance. The "vault" has associations with someplace safe and underground; in this context, it corresponds with soil. The "vault," or soil, is significant as it is needed to preserve biodiversity. The metaphors related to saving the "last seed" and plant cultivation indicate the speaker's love for the planet and a protective and caring disposition. Throughout the sonnet, the speaker desperately tries to express how they love the addressee. The metaphor safeguarding the "last seed" highlights the speaker's pro-environmental attitude and active role in their environment. By describing the seed as precious and ensuring its preservation, the speaker's language and actions indicate a disposition to protect future life and biodiversity. This metaphor aligns with Scannell and Gifford's notion of "place-protective attitudes" and "environmental risk perception," which are crucial for fostering pro-environmental behavior (1). The seed metaphor thus indicates the speaker's pro-environmental behavior and dedication to the Earth.

Once the speaker planted the seed, it bears fruit, and the speaker's act of tasting the "fruit" symbolizes a tangible reward for environmental stewardship. The appreciation of the fruit deepens the speaker's connection to the place, linking it to nourishment and pleasure. The poem highlights the speaker's appreciation through the vivid description of the speaker's gustatory experience, where they say, "and thanks to your body, the taste that ripens / from its fruit still lives sweetly on my tongue" (lines 7-8). In this seventh line, it becomes clear that the source domain of the natural world to which the speaker links the addressee's "body" is the Earth or soil domain. This mapping can be inferred because soil is needed for seeds to grow to fruition. Reading the addressee's "body" as the Earth highlights their ambiguity, as women's bodies are often connoted as those in which man's "seed" can grow to fruition. The woman/Earth becomes a site of meaning because the speaker acknowledges its qualities, such as the ability to create life/fruits. The poem emphasizes the Earth's role in sustaining life by relating the "body" of the addressee to the Earth or soil. Unlike in Petrarchan sonnets, where the woman is praised for her beauty, or in pastoral poetry, where landscapes and bucolic scenes are praised for their beauty (as in Neruda's poem), Pérez's poem celebrates the Earth/woman's capacity to enable life/fruits. This shift highlights the speaker's appreciation for the Earth's capabilities and underscores a deep attachment to place and place dependence. Saving the "last seed" and enjoying its fruit reflects a commitment to protecting the planet, aligning with Scannell and Gifford's view that place meanings and experiences foster attachment.

Thus, Pérez's use of seed-saving and plant cultivation metaphors reflects a deep connection to place. The metaphorical framework compares love to protecting and nurturing a seed, highlighting its value and rarity. Unlike Neruda's portrayal of love through hidden beauty, Pérez depicts love as a commitment to ensuring the continuity of life. The "last seed," "gestating," "heritage," and "ripening fruit" all evoke connotations of human reproduction, underscoring the intrinsic value of life and environmental preservation. The poem's underlying conceptual metaphor portrays love as protective and nurturing, paralleling the speaker's commitment to the Earth's well-being. This metaphorical framework reinforces the idea that love involves protecting and valuing, reflecting the speaker's dedication to environmental stewardship.

In stanza four, Pérez adapts the traditional love metaphor of fusion to highlight the nurturing and sustaining role of the environment. The metaphors in this stanza draw on the conceptual framework discussed by Navarrete Lopez, where "Love is the unison of

two complementary parts" (116). This metaphor enacts a love scenario between the speaker and the woman/Earth, expanding traditional love ideas to encompass ecological relationships. Navarrete Lopez identifies related metaphors such as "love is fusion," "love is possessing," and "love is a journey" (116), but the most prominent in Perez's poem is the notion of fusion, expressed in the line where love survives "only in the nitrogen-rich compost of our [their] embrace." Here, Perez maps the biological necessity of compost for plant growth onto the physical act of an embrace, symbolizing emotional connection and interdependence (line 12). This imagery builds upon the seed-saving and soil metaphors introduced earlier and suggests that just as compost sustains plant life, emotional bonds sustain human relationships. The speaker's need for this nourishing "embrace" with the Earth's "body" mirrors humanity's reliance on the natural world for survival; plants provide oxygen, food, and a stable climate. The metaphor resonates with Scannell and Gifford's idea that attachment to a place offers security (5). By blending plant biology and emotional connection, Perez conveys that a healthy relationship, like a thriving ecosystem, depends on nurturing care and mutual sustenance. Just as plants need nitrogen-rich compost to grow, humans need nature's resources to meet their physical and emotional needs. Yet, the environmental crises we have caused, such as habitat destruction and biodiversity loss, suggest that we are no longer in this vital "embrace" with the Earth. This metaphor of fusion underscores how Perez reimagines traditional love metaphors, shifting the focus from human-centered relationships to analogies between human and natural processes. The sonnet suggests that, like human love, the Earth, too, requires protection, nurturing, and a deep emotional bond. In this sense, the poem emphasizes that humans are kin to the Earth as it envisions the ground and the plants needing care, just as humans do.

Interpreting the "embrace" non-metaphorically reveals a surreal image of fusion between humans and the Earth. By suggesting that their "embrace" is the "compost," as indexed with the preposition "of," the speaker prompts a literal understanding of how plants and humans require essential elements for growth (lines 11-12). In my literal reading, the "I" human speaker and the addressee become like plants or organisms that require a fusion with nitrogen compost to grow. This non-metaphorical interpretation clarifies the biological needs of plants, aligning human survival with nature's. By positioning the reader as a plant reliant on a nutrient-rich environment, the poem prompts us to see the parallels between humans and nonhumans, where the emotional

and physical connections required for human relationships are the ecological connections necessary for plant life.

In the poem's volta, the speaker uses environmental metaphors to activate the image of an erotic scenario, yet this blend generates irony. The metaphor love is fusion in line 12 morphs into love as a sexual union in the sonnet's couplet, primarily expressed through environmental imagery. The speaker realizes this metaphor through two 'to be' copular verbs: in line 13, "so close that your carbon emissions are mine," and in line 14, "so close that your sea rises with my heat." Here, the speaker and the addressee's "nitrogen rich compost" "embrace" fuses them "so close" that it initiates biogeochemical processes, notably the carbon cycle, in which they synchronously release and absorb carbon emissions into the atmosphere (lines 11-13). The decomposition of organic matter in compost mirrors the physical and emotional release of a sexual union. The final line likens this union to the melting ice and the consequent sea-level rise, an analogy to long-term climate changes, such as rising global temperatures (line 14). The "heat" symbolizes passion, while the "sea" "rise" evokes arousal, climax, and the addressee's response to the speaker's "heat" (line 14). Interpreting this last line with the addressee as the Earth's "heat" symbolizes human's carbon "emissions" that cause global warming; the rising seas are a consequence of melting ice that causes changes to the global hydraulic system. In this way, the speaker demonstrates their awareness of the Earth's reactivity to disturbances in its system.

The poem's use of environmental metaphors to evoke a scene of sexual union is ironic, as these same processes of carbon emissions and rising sea levels are associated with environmental destruction. This ironic juxtaposition disrupts the unity of the love scenario, as the metaphor of sea-level rise does not fit with the otherwise intimate imagery, such as the embrace in "compost" (see stanza 3). The speaker's attitude toward love becomes ambiguous by ending on this ironic note without solving the tension. Thus, the irony in line 14 is unstable. As Paul de Man argues, irony is not a tool for creating structural stability but rather a rhetorical process that removes the illusion of textual unity (209). The irony in Perez's poem disrupts the illusion of the poem's unity, as expressed in line 12 with the metaphor of unity. The tone in the final line conveys irony towards the intimate scene, suggesting that the speaker can no longer think solely about their sexual union with their partner without drawing parallels to the climate crisis. Their climax, symbolized by the rising sea, reflects the tipping points of the Earth's systems, such as the cryosphere.

This irony raises the question: Why would the speaker associate their sexual union with the catastrophic reality of our seas rising? It is unlikely that the speaker is dissatisfied with their physical union with the addressee, as they express “I love you” to the addressee in three different ways throughout the poem (stanzas 1-3). Instead, the title “Love in a Time of Climate Change” provokes us to reconsider the speaker’s attitude toward love. The speaker’s consciousness of rising seas, emissions of carbon, and loss of habitats in the poem renders the love they express for their (human) partner fraught with irony. Loving someone “urgently” and with as much care as the “last seed” while inhabiting a world of instability and imbalance reflects the speaker’s broader awareness of the Earth’s precarious state. Thoughts of environmental issues shade the speaker’s love for their partner.

Perhaps the speaker’s attitude to love is that it should extend beyond human relationships. The metaphors of fusion, protection, and sexual union drawn from ecological processes suggest a rethinking of love: one that draws on parallels between the commitment humans need to sustain a loving relationship and the ecological conditions plants need in their ecosystem to survive. In this way, the speaker posits that “Love in a Time of Climate Change” cannot be understood purely in human terms, as Neruda’s sonnet does, because how can love between humans be sustained if our places are being degraded and collapsing around us? Even the erotic imagery is overlaid with images of tipping Earth systems, illustrating that the speaker can no longer separate personal love from planetary crisis.

The metaphoric language in the poem illustrates the relationship between love and environmental care, fostering a sense of ecological responsibility. The metaphor of saving the “last seed” and nurturing it to fruition mirrors how humans can actively participate in preserving biodiversity. Additionally, the speaker’s appreciation of the Earth’s fruits highlights the rewards of care and cultivation, encouraging us to recognize the value of protecting and saving seeds as they belong to our basic physiological needs and preserving them for future generations. The speaker’s fusion in the “compost” further compels us to reflect on our treatment of the soil and the Earth. Just as human relationships require an emotional connection, plants thrive on “nitrogen rich compost”, reminding us of the conditions ecosystems need to thrive (stanza 4). This ecocentric metaphorical language encourages readers to draw connections between the emotional nourishment needed in a loving relationship and the ecological care necessary for the Earth’s survival. The language thus promotes us to form an attachment to the Earth.

Both Yi Fu Tuan and Knickerbocker argue for the power of language in shaping our relationship with the Earth. Tuan posits that language can help us understand the process of place-making, by imparting the “quality” of a place, a quality that includes a “moral dimension” (694). When language conveys this moral quality, it can mediate between our environment and behavior. In Perez’s poem, the moral dimension is conveyed through metaphors that link the Earth’s processes with the human body, drawing attention to the necessity of protection, fusion, and union for human relationships and ecological systems. This moral quality aligns with Knickerbocker’s concept of “sensuous poesis,” the “rematerializing” of language “as a response to nonhuman nature” (2). Knickerbocker contends that this sensuous language promotes “ecologically oriented behavior” by heightening perceptions and promoting deep thinking (2, 18). The love metaphors in Perez’s poem impart a sensuous quality; there is a sexual union scenario of the addressee’s “rising” with the speaker’s “heat,” and there is an image of a rich “embrace” in a “nitrogen-rich compost.” Indeed, the irony in the final metaphor compels the reader to contemplate the meaning of love in the context of climate change.

The poem’s blend of metaphors reflects the Indigenous principle of kinship, illustrating that love for the earth is like love for a partner. The speaker uses metaphors of protection of the “last seed” saved, reflecting what Russo notes in kin studies, a “kincentric futurity” (29). The poem’s speaker recognizes understanding what their partner/Earth needs to survive, thus illustrating their respect and appreciation for their relationship to the Earth. It demonstrates an ecopoiesis similar to what Russo finds in kin studies, one that enacts “modes of accountability” where “reparative and equitable” forms of relationship are imagined (34). This kinship framework emphasizes the reciprocity and long-term ecological relationships essential for the continuity of our places.

3.2 Kinship in Perez’s “Thirteen Ways of Looking at a Glacier”

Craig Santos Perez’s 2016 “Thirteen Ways of Looking at a Glacier” is a recycling of Wallace Stevens’s famous 1954 “Thirteen Ways of Looking at a Blackbird.” Perez’s recycling shifts the subject of Stevens’ poem, *The Blackbird*, to the subject of the melting glaciers, a major environmental issue in our current world. Stevens’ poem has received much scholarly acclaim and critical attention. According to William Keast, one of the main aspects that have puzzled scholars about the *Blackbird* poem is that the

stanzas have an irregular structure, and the thoughts between them appear disconnected (48). Indeed, Keast seems to agree that, in general, Stevens' poems are difficult to analyze (48). Understanding key elements of Stevens' poem enables a comparison between the Blackbird and the Glacier poem. A quick comparison between the two poems illustrates that the Glacier poem retains several aspects from Stevens' poem, such as the thirteen stanzas, its irregular stanzaic structure, syntax, and certain words, such as "O," "I do not know [...]" and "Or just after." Aside from the apparent thematic difference between Stevens' and Pérez's poems, relating the naturalist poetic thought inherent in the Blackbird poem to Pérez's poem illuminates how Pérez recycles naturalist elements from Stevens' poem 20th-century poem to reflect the current realities of our world.

In Stevens' *Poetry of Thought*, Frank A. Doggett argues that Stevens' rejects the viewpoint of transcendence and primarily subscribes to the naturalist view, as evidenced in the Blackbird poem. For Doggett, Stevens expresses this naturalist view in a way "that is usually little more than a sense of the reality of things about him-things moving and changing in the flux of their time and experience" (16). Further, the scholar also says that his poetry emphasizes how the human is just one element among many others (17). The blackbird poem conveys this aspect when its speaker says, "A man and a woman and a blackbird /Are one" (stanza IV). Further, the former naturalist view is also accurate for the Blackbird poem in that the speaker conveys their awareness of our world as constantly in flux. William Keast's analysis of Stevens' poem illustrates how its speaker fears the terminality of human life; this fear stems from observing the constant changes in nature (53). For Keast, the speaker in the poem resolves this fear of death by looking at the blackbird in various ways. The "blackbird" symbolizes motion and the Earth's natural rhythms (Keast 57). Stevens' speaker holds imagined constructions of the bird in their mind due to their yearning for stability and permanence (63). However, finally, they realize that to understand motion and change in our world, they must submit their mind to nature and its rhythms (63). Stevens' speaker does this by putting the "blackbird" into its natural setting "in the cedar limbs." This submission to nature allows the speaker to find "tranquility" at the poem's end (63). Indeed, Doggett argues that Stevens' naturalism expresses "allegiance" to the Earth and centers on celebrating reality (ix).

Pérez's poem retains aspects of the naturalist views found in Stevens' poem, amplifying them with apocalyptic rhetoric to underscore that we are living in a crisis and further

environmental disasters might be inevitable. While Stevens' blackbird represents nature and its natural rhythms, Perez's glacier symbolizes nature in crisis. Although the speaker primarily refers to the "glacier" in the singular, I argue that the glacier represents all glaciers and climate change-induced environmental change. Perez's ecocentric glacier poem conveys the naturalistic view by grounding its depictions of melting glaciers in empirical science and facts. For instance, Perez's article about recycling poems mentions that he "attempted to look at glaciers in different ways to process what [he] had learned about them." This way, Perez uses data and current scientific knowledge to portray the state of the glaciers. Some lines in the poem state in a matter-of-factly what the glacier does: it "absorbed greenhouse gases" and "floods the streets" (stanza 3;7). The poem also captures the naturalist aspect of human interactions with their environment and the element of the human as connected to all other elements in our ecosystem, as the speaker says humans and "glaciers" are "kin." In this sense, Perez's naturalist views in the poem also convey a sense of "allegiance" to the Earth, as the speaker establishes how we are part of the ecosystem. It raises the question of why we would not want to protect and care for things in our places if they are "kin" to us.

And yet, Perez shifts Stevens' message about submitting the mind to nature's rhythms to fit the reality of the 21st century. Perez's message is that the natural rhythms are in disarray; there is "[...] summer all winter" (stanza 13). The poem communicates an urgency for awareness of the severity of the dramatic changes around us and the inevitability of oncoming disasters. Perez carries the element of fear from Stevens' poem into his own. However, it is no longer a fear of inevitable death; it is a "terror" of the "changes" occurring in our environment and the fear of what will happen when the "glacier fits / in our warm hands" (stanza 5). This way, Perez uses apocalyptic rhetoric to amplify the naturalist view. It adds an emotional and ethical urgency to the reality of our melting glaciers, encouraging the reader to make a cognitive change in that we should not be indifferent to the dramatic changes in our natural world and that there are possibilities for action. Although the poem ends with a tone of inevitability and little hope for the future of the glaciers, the naturalist language helps the poem avoid being emotionally fatiguing. The poem encourages us to notice the state of our environment and recognize ourselves as "kin" with "glaciers," prompting us to consider our embeddedness with other elements in our ecosystem and that we are a causal element in our environment.

“Thirteen Ways of Looking at a Glacier” has thirteen stanzas, which can be grouped into four central thematic units; these units underscore the layering of the apocalyptic rhetoric on the naturalist nature of thought in the poem. For instance, the first unit consists of stanzas 1-4, which contain a report on the services of glaciers for the planet and establish humans' kinship with glaciers. Stanzas 5, 6, 8, and 9 signal apocalyptic writing. In those stanzas, the speaker expresses the magnitude of the loss of glaciers and their fear of the implications of the melting glaciers for all on our planet. Stanzas 7, 10, and 11 elaborate on human reactions to the melting glaciers. Finally, the last unit consists of stanzas 12-13, emphasizing the inevitability of the loss of glaciers. Through objective observations grounded in empirical knowledge, the speaker conveys the significance of cryosphere regions and the changing state of the glaciers, emphasizing their role in the ecosystem and the consequences of their melting for the planet.

In the first four stanzas, an objective, observant, explorer-like voice emerges; their attention is entirely attuned to their immediate environment. The first stanza begins with an observational description of a polar region. The speaker's eye settles on the "starving polar bears." This observation of the "starving" condition of the polar bears indicates the speaker's objective and critical view of their immediate surroundings. An article from *The Guardian* published in 2024, titled “*Polar bears risk starvation as they face longer ice-free periods in the Arctic*,” illustrates how the first line presents our actual reality. “Among” these famished polar bears, The only moving thing / Was the edge of a glacier.” By using the motion verb "moving" in the present progressive, the speaker alludes to the current ongoing melting of the “edge” of the glacier, foreshadowing the glacier's disappearance and drawing the reader's attention to the current state it is in. In stanza 3, the speaker observes another aspect of the glacier, connecting it to its services for the planet. For instance, the speaker suggests that the glacier plays a role in our ecosystem by saying that it "absorbed greenhouse gases," this statement is grounded in the fact that glaciers store CO₂, an assertion J.L. Wadham and colleagues provide evidence for in their article “Ice sheets matter for the global carbon cycle.” When glaciers melt, they release CO₂ into the atmosphere. These descriptions that impart knowledge and awareness about the state of the polar region in the first and third stanzas indicate the speaker's sense of place in the polar region.

In stanzas 2 and 4, the speaker employs the naturalist view that humans are just one element among many others. In stanza 2, a public voice emerges from the quiet observing explorer-figure. A "we" voice states, "We are one ecology." This "we"

pronoun indicates an intermental unit, where the inclusive pronoun gives the impression that the speaker directly addresses humanity. The content of this address is located in the relational clause in the first line of stanza two, which expresses the relationship between “humans and animals and glaciers” as “one ecology” as indexed by the to-be verb. The relational clause type is extended in the last two lines, with a simile, where the “ecology” is likened to the “planet” (stanza 2). With these relational clauses, the speaker thought embodies the principal meanings of ecology, which is the “study of the interrelationships among organisms and between organisms, and between them and all aspects, living and non-living, of their environment” (“ecology”). In this poem, the speaker establishes relations between the natural and human world. The effect of the speaker’s public-sounding statement that humans are “kin” with “glaciers” and “animals” is that the reader gets the sense that the speaker is actively trying to convince the addressee that this is a fact.

In stanza four, the speaker continues to intensify the relationship between the natural and human world, stating that “humans and animals and glaciers” are “kin.” Using another “and” rather than the simple Oxford comma slows the reading down and lends weight to the “and” or the connectedness of these three agents. The speaker’s choice of words to express their relationship to one another is of great interest. The word kin belongs to the isotopy of ecology, which includes the lexical items “biosphere” in stanza three, the “planet” in stanza two, and “humans,” “animals,” and “glaciers” in stanza four. The quatrain in stanza four, with its two perfect alternating rhyming lines, “are kin,” and the stress on the monosyllable “kin” is stressed and end-stopped, suggesting the emphasis the speaker wants to place on the interconnectedness between these three elements. The combination of the rhyme patterning, syntax, and punctuation underscores the speaker’s intention of conveying that “humans,” “animals,” and “glaciers” are all part of a nuclear family. The speaker created their own kinship terms that go beyond the traditional definition of the nuclear family, such as mother, father, son, and daughter, extending our associations with the word “kin” to include relationships with nonhuman life in our biosphere.

This kinship towards glaciers indicates the speaker’s strong bond with them. Indeed, the cognitive content in these first four stanzas shows how the speaker’s mind is filled with statements that convey their beliefs of the relationships between humans, glaciers, and animals, that we are all elements of “one ecology” and “part of the biosphere.” By extending the concept of kinship to glaciers, the poem underscores the idea of a shared

existence. But a line from the third stanza that says, “we” humans “are a large part of the biosphere” can be added here to complete the argument that although we are only one element in our biosphere among many others, humans make up a “large part” of it, that is, humans are contributing immensely to the emission of greenhouse gases, which is causing higher temperatures and consequently causing the glaciers to melt. This line implicitly refers to the empirical knowledge that the dramatic glacier loss is anthropogenic. Essentially, this line from the third stanza combined with the fourth stanza shows how the speaker aims to establish that we are “kin” with other elements in our ecosystem but that humans are primarily responsible for destabilizing our planetary systems.

In the fifth stanza, the speaker’s thoughts shift to apocalyptic rhetoric, using the emotion of fear to highlight the urgency of the melting glaciers and the dramatic consequences of climate change. The speaker attributes themselves and others, as indicated by the “we” pronoun, with a fearful state of mind. For instance, the speaker says, “We do not know which to fear more, / The terror of change / Or the terror of uncertainty, / The glacier calving / Or just after” (stanza 5). Indeed, this stanza is unique because it is the only instance in the poem that explicitly refers to the emotion “fear.” The stanza following the one about the interconnectedness of humans and nonhumans seems like a fragment, making it difficult to understand why the emotion emerged. However, tracking the speaker’s earlier activity of observing their surroundings by watching the “moving” edge of a glacier, it becomes clear that the emotion arose due to their awareness that the glaciers are melting. The speaker’s “terror of change” of the “glacier calving” is logical and justifiable because if they all melt, it will cause a chain of processes that contribute to further global warming and increased sea levels. After recognizing that humans and glaciers are “kin” in the previous stanza, the speaker is now expressing fear of the implications of the melting glaciers for humans, animals, and glaciers. The speaker feels a “terror of change” of the dramatic ice mass loss from the glaciers (stanza 5). According to Palmer, emotions include cognitive judgments on the “state of affairs in the world” (Palmer 162). In this stanza, the speaker signals a negative evaluation of the changes they perceive in the glacial system with the noun “terror.” This strong dissatisfaction suggests the speaker’s disposition to mitigate the melting glaciers, especially since the speaker sees themselves as “kin” to them and because they are aware that humans are responsible for the glaciers calving. Indeed, Oatley states that “emotions can communicate the need for cognitive change” (412). This change might

be manifested in Palmer's argument that emotions can influence carrying out goals and achieving things (160). Thus, the question remains whether the speaker's fear will drive them to attempt to mitigate climate change.

The apocalyptic imagery and symbolism in stanzas six, eight, and nine underscore the magnitude and irreversibility of glacial loss, setting the groundwork for Perez's critique of humanity's indifference and their inadequate responses in stanzas seven, ten, and eleven. Stanzas six and nine contextualize the speaker's "terror of change" and "calving" glaciers, where the detached speaker more concretely reports what is occurring in their environment, stating that the "The mass of the glacier / Disappears, to and fro," and its "glacial terminus broke," releasing "Icebergs" that "fill the vast Ocean / With titanic wrecks" (stanzas 6, 9). The choice of the word "titanic" in this context is slightly ambiguous. Titanic, the adjective, can also be interpreted as an implicit allusion to one of the most historic shipwrecks, the sinking of The Titanic passenger ship in 1912, where the wreck has never been raised to the surface. The third and fourth lines of the sixth stanza complete our shared image of the Titanic sinking and vanishing; that is, the glacier "Disappears, to and fro," just like the Titanic did in 1912. The sinking of The Titanic is also associated with the extremely high death toll, which was a consequence of the crew of the ship not informing their passengers that there was danger (*The Gilder Lehrman Institute of American History*). Overall, the ship's sinking shocked the world as it was the largest passenger ship then and was believed to be unsinkable. Perhaps this aspect of the poem draws our attention to how many people today are unaware that the "200,000" glaciers could eventually melt. Using the present tense in the fourth line of the sixth stanza to conjure the image of one glacier disappearing into the ocean, the speaker draws to our attention that the glaciers are disappearing. Moreover, like the Titanic, whose wrecks still lay at the bottom of the ocean, the glacier's "calving" is irreversible. Not only are the "melting" glaciers irreversible, but the breaking of their "terminus" signals for the speaker, "the beginning / Of one of many waves." (stanzas 5;9). These "waves" caused by glacier mass calving and falling into the ocean are another figurative device the speaker uses to foreshadow several adverse events that will follow due to the fractured glacial system (stanza 9).

The speaker alludes to the threat the "waves" pose (stanza 9). For instance, in the sixth stanza, the speaker uses the metaphor of "The threat/ hidden in the crevasse" to symbolize the crack in the glacial system and that this crack poses a "threat" not only to the glacial system but to our "ecology." Moreover, the poem suggests that the

interconnectedness of elements such as glaciers, humans, and other nonhuman beings is part of this ecology. If the glacial system reaches its tipping point, the poem implies that the repercussions of the disappearing glaciers will impact the entire planet like "waves" (stanza 9). In stanzas six and nine, the image of a shipwreck, menacing waves, and glaciers losing their "equilibrium" seems to convey the terrifying experience of the "calving" glaciers to the reader. However, the detached nature of the speaker's voice, devoid of the first person, and the use of figurative language ensures that the apocalyptic writing does not cause emotional fatigue.

In stanza eight, Perez's apocalyptic imagery is intertwined with the poem's naturalist framework, creating a striking tension between intellectual detachment and emotional urgency. The glacier, described as "involved" in the same knowledge as the speaker, reflects a shared fate and awareness of the catastrophic changes in the natural system. The speaker's reference to "king tides" and "lurid, inescapable storms" connects the current reality of climate change to the growing threat of these extreme weather events. However, the glacier's "involvement" suggests agency, as though it is not a passive victim to human activity but a dynamic, animate entity within the ecosystem that is "melting" and "rumbling," impacting cities. This anthropomorphization challenges the reader to empathize with the glacier, not simply as an emblem of crisis but as a fellow participant in the planetary system. By portraying the glacier as having awareness in combination with scientific understanding, Perez amplifies the urgency of the speaker's message while maintaining a tone that avoids emotional fatigue, a hallmark of much apocalyptic rhetoric.

In stanzas seven, ten, and eleven, the speaker's emotional tone of lament highlights humanity's indifferent and inadequate response to the melting glaciers. The speaker's voice in stanza seven is critical, questioning society's response to rising sea levels. The archaic vocative "O" adds emotional weight to the speaker's cry, addressing the "vulnerable humans" and asking them why they "engineer sea walls" if the glacier "Already floods the streets" (stanza 7). This exclamative, combined with two rhetorical questions, underscores the irony of attempting to control nature while ignoring the root cause: the melting glaciers. The speaker's lament is further illustrated in stanza 10, where the poem critiques superficial responses to the disappearing glaciers. The speaker points out how when the world heard that glaciers were calving in polar regions, "tourists" became desperate to have a glimpse at these disappearing ice monuments, and oil companies viewed this event as an opportunity to explore the "poles / for offshore

drilling” (stanza 10). This juxtaposition reflects a disturbing reality: rather than addressing climate change, humans indulge in superficial experiences or exploit the areas losing glaciers. The term “last chance tourism,” as noted by Austyn Gaffney in *The New York Times*, mirrors this behavior, where people rush to see calving glaciers, oblivious to the long-term implications. In this way, the speaker does not predict catastrophic future events; instead, the poem is focused on presenting the facts of our immediate reality, urging us to recognize that we are already living in a climate crisis. The rhetorical questions in these stanzas point to humanity’s failure to grasp the immediacy of the situation, echoing Doggett’s observation of the “lag between event and consciousness of event.” (58). In this poem, this lag is symbolized by tourists and oil drillers who remain unaware of the implications of melting glaciers, even as these flood our “cities” (stanza 7). The connection between these stanzas and the Titanic symbolism from stanza six further emphasizes the speaker’s urgency. Unlike the crew of the Titanic, who refrained from informing the passengers until it was too late, the speaker in this poem is intent on warning the “vulnerable” passengers of our planet about the rising seas. Through apocalyptic rhetoric, the speaker implores us to use our senses to “see how the glacier / Already floods the streets” (stanza 7).

Perhaps it is humans’ indifference to the melting glaciers and the consequences for all of us that is the source of the speaker’s “terror,” it drives them to take action and protect the world. The speaker’s fearful mental state is not limited to the “calving” glaciers but also encompasses the apathetic human response to this crisis. Their ironic tone in stanzas seven, ten, and eleven explains why the collective “we” speaker takes action and “blocked” the people exploring the poles for “offshore drilling” to prevent further loss of the glaciers (stanza 11). The speaker’s fear of glaciers “losing” their “equilibrium” prompts a cognitive change; it fuels a sense of activism and attachment to the entire planet. This connection between emotion and action aligns with place attachment theory, which posits that meanings, attitude, and attachment play critical roles in fostering “willingness” to maintain a place (Richard Stedman 561). In the poem, the speaker’s emotions and actions revolve around glaciers, reflecting a deep place attachment. In this way, the speaker’s fear in the poem indicates their disposition to urgently protect the remaining glaciers, taking personal and collective action to stop others from exploiting the glacial region carelessly. This activism is a direct response to the emotional attachment to the glaciers and a critique of those who fail to recognize the urgency of the crisis.

The final two stanzas exemplify how the speaker's naturalist view embedded in the poem ensures that the tone of the stanza does not induce panic. The speaker's observations are aligned with scientific knowledge and projections about climate change. In stanza twelve, "the sea is rising" directly reflects scientific consensus on the consequences of glacier melt on global sea level rise. According to *the Intergovernmental Panel on Climate Change* (IPCC 6), rising sea levels are one of the most visible impacts of glacier retreat, echoed in the speaker's assertion that "The glacier must be retreating." The speaker's language here is grounded in the present moment's reality, using simple, factual words that heighten the sense of inevitability. The shifts in tense in stanza thirteen are significant, emphasizing the ongoing and continuous nature of glacial melt. The speaker reflects on the abnormal seasons, stating that it "was summer all winter" and "it was melting" (stanza 13). The past progressive tense, "it was melting," captures the glaciers' gradual yet unstoppable retreat. In the third line of the thirteenth stanza, the speaker shifts to the going to-future tense, "And it was going to melt," indicating the speaker's belief that the melting is inevitable. The tone remains detached and direct.

While the speaker refrains from directly declaring doom, the restrained scientific tone evokes a quiet foreboding, much like the first stanza. The concluding image of the glacier fitting "in our warm hands" conveys a literal and metaphorical disappearance of the glaciers. The glacier's shrinking symbolizes the larger elements of our Earth system that are tipping. The phrase "in our warm hands" not only illustrates the physical warmth of humans but also implies that the warmth or human activity is responsible for the glacier's retreat. The speaker's projection shows that the speaker is anticipating a world drastically altered by climate change. In this sense, the speaker recycles Steven's theme of nature in flux and fears of death to thematize how the extreme weather events and glacial melting are anthropogenic and need awareness of these changes and their implications for all on the planet before all the glaciers disappear and fit "in our warm hands."

Lawrence Buell asserts that the "apocalypse is the single most powerful metaphor that the contemporary environmental imagination has at its disposal," arguing that it heightens our awareness of the environmental crises by evoking a "sense of crisis" (285). While this rhetoric can be emotionally exhausting, Keller turns to the ideas of Frederick Buell's argument that we are living through an ongoing apocalypse, with environmental crises becoming the norm (177). He says we should abandon apocalyptic

writing for a “sadder realism,” one that prompts us to recognize that we are living “in a damaged world” (205). Accepting this realistic view of our planet means being aware of our “embeddedness” in ecosystems and the rising environmental risk (205). Buell posits that this awareness can prompt us to adopt environmental caring practices (205-206). However, Keller argues that abandoning the apocalyptic rhetoric “does not preclude anticipation of dramatic catastrophe on top of the creeping degradations one already inhabits” (22). Keller’s analysis of the apocalyptic rhetoric of two poets, Jorie Graham and Evelyn Reilly, demonstrates that by avoiding its pitfalls and critically exploring the mode, the apocalyptic rhetoric can help to produce “action” and draw our “attention” to the urgency of the crisis (41). Keller argues that these two poets produce a productive response by using “distinct modes of pleasure as a counterpoint” to the emotionally exhausting language of apocalyptic writing (20). For instance, Keller says Reilly mixes humor while paying attention to living in the ongoing crisis and high risk of imminent disaster (20).

Perez’s poem aligns to some extent with the productive aspects of this apocalyptic rhetoric, as discussed by Keller. The poem communicates the gravity of living in a time where the complete loss of glaciers and the risk of further environmental disasters looms as a real possibility. However, unlike the humor seen in Graham’s or Reilly’s work, Perez avoids a mode of pleasure. Instead, it tempers the fear of environmental collapse through naturalist language, grounding the poem in scientific observation using a restrained, reflective tone. This balance ensures that the poem avoids becoming a work of “unmitigated sadness” while confronting our reality of living in the climate crisis. By blending naturalist observations with apocalyptic rhetoric, the speaker in the poem draws the reader’s attention to rapidly melting glaciers through empirical-like observations. The poem presents glaciers as dynamic elements that play a role within our shared ecosystem. The poem highlights that glaciers are storehouses for carbon, and their melting has widespread consequences for the planet. By depicting the speaker’s fear for them, readers are encouraged to reenact the speaker’s fear of the disappearing glaciers. Thus, naturalist language intertwined with apocalyptic rhetoric reflects the dual challenge of engaging people intellectually and emotionally. More scientifically grounded knowledge about glaciers and their role in our environment is needed, and a slightly emotional tone helps draw our attention to the urgent need to stop the glaciers from melting. In the context of the poet’s Indigenous background, the poem might reflect their fear of the rising seas for the poet’s homeland, Guam, which lies in the

Pacific. Thus, the poem encourages readers to empathize with those living near the coast, especially in the Global South.

4. Kane's Poems on Losing Place

Kane's poems "Epithalamia" and "Hyperboreal" evoke startling images of the radical transformations occurring on the planet. Jen Rose Smith argues that at the heart of these poems lies the topic of the threat of "cultural and biological extinction" for the Inupiaq people and the "contested place of the human" on Earth (75). Building on this exploration of existential threats, Kane's work reveals interconnections between language, land, and identity. Kane's "Epithalamia" and "Hyperboreal" use scientific language such as "butane," "wolfbane," "snowmelt," and lexical sets associated with the isotopy of environmental degradation, where "roofs" are "strung / with hot wire" and the "glacier's heart of milk" is "loosed." Her poetic landscapes depict rising global temperatures and sea and glacier ice decline.

For instance, in a 2022 interview, Anastasia Nikolis articulates how Kane's poetry examines "the profound and complicated, but also dynamic and changeable ways the body, the land, and language relate to one another." Kane clarifies that these aspects are strongly interrelated in her work because they are survival aspects for all Inuit people ("Interview"). For Kane, language counteracts the loss of the Alaskan landscape by illustrating the connections between the body and the land.

"Epithalamia" depicts a failing relationship between humans and the environment. The attributions in the poem reveal the speaker's recognition of their implication in global warming. Yet their lack of perceived possibilities for changing their behavior illustrates the speaker's difficulty in overcoming the use of fossil fuels, which leads to their loss of emotional attachment to the Earth. "Hyperboreal" transports readers to a north where there are "a thousand / Summer days." The speaker's observations of the shifting landscape in the far north from a frozen icy place into "mud" defamiliarizes the reader's mental image of the Arctic. The poems encourage readers to reflect on their contributions to the climate crisis by imagining scenarios of losing the cryosphere and attachments to place.

4.1 A “Rocky Marriage” in Kane’s “Epithalamia”

The title of "Epithalamia" refers to a lyric genre originating in Ancient Greece, traditionally used as a wedding song to celebrate and bless the union of the bride and bridegroom. In classical epithalamia, poets invoke blessings and predictions of happiness for the couple's future. Sappho, the Greek lyric poetess, is famous for her epithalamia. Amanda Kubic states that Sappho often depicted the bride's transition from girlhood to womanhood through certain rituals (306). Eleni Contiades-Tsitsoni characterizes Sappho's epithalamia as graceful and cheerful, evoking a tone of optimism and unity (68). Yet, as the British poet Adam O'Riordan notes, modern poets have reimagined this genre to "defamiliarise, question, and subvert" traditional meanings associated with marriage and weddings ("What Makes a Poem"). In a notable example, Kubic's analysis of H.D.'s poem "Hymen" illustrates how H.D.'s marriage song, which contains fragments of Sappho's chorus, subverts the traditional epithalamium genre. Kubic argues that H.D.'s "Hymen" does not "celebrate heterosexual marriage"; instead, it focuses on a "creative" union between the bride and the chorus members, suggesting the possibility of a love that is "plural and communal" (302).

Similarly, in "Epithalamia," Kane reinterprets the traditional wedding song to address a strained relationship between lovers and humans and between the Earth itself. Kane manipulates scale to suggest how individual actions and weak emotional bonds cause the environmental degradation surrounding us. Although Kane's poem references the themes of marriage, it markedly departs from the joyful tone and musicality of classical epithalamia. The lack of rhyme scheme in Kane's poem contrasts with the typical musicality of famous wedding poems, such as Edmund Spenser's "Epithalamion," filled with end rhymes. The lack of a consistent rhyme conveys a fractured tone reflecting a disrupted human-nature relationship. Kane's poem adopts a pessimistic tone rather than offering optimistic predictions of happiness for the union of this relationship; indeed, it presents a sobering view of a bond weakening between humans and the nonhuman world.

In this brief thirteen-lined poem of four stanzas, the "I" speaker reflects on their deteriorating connection, describing their physical discomfort as they inhale "diesel" fumes under the intense heat of "hot wire" strung across the "roof." This physical unease parallels the speaker's emotional dissatisfaction and disconnection. The speaker's

reflection on their and others' use of fossil fuels like “diesel” offers explanations for possible reasons for this negative state (line 2). The ending of the poem predicts a negative future for the relationship between the speaker and addressee, as the speaker says that their “love” is now “gaunt” (lines 10 and 12). Thus, Kane uses the epithalamium genre ironically because the speaker’s loss of love for their partner reflects a weakening emotional tie to the Earth itself. By examining the attributions and identifying the speaker’s mental state, this analysis shows how Kane’s poems expose humanity’s imbalanced relationship with nature and the harmful effects of fossil fuels on humans and the Earth. Her poem blurs the boundary between individual actions, such as filling the tank with “diesel,” and larger planetary consequences, like “rain in a frozen season,” positioning readers to contemplate how environmental degradation is intricately tied to human activity.

The poem presents an ambiguous perspective by questioning who the speaker represents in this deteriorating relationship, inviting the reader to reflect on their connection to the planet. The speaker begins in the first person with “I did not stand a chance,” establishing a personal tone, where the speaker, one of the participants, speaks about their marriage or the relationship between the natural world and humans. Thus, the poem leaves it open for interpretation whether the “I” speaker represents humanity's perspective on their relationship to Earth (addressee) or the Earth’s. By creating this ambiguous speaker, the poem encourages the reader to consider their relationship to the planet and reflect on the radical environmental changes from Earth’s perspective, positioning the reader to empathize with the planet. Due to the cognitive activity in the poem, it can be inferred that the poem utilizes a human speaker; thus, the perspective of the human is utilized. Toward the poem’s conclusion, the first-person perspective shifts to the collective pronoun “our” (used twice in lines 9 and 10), indicating that the speaker’s mind reflects on shared experiences within the relationship. For instance, the speaker points out how their “roof” is “strung / with hot wire,” that is, that their shared living space is burning, thus showing an awareness that the speaker and addressee (human and planet) are implicated in the environmental transformations occurring around them. The use of “our” indicates that the poem is not a monologue, the speaker is indirectly addressing their partner. This shift in perspective invites the reader to see the Earth as a shared home, reflecting on how its collapse, represented by their failing love, deeply impacts both the speaker and the addressee.

The cognitive writing in the first two stanzas reflects the speaker's negative mental state. Beginning with an intense sensory experience, the speaker reacts to the odor of fuels at a gas station in the poem's first line. The smells trigger the fragment of thought: "Butane, propane / and lungful of diesel" (1-2). The first two words are harsh plosive sounds (/b/, /p/), and they rhyme, emphasizing the harshness of these agents. Listing and inhaling these three fossil fuels seems enough to jolt and repulse the speaker's senses and cause them to choke, as inferred from their statement, "I did not stand a chance," in the third line. This statement implies that the gases or fumes caused the speaker to suffer and threatened their well-being. These fumes are poisoning them or may have poisoned them, as suggested by the past tense "did." This first stanza immediately indicates the speaker's negative physical and mental state.

The speaker's habit of using "diesel" directly impacts their well-being. The poem describes the speaker inhaling a "lungful of diesel." Since there are few contexts in which one would inhale a large amount of diesel, the reader can infer that the speaker is fueling their tank. After inhaling the fuels, the speaker reflects on their consumption of fossil fuels: "Always with poison/breath, bill, responsibility" (lines 4, 5). The speaker attributes the consumption of these fuels negatively because they claim that they contain "poison/breath," that is, the fuels release poisonous gases. The three explosive sounds from the plosives /p/ for "poison" and /b/ for "bill" and "breath," combined with the alliteration of the /b/ and /p/ consonants in lines four and five, imbue these words with a semantic charge that emphasizes the idea of toxic gases being emitted into the air. These gases contribute to pollution and cause serious harm to the lungs of those who inhale them. These two lines, with their explosive sounds, highlight the association between human activity of using fossil fuels and "poison/ breath," or greenhouse gas emissions. The speaker's release of 'poison breath' drives global warming. The "poison breath" is a metaphor for humanity's impact on the planet, where each individual action of fossil fuel use represents an exhalation, collectively contributing to global warming.

In the second stanza, the speaker's statement: "Always with poison /breath, bill, responsibility:/a man with rote hands," illustrates how the speaker recognizes not only that fossil fuels are poisonous, they recognize their complicity in releasing the "poison breath." The adverb "Always" suggests the frequency with which the speaker fuels their tank and the repeated sensations they experience. In line six, the speaker compares the action of using fossil fuels to a "man with rote hands," highlighting how they view their actions as learned but mindless and mechanical. In this sense, the speaker's introspective

reflections convey their awareness of their toxic habit of consuming fossil fuels without fully understanding why they continue it; in turn, their habit weighs upon their conscience because they “Always” feel “responsible” for releasing “poison/breath” into the atmosphere, because they know that it is detrimental for the planet and themselves, causing them to “not stand a chance.”

Despite the speaker’s recognition of their contribution to releasing “poison breath,” the poem offers no cues that they will stop using them, thus indicating that the speaker has a dispositional tendency to experience dissonance. Leon Festinger posits that cognitive dissonance occurs when a person’s cognition and behavior contradict. The speaker’s articulation of dislike of using “Butane, propane,” and “diesel” illustrates their belief that they have harmful effects, and they acknowledge their “responsibility.” Yet, they continue to “Always” pay the “bill,” using fossil fuels like a “man with rote hands,” with no textual indication anywhere in the poem that they will reduce their dissonance and change their behavior. This portrayal of reflection on human use of fossil fuels inspires the reader to reflect on their dependence on fossil fuels and consider why they should continue using them like “a man with rote hands” when there is wide-spread knowledge that their use is detrimental to the climate.

The speaker’s disposition to experience dissonance can be attributed to not perceiving any possibilities in their environment that allow pro-environmental behavior. Affordances Theory highlights how environmental constraints may limit the speaker’s ability to engage in pro-environmental behavior. In David Herman’s analysis of minds in modernist narratives, he adopts the enactivist approach, which views mental states “as both shaped by and contributing to action possibilities” (257). These possibilities for action are better known as what psychologist James Gibson calls “affordances,” which Herman explains as opportunities for action we perceive in the environment (257). Indeed, Herman says that perception primarily explains people’s actions. In place-attachment studies, scholars such as Christopher M. Raymond, Matteo Giusti, and Stephan Barthel use affordances theory to argue that human-environment relationships, such as cultural ecosystem services, are produced not only in the mind but through a web of relations between the body, the environment, the mind, and culture through time. These scholars emphasize that the co-production of cultural ecosystem services needs to be conceptualized as an embodied ecosystem guided by the Affordances Theory (779). They assert that this approach has implications for guiding environmental management (794). Their approach helps demonstrate how there is no “seperateness”

between culture, psychological processes, and the ecosystem (789). Raymond and colleagues argue that this approach thus demonstrates that culture is “nested in all aspects of human perception and action within environmental settings” (789). For the context of this poem, embodied ecosystems thus show how the culture of fossil fuel consumption is rooted in consumers’ perceptions of available actions in their environment.

Raymond and colleagues’ embodied ecosystem approach helps explain the speaker’s dwindling attachment to place and the limited action options within their environment, ultimately reflecting the deteriorating state of their marriage. Raymond and colleagues define “embodied ecosystems” as being “relational,” “situational,” and “dynamic” (794). For them, these ecosystems are ‘relational’ because ecosystems encompass a web of relations between the mind, body, and environment (794). They are ‘situational’ because perceptions of possible actions in the environment can actualize at any time (794). They are ‘dynamic’ because values people attribute to the ecosystem through perception-action processes can change (794). In “Epithalamia,” the speaker’s cognitive dissonance and lack of change in their behavior can be explained through the lack of perceived possibilities they perceive in their physical environment to enact pro-environmental behavior. The speaker is aware of the widespread consumption of fossil fuels; they report how our “roofs” are “strung/ with hot wire” and are aware of the impact of using these fuels on our climate, as there is “rain in a frozen season” (lines 8-10). The poem implicitly conveys that the widespread use of fossil fuels contributed to collective impacts on the climate: “rain in a frozen season.” However, the speaker does not seek to reduce their cognitive dissonance. They do not indicate that they will stop using “diesel” or discourage others from heating their roofs “with hot wire” (lines 2,10). Their thoughts in the first three stanzas only report the state of their environment and their toxic habits; the poem presents an ambiguous perspective by questioning who the speaker represents in this deteriorating relationship, inviting the reader to reflect on their connection to the planet. The speaker seems constrained by their environment to take pro-environmental behavior. With its tight trimeter structure, the form reflects this sense of constraint. The speaker’s inability to change their behavior is explained by the interplay of the relations between the culture, action abilities, and environment features, which, according to their perception, presents no opportunities for action. There is a global dependence on fossil fuels; thus, the speaker perceives no alternative to other energy sources, as fossil fuels are the primary energy source. The speaker’s sense of

constrained agency contributes to the planet's degraded state. This perception indicates a weakening bond to place, and within the context of this wedding poem, it suggests that the speaker's marriage 'is on the rocks.'

In this sense, the speaker attributes the deterioration of their relationship to their own harmful behavior and the lack of opportunities for action in their social context; with no perceived possibilities for action in the environment, the speaker conveys that they no longer see any benefits for their partnership. For instance, the speaker reflects on the negative aspects of their environment. They are choking because of the fumes around them and observe how climate patterns have become disrupted, exemplified by "rain in a frozen season" (line 8). They convey the sense that their temperatures are burning hot, as their "roofs" are strung with hot wire" (lines 9-10). Through the lens of affordance theory, the final line, "there is // nothing to get," confirms the speaker's feelings of detachment from the planet, as they see no value obtainable from a deteriorating environment. This sense of finality reflects their perception that the natural world, like their relationship, is beyond repair. The poem uses the concept of "exchange," often associated with mutual benefit, to emphasize human behavior's impacts on the environment. Here, "everything in exchange" carries a negative connotation, shifting from a reciprocal act of "giving and receiving" to a sacrifice, where the speaker's reliance on modern conveniences comes at the cost of a toxic environment filled with "propane" fumes ("Etymology of exchange"). In this way, the poem shows how human actions are interconnected with our ecosystems, shedding insight into the speaker's relationship with their partner.

This breakdown in the speaker's connection to place and environment is further revealed through the observation that neither they nor the natural world is "physically capable of standing / a chance" against this decline (line 2). The imagery of "lungful of diesel" captures the ecosystem's inability to sustain its services, just as the speaker's environment deteriorates into "roofs / strung with hot wire" and heat (lines 9-10). These connections reflect a misalignment within the speaker's embodied ecosystem: their critical disposition toward fossil fuels contrasts with their reliance on these same conveniences, highlighting a disconnect between their mind, environment, and body. This misalignment fosters dissatisfaction and a sense of diminished value, leading to the speaker's detachment from both their partner and the environment. Ultimately, the poem illustrates how negative feedback loops emerge when one perceives no possibilities for agency or change, further eroding their sense of attachment.

The final thought in the poem, in lines 12-13, illustrates the speaker's resignation, signaling a mutual detachment between themselves and the planet, suggesting that neither benefits from their 'marriage' any longer. The poem's final lines reveal the speaker's state of mind: "Our love, / what was, an impression / of light, gaunt: there is // nothing to get." This expression conveys a deep sense of loss of love for both partners; their love is not what it once was. It is thus inferred that the speaker no longer intends to 'save' their relationship or take action to reconnect with place, signaling intense negative feelings for the planet or a "place alienation" (Lewicka 677). Even the poem's narrow layout and concise lines, rarely exceeding the trimeter, embody the notion that the speaker has little left to express to their partner.

with hot wire. Our love,
 what was, an impression
 of light, gaunt: there is
 nothing to get.

(Kane 19)

By invoking the epithalamium genre, Kane's "Epithalamia" subverts its celebratory origins to critique the unsustainable nature of human-nature relations. Through vivid sensory imagery and a pessimistic tone, the poem reflects on the deteriorating connection between humanity and the planet, illustrating how individual actions, such as the use of fossil fuels, contribute to global environmental decline. The speaker's constrained agency and disposition to experience dissonance mirror the broader cultural challenges in overcoming the use of fossil fuels, as their use is deeply ingrained in our economic systems. This critique extends beyond the speaker's personal relationship to the planet, emphasizing how collective choices have collective impacts that can alienate us from the environment. The irony of this marriage song is that the speaker and their partner's relationship is collapsing, highlighting the urgent need for change in our behavior and changing the possibilities for action in our environment through cleaner energy sources. The poem thus serves as both a warning and call for reflection of the consequences of acting like a "man with rote hands" that affects us personally and

our environments. It urges readers to confront their complicity in environmental harm and on imagine new ways of being in “exchange” with the environment. “Epithalamia” acts as a mirror for humanity, prompting us to reconsider the foundations of our relationship with the planet before “there is /nothing to get.”

Returning to Huhndorf’s assertion that Kane’s poems address human-environmental “continuity,” “Epithalamia” conveys this theme with her language that depicts a failing relationship with Earth, underscoring how “continuity” of Inuit culture and identity, whose lives are so intertwined with their immediate environment relies on being physically well in that space and on adopting non-exploitative behaviors to maintain these places. Her language draws the reader’s attention to how unsustainable actions can affect the climate system, affecting our quality of life on Earth and, thus, our perception of the value of place.

4.2 “Hyperboreal”: Defamiliarizing The Far North

Kane’s second poetry collection, *Hyperboreal*, published in 2013, opens with the poem titled “Hyperboreal,” a word that the reader may need to look up to understand its meaning. Although no dictionary entries exist for “Hyperboreal,” it is a derivative of the ancient Greek word Hyperborean. According to Encyclopædia Britannica, in ancient Greek mythology, the “Hyperboreans” were a people from a “paradisaal region in the far north” who could live for “1,000 years” (“Hyperborean”). By creating an adjective with the suffix “-al,” Kane evokes this mythic land’s cold climate and idyllic qualities. As a native Inupiaq from King Island, Alaska, Kane draws upon her deep connection to the northern landscape, yet she disrupts the romanticized vision of an untouched Arctic wilderness. Instead, “Hyperboreal” presents a dystopian Arctic landscape, emphasizing the disturbing impacts of climate change on Alaska’s glacial regions and, consequently, the people who inhabit them.

To convey this dystopian vision of the Arctic, the poem transports the reader to a mountainous, glacial region that defies traditional expectations of the Arctic. The familiar image of the Arctic, a frozen silent environment with glaciers and ice extending far into the horizon, is a contrasting backdrop to Kane’s portrayal. As the speaker hikes along a “bruised slope,” they describe plants like “Arnica” growing where only ice and

rock would be expected. The speaker also describes how “Peaks recede in all directions, in heat-haze,” and expresses discomfort in this uncharacteristically warm Arctic scene. Here, the speaker’s “shield,” or scarf, feels merely “ornamental” and makes them feel “worse” in the heat. Kane’s depiction of an altered landscape signals to readers that, like the speaker in the poem, they are also invited on a hike around this defamiliarized world, one disrupted by climate change.

By defamiliarizing the Arctic, the poem creates a “sinister” text-world, emphasizing the empirically proven loss of glacial ice in this region and its impacts on the Alaskan landscape and the Inuit people. According to Joanna Gavins, “text-worlds” are the “distinct pictures we create of language in our minds” (2). These “mental representations” form the basis for understanding the language people encounter (Gavins 2). Text-World Theory examines how people form text-worlds and the mechanisms through which humans construct them (Gavins 2). In “Hyperboreal,” readers construct these mental landscapes through “world-building elements,” which include the objects and characters that situate the text in place and time, and “function-advancing propositions,” the linguistic elements in a text that “propel the narrative or dynamic within the text-world forward” (Stockwell 160). This theory is a supportive framework to explore how the poem’s dystopian text-world reflects the Arctic’s transformation into a region in crisis.

The term “defamiliarization,” coined by Viktor Shklovsky, describes a technique in which art makes “objects ‘unfamiliar,’” and “forms difficult, to increase the difficulty and length of perception because the process of perception is an aesthetic end in itself and must be prolonged” (12). In line with Shklovsky, Kane’s poem prolongs the perception of the Arctic region by inviting readers to build an alternative picture of a mountainous glacial region under distress. The landscape becomes a personified region, imbued with a mental state, as it is described as being “thrummed into confusion,” with a “bruised slope” and a “heart” that is “loosed,” a figurative depiction of the region’s physical pain. These linguistic details enable readers to enter this text-world and envision the Arctic landscape’s distress, inviting them to cognitively process this landscape’s loss and see that it needs help. The poem’s immersive nature compels readers to contemplate possible actions to prevent the potential extinction of the poet’s homeland.

Kane could have chosen any other world to present this dystopian vision, but she deliberately remains close to what cognitive linguists like Gavins and Stockwell call our “actual world.” This choice is grounded in reality, as she draws upon documented knowledge about the Arctic’s future from climate change reports, which confirm that this region is warming faster than any other region on Earth (“Arctic”). In “Hyperboreal,” Kane uses many of the world-building elements such as “slope,” “peaks,” “gully,” “glacier,” “shield,” and “snowmelt” as objects part of our actual world. These objects help the reader locate the poem’s setting and associate its landscape with the familiar Arctic, facilitating their comprehension of the poem. Nevertheless, the poem defamiliarizes these objects cued by adjectives and verbs. For instance, the “slope” is “bruised,” the “Peaks recede,” the “last snowmelt” trickles into “mud,” wearing a “shield” is “ornamental,” and the “glacier’s heart of milk loosed.” In this way, the poem deliberately ties the text-world to our actual world but defamiliarizes it based on the reality of the state of this region.

The extremity of temperature change in the far north becomes the central theme in constructing this dystopian text-world. The poem opens with an image of a figure atop a mountain observing “Arnica” growing on an ice-free “bruised slope” (line 1). This sight defies the reader’s common assumptions about Arctic landscapes formed early in school lessons, where Arctic lands are described as having “permanent snow and ice” at high elevations, frozen ground or permafrost at low elevations, and brief summers (“Arctic”). From the start, this unexpected image shifts the reader’s perception. Although mosses and lichens may grow on frozen ground, plants like “Arnica” are rare at high Arctic altitudes. Kane’s imagery continues to subvert these preconceptions as the speaker notes in line two how “Peaks recede in all directions, and the intense heat emanating from the slope, as indicated by how they see the peaks receding “in heat-haze.” The discomfort in wearing a “shield,” that feels “ornamental” intensifies this sensation of an Arctic unrecognizably altered by climate change.

Kane further deepens this defamiliarization effect through the image of the “last snowmelt a tricklet into the mud, ulterior,” which symbolizes the final stages of glacial melting. This metaphor indicates the irreversible loss of glacial mass with potentially catastrophic future consequences. Such imagery combines to create a vision of the Arctic in peril, where high temperatures hasten glacial melt. Although the speaker uses familiar, mundane language, like “Peaks recede in all directions,” it becomes unfamiliar in this context. Even though these images convey information not uncommon to those

who follow climate change news, readers are still challenged to create a text-world based on the poem of the Arctic that reflects it is under tremendous stress and one that feels plausible given that there is extensive scientific evidence that many glaciers will melt. According to the Fifth Intergovernmental Panel on Climate Change (IPCC) assessment report, scientists have found a general decline in low-elevation snow cover, glaciers, and permafrost, with many glaciers worldwide expected to disappear by the end of the century (133; 143).

The poem's text-world also invokes the Arctic's transformation into a "sinister" place by employing ominous and toxic imagery, heightening the reader's perception of environmental degradation. The speaker's use of negatively connoted descriptors such as "bruised slope" and "gully thrummed into confusion" conveys a sense of chaos in this landscape. The mention of two plants growing on the "slope," "Arnica," and "One wolfbane bloom, iodine-hued," rarely sighted at high altitudes, much less in the Arctic region, conveys the sense that these plants growing in this landscape, now appear in an inhospitable. That both plants are poisonous intensifies the portrayal of this landscape as a toxic and "sinister" place. Moreover, the speaker's tone, when narrating "from the back of" their "tongue," is described as "sinister," and the image of the "last snowmelt" is described as "ulterior," reinforcing this sense of unease. In this poem, the "function-advancing propositions" primarily depict natural elements in action, intensifying the text-world's degradation atmosphere. The landscape appears active and almost alive, as illustrated by phrases like "Arnica nods," "Peaks recede," "a tricklet into mud," "One wolfbane bloom, iodine-hued, rising on its stalk," "A glacier's heart of milk loosed," a "gully thrummed into confusion." Each of these actions underscores a natural process symbolizing environmental breakdown, supporting the sinister tone. This sinister aspect is embedded not only in the action predications but also in the attributional predications. For instance, the "last snowmelt" that becomes a "tricklet into mud" is qualified as "ulterior" (line 6). This suggests that the transformations in the Arctic landscape are not merely natural but are "ulterior" results, with climate change at the root of these place changes.

The speaker's perspective on these changes reflects an unsettling sense of confusion in both themselves and the "gully," suggesting that the environment and its inhabitants are "thrummed into confusion" by these disruptions to the landscape (line 5). Thus, the toxic imagery plays a crucial role in illustrating to the reader that this landscape is becoming not only degraded but dangerous, a place where the speaker feels physical discomfort

and where the reader, too, might not feel welcome. The IPCC's "Special Report on the Ocean and Cryosphere in a Changing Climate" similarly underscores the dangers of the extreme changes in temperatures in the cryosphere areas, stating that although high mountains will create more habitat area for lowland species, extinctions, and population shrinkages are expected at high elevations (134). By depicting the Arctic altered to this degree, the poem urges readers to draw connections to the current climate crisis in their own world. This comparison between the poem's dystopian text-world and the real-world climate crisis underscores how landscapes everywhere are "bruised" and shifting due to climate change, evident in warmer climates and consequently unexpected flora and the northward movement of treelines.

The poem further defamiliarizes the reader's mental image of the Arctic, emphasizing that this frozen remote place is not immune to environmental degradation. Traditionally, people envision the far north as distant and unaltered by climate issues affecting urban centers. However, the poem disrupts this expectation by shifting the reader's attention to the new world introduced in the speaker's flashback or their "recollection" (line 3). This flashback transports the reader into an Arctic mental world reminiscent of their own, where "Peaks" retreat and temperatures rise. The flashback is interrupted by what Stockwell describes as a "fleeting world," a "highly temporary" world (164). This fleeting world, cued by the negated question tag "June really isn't June anymore, / Is it?" in line eight, disrupts the familiar associations with Arctic summers. In this way, the speaker questions whether "June" is the same "June" they once knew, casting doubt on the continuity of the seasons and introducing the idea of a prolonged, unnatural summer. Indeed, the speaker emphasizes this phenomenon, noting that "a thousand / Summer days" occurred in "extravagant succession." These "thousand / Summer days" are aligned with climate change's consequences, including disruptions in seasonal cycles. This surreal prolonged summer defamiliarizes the reader's expectations of the brevity of summers in the Arctic and the average temperatures in this region that reach 10 degrees; it changes the Arctic's familiar cold climate into endless heat that feels unreal and disorienting for this landscape. In this way, the poem shows how entangled humans are and how their activities with the Earth are on various scales.

The poem emphasizes this defamiliarization by personifying the glacier, depicting it as having a "heart of milk" which is being "loosed" due to "a thousand / Summer days in extravagant succession," inviting the reader to empathize with this suffering landscape (lines 9-10). This metaphor urges readers to envision the glacier as a sentient entity, its

heart melting like a living, vulnerable being. The metaphor of the “glacier’s heart of milk” is another type of fleeting world or redirection of attention that causes the readers to imagine that the metaphor’s assertion is “literally true or existent” (Stockwell 164). In other words, the poem forces the reader to envision an impossible world where glaciers are living beings with a literal “heart.” Similar to the function-advancing propositions in the poem that consist primarily of material processes, portraying the landscape as changing, the “heart of milk” metaphor also contributes to what Stockwell’s argument in “Mind-modelling literary personas” that “animating” the environment, by assigning disposition and consciousness to objects in the world in a text, the text moves the glacier and this northern landscape towards empathy (134). The animism conveyed in the poem enables readers to engage their emotions and immerse themselves more fully (134). This personification effectively defamiliarizes the glacier, portraying it as a cognizant entity gradually fading away, much like the broader Arctic region in the face of climate change.

Through this immersive and unsettling portrayal, the poet dexterously engages with the actual discourse world, challenging readers to cognitively process the dramatic consequences of climate change and imagine how an “extravagant” number of summer days in the north might occur in the future. Kane ‘prolongs’ the reader’s perception process using several poetic devices. Using vivid descriptive imagery establishes a dystopian setting, defamiliarizing common associations with the Arctic. The fleeting worlds, cued by the negated question tag and the metaphors, invite readers to question the continuity of Arctic seasons while also calling for empathy for this distressed landscape through animating the objects in this text-world. The poem thereby urges readers to create new, more realistic images of the Arctic, emphasizing how it is in the process of turning into a “sinister” dystopian landscape. By altering the reader’s perspectives, the poem promotes an emotional and intellectual response, pushing the reader to reflect on how remote places on Earth, like the far north, are impacted by climate change and consider what actions might protect the Arctic.

In response to this dystopian world, the speaker expresses a sense of discomfort during their hike, becoming acutely aware that the changes they see in this mountainous place are “sinister.” While this awareness might provoke the reader to reflect on the environmental degradation occurring in the north, the speaker remains observant, with no clear indication that they will take action to stop the “glacier’s heart of milk” from being further “loosed.” This hesitation to act raises questions about the speaker’s

attachment to this landscape, which is clearly a location with meaning, as indicated by their personification. Their hesitation might signal the speaker's resignation. Patrick Devine-Wright's "psychological response" to place change framework developed in his article "Rethinking NIMBYism" can help explain the speaker's reaction, as attachments to place can affect one's motivation to protect these places. Gaining insight into how people cope with changes to their places is also important for place-attachment studies because attachments to place influence and are influenced by place change (Devine-Wright and Quinn 232). For instance, Devine-Wright and Quinn find studies showing how climatic changes in the Pacific Atolls and the Arctic weakened people's ties to the land and sea (232). A study by Cunsulo Willox and colleagues showed how changes to "traveling," "foraging," and "hunting" have disrupted place attachment and thus negatively affected the mental, physical, and emotional health of an Inuit community (255). Devine-Wright and Quinn posit that climatic changes, such as melting glaciers and sea-level rise, can impact our emotional attachments to those places (226). The environmental changes portrayed in the poem and the speaker's evaluation of this place as "sinister" suggests the speaker feels what Lewicka terms "place relativity," which reflects ambivalent feelings toward a place.

Devine-Wright's framework includes five stages in response to place change: "becoming aware of change, interpreting the meaning of such change for people and places, evaluating whether change will be positive or negative, coping with change (including acts of denial or avoidance), and acting (including collective acts of opposition dubbed "place-protective action") (232). The first stage, "awareness," is especially reflected in lines six and ten-eleven of the poem, where the speaker's flashback demonstrates heightened sensitivity to the environmental changes around them. Their observations include several sensory descriptions of what they see or feel in the landscape, like a "bruised slope," "Peaks" that "recede in all directions," and the unusualness of a "heat-haze" in the "evening" in a mountainous region (lines 1-3). In the second stanza, they recall feeling annoyed by the hot temperature, stating that the "shield" or scarf they are wearing only makes them feel "worse." They suggest surprise at seeing "Arnica" and "wolfbane" growing on the now ice-free slopes, and they attribute the sentient quality of "confusion" to the "gully" and a "heart" to the "glacier." Through these details, the speaker conveys a perceptive awareness of change, signaling a deep connection to this altered landscape

In Devine-Wright's framework, the next stage is interpreting the meaning of place change, where individuals assess whether the outcomes of place change will be "positive or negative" (232). This stage is evident in the poem's evaluative language, particularly in the speaker's reaction to the "last snowmelt a tricklet into mud" which is described as "ulterior" (line 6). The term "ulterior" suggests the speaker's suspicion that this melting has hidden or unforeseen outcomes, and when taking the metaphor of the melting "glacier's heart" in the third stanza into account, the poem conveys how the sight of "mud" caused by the melted ice foreshadows larger, perhaps more disastrous implications. The figurative language conveys the speaker's negative evaluative stance towards the changes they perceive in their environment, where they see processes happening around them as an ominous development.

The third stage, "coping," involves processing the changes in one's place through denial or avoidance. The speaker certainly does not deny the changes, as evidenced by their numerous observations of the landscape's changes. The speaker's acknowledgment of the various changes reflects a strong psychological response and suggests a strong attachment to this glacial region. Given this attachment, the speaker is expected to take action to slow down the changes in this place. However, the acting stage in Devine-Wright's framework, which refers to "what can I do about" the changes in my environment, does not crystalize in the poem (232). The speaker's passive stance suggests an unresolved tension for the speaker between the attachment to place and the "already-happening" and "already happened" consequences of climate change, raising questions as to how to respond to extreme environmental loss.

As previously mentioned, the function-advancing propositions within the poem predominantly reflect actions within the natural world, reinforcing the notion of the transforming Arctic landscape. The speaker's only concrete action in the text-world is descending "the gully" and guiding the reader while hiking in a glacial region. The only other action inferable in the poem's final line is a metareference to creating this text-world, from the "back" of their "tongue." On the individual level, the speaker does not know how to confront this physical loss. Although the speaker cognitively processes the changes, they lack the cognition to confront this loss. The poem's text-world invites readers to inhabit this dystopian world and follow the mind of the speaker who sees and responds to the changes they see around them, what logically follows this awareness of changes is asking about what can be done, which the poem leaves up to the reader to consider and reflect on.

Ultimately, the poem's text-world creates a space for readers to process the psychological impact of climate change, fostering a sense of urgency and reflection about what can be done. Lesley Jeffries and Dan McIntyre argue that art should be defamiliarized "to generate for the viewer or reader a new perspective on the topic of the piece of work under consideration." Kane's defamiliarization generates a new perspective. It invites the reader to create an alternative image of the Arctic region, recognizing how climate change has far-reaching impacts even in the most remote parts of the world. This approach reveals the Arctic's increasing vulnerability and the environmental degradation that impacts those who live there. These severe changes especially impact Indigenous communities in the cryosphere (IPCC 6 51). Kane's poem writes about the environmental changes in the Arctic to counter their personal loss of this landscape, using vivid imagery, her text-world allows readers to journey through the changed and "sinister" Arctic, compelling them to empathize with this "bruised" and "thrummed into confusion" landscape and its inhabitants, reflecting on the heritage of this once "paradisical" frozen land and consequently on what can be done to halt the harmful changes.

5. Jewel Cao and Alice Brooker's poems on "Feeling Hollow and Static"

In 2020, *The Young Poet's Network* and the Freud Museum London released "The Climate Crisis and You" challenge. This initiative invited young people to respond to the question, "How does it feel to be surrounded by dire climate news and extreme weather?" The challenge stemmed from the understanding that we are being "bombarded" with news about the climate crisis, resulting in what many call "climate anxiety." According to the organizers, climate anxiety signals a perceived "impending danger," echoing Freud's theories on anxiety. They emphasize that young people are prone to experience climate anxiety as they are the generation "expected" to inherit the planet and address its environmental degradation ("The Climate Crisis and You"). The environmental humanist Sarah Jaquette Ray discusses the psychological impacts of climate change in her book *A Field Guide to Climate Anxiety*, published in 2020. She describes conditions such as pre-traumatic stress disorder, solastalgia, and eco-guilt, which contribute to a sense of dread about the future and a feeling of powerlessness to do anything to shape that future. The "Climate Crisis and You" challenge aimed for

poets to capture these complex emotions, such as “thoughts, feelings, and observations” on the climate crisis.

The finalists in this challenge were Alice Brooker’s “Are Your Words Empty, or Am I Hollow?” and Jewel Cao’s “Translations in Survival.” The poetry of the challenge winners included themes that strongly conveyed climate anxiety. For instance, Danann Kilburn’s “Bees” is a poem about feeling anxious that the bees and “signs of life” are “dwindling,” so the speaker “counts the bees” repeatedly till they think they will “go insane.” Elspeth Wilson’s “Wildfires burn across Australia as Edward Cullen takes his top off for the twentieth time” communicates how we are “Impervious/ to our home /dissolving.” The speaker in her poem is frustrated that people are more preoccupied with planning a “Twilight/marathon” than thinking about “climate refugees” (Wilson). This frustration manifests as physical distress, with the speaker experiencing “sharp pains” in their “chest,” a sign of climate anxiety (Wilson). Brooker and Cao’s poems are no different in this respect, as they communicate climate anxiety. Their creative expressions reveal the intense psychological impact of the climate crisis and the pressures society imposes on them. Brooker’s speaker feels “hollow,” and Cao’s “static.” Their distress results from the speakers’ emotional bond to the Earth, where Natacha Parreira and Carla Mouro have found that strong attachments to place correlate with higher eco-anxiety. Rather than describing and addressing the Earth’s turmoil, the poems’ autobiographical speakers richly convey young people’s experiences and mental states in the Anthropocene.

The climate anxiety in Cao’s poem is intricately conveyed through its linguistic expressions. Cao’s “static” mental state is conveyed through ontological metaphors to represent their mental state of stasis and rhetorical questions that emphasize their perception of movement around them, reflecting the speaker’s. As the poem’s title suggests, the speaker ‘translates’ into various static objects, “oil and bone,” as a means to psychologically survive their extreme climate anxiety. The speaker thinks that by becoming “bone,” they will have a minimal impact on the environment. Brooker uses a poetic-journal style poem to make visible a consciousness filled with anxiety and frustration with the older generation’s solutions for climate change. The content of this cognitive exchange handles an environmentally aware university/school student’s perceptions and attitudes. The poem thus invokes a conflict between younger and older generations, where the speaker challenges the “empty” words of the older generation

that make them feel “hollow” and filled with anxiety as they are inadequate for addressing climate change.

Young people are under immense pressure to make our future on this planet possible. Since they grew up learning about eco-disasters and experiencing the climate change happening around them, they have become strongly aware of the human impact on the planet, which causes climate anxiety. Both poems present minds filled with immense climate anxiety, as evidenced by their language, which is “static” and “closed scope” in Cao’s poem, and Brooker uses “silence” and “hollow” words. These moving poems allow young people’s angst to be heard, compelling readers to take them seriously and empathize with those concerned for our planet’s future.

5.1 Climate Anxiety in Jewel Cao’s “Translations in Survival”

Cao’s “Translations in Survival” looks like a wave on the Young Poets Network webpage. The poem’s first line begins with the speaker transforming into a “boat.” However, this metaphor is only the start, as the poem continues to describe multiple transformations across its twenty-one lines using the repeated syntactical pattern ‘I became x,’ alternating with rhetorical questions. The challenge encouraged contestants to use vivid images to convey their feelings in light of the climate crisis (“The Climate Crisis and You”). Cao’s poem answers this prompt by depicting a series of unsettling mental transformations. The speaker’s desire to transform into “static” objects suggests an attempt to cope with climate anxiety by becoming inert, as if stasis might minimize their ecological footprint and anxiety. The repetition of ontological metaphors, combined with the syntactic pattern “I became,” emphasizes the speaker’s extreme reaction to climate anxiety. The desire to become “bound” and “static” is driven by a longing to minimize their impact on the environment and a sense of helplessness. This reflects how “survival” in the Anthropocene involves dealing with overwhelming fear and the realization that all human actions impact the planet.

In “Translations in Survival,” ontological metaphors underscore the speaker’s profound desire to transform into static objects, reflecting the emotional weight of climate anxiety. According to Lakoff and Johnson, ontological metaphors occur when we understand aspects of our experience, such as emotions and ideas, in terms of objects and substances

(25). In “Translations in Survival,” each metaphor stanzaic unit consists of three lines exhibiting identical syntax, following the same rhyme scheme: aab. The first line of these metaphor units begins with an anaphora, “I became,” and ends with “became,” indicating the centrality of the transformation. The ontological metaphors repeated in four out of the eight stanzas of the poem state the many static objects the speaker “became”: “boat,” “road,” “oil and bone,” “home,” “soap and lye,” “rope,” “poem.” This repetition of ontological metaphors through anaphora and patterning throughout the poem establishes parallelism, emphasizing the speaker’s strong desire to change their existence from a human body into a static object. The ontological metaphors blend the target domain of mental experience with the source domain of entities and substances. At the core of this blend is how the speaker transformed into becoming these entities, which always culminated in becoming “static.” The conceptual metaphor that emerges is the mind, a body that transforms into a static object. These transformations do not render the mind trapped; instead, the number of static objects the speaker “became” implies a desperate attempt to escape themselves.

The speaker purposefully tries to become a static, lifeless object. This desire resembles the unpleasant emotions that Ray identifies as typical when experiencing climate anxiety: “self-loathing” and “eco-guilt.” Ray’s discussion on emotions in her book describes young people who have taken “zero impact” too far, trying to “self-erase” due to intense feelings of self-loathing (18). She recounts how one of her students developed an eating disorder, believing that the “best environmentalists are the ones who disappear” (18). This continuous change is also reflected in the poem’s visual presentation. The lines containing the ontological metaphors alternate between indented and non-indented lines, shorter and longer lines, and unenjambled and enjambed lines, creating a wave-like motion on the page. The form emphasizes the speaker’s unsettled state, both emotionally and mentally. Within the climate change challenge context, the speaker in this poem attempts to escape their human form, associating it only with consumption and harm. The “translations” into static objects represent their struggle to survive under the overwhelming weight of self-loathing and eco-guilt.

Indeed, it is almost as if the speaker desires to be “static” like a “road,” “home,” or “soap,” as if becoming lifeless and immobile would leave no trace or impact on the planet. At the end of each of the four metaphoric units, the speaker emphasizes the “static” quality of the object they have transformed into. The word static originates from the Ancient Greek word *statikós* pertaining to weighing and the state of being in a fixed

position on an opposite pole of meaning; its root word, *sta-* means “stand” or to stand (Hoad). Applying this meaning to the poem suggests that the speaker wants to stand still, aligning with the idea of having a ‘zero footprint.’ The speaker shape-shifts into various inert forms. This idea of being bound and fixed to place is indicated in the “container” nature of the ontological metaphors. According to Lakoff and Johnson, “Each of us is a container, with a bounding surface and an in-out orientation” (29). Humans project their perceptions of inside and outside onto physical objects (29). The speaker maps their mind onto objects like “home,” “poem, bound,” “rope,” and “road,” evoking a sense of boundedness or structural constraint. Roads have clear borders, fibers are twisted to make a rope that binds, boats have defined structures, and homes have four walls, just as a poem has structure (e.g., layout, rhyme scheme, lineation) and is bound within four walls of paper. Mapping their mind to these container objects suggests a wish to be constrained away from the world to not degrade it.

And yet, even though the speaker retreats into a container, disconnected from the world, their anxiety persists, a coping mechanism that proves both unhealthy and impossible, which can lead to self-erasure. The speaker must change their form from a “boat” to a “lye” because they realize that these objects are cultural commodities, and their production involves a deep entanglement with the world. Building and living in a “home” leaves an ecological footprint, and “oil” is toxic for animals and the environment when it is leaked or used in human activities. The speaker even feels guilty for creating a poem, as it often involves using a computer or paper, which produces waste when disposed of and requires energy. Their attempts at “survival” or coping with anxiety repeatedly fail, leaving them trapped in a loop of self-loathing and eco-guilt, driven by the belief that they are “bad for the planet.” Ray highlights the damaging nature of this mindset, noting that it is “demoralizing but factually wrong,” and it weakens our efforts in thinking about how to live sustainably within our ecosystem (24). She warns that this mentality can lead to forms of “self-erasure” or lead people to give up their efforts on environmental work (25). Thus, the transformations highlight the cyclical, exhausting, and harmful nature of climate anxiety. The poem’s “closed scope” and the linguistic repetition of “static” underscores the speaker’s exhaustion. Through repeated ontological metaphors and syntactic patterning, the poem conveys that the desire to be immobile is more than a means of reducing their ecological footprint; it is a response to feeling overwhelmed and powerless. Indeed, the speaker describes their mind in line two, saying that they became “closed scope,” unable to effect change

actively. Consequently, they became “static” and tried to stand “still” to minimize their impact, believing that that was the best they could do.

The rhetorical questions in the poem indicate the speaker’s doubt of the effectiveness of their “survival” tactics, contemplating the futility of trying to become static and disconnected from the world when the world is in a constant state of movement and change that relies on force. The stanzas with the ontological metaphors alternate with four stanzas containing rhetorical questions, illustrating the speaker’s serious doubt about whether attempting to be “static” is effective or even possible. Questions like “Does the water not move, / still, in waves?” emphasize nature’s inherent movement. In the fourth stanza, “cherry blossoms” “spill” abundantly emphasize growth, and in the sixth stanza, the speaker notes that gravity causes a “woman cycling downhill” to move effortlessly. Cao’s speaker’s rhetorical questions indicate a contemplation of nature’s fundamental forces, gravity, and movement, which makes the speaker’s “static” state appear futile and unnatural. The speaker doubts the efficacy of their “Translations in Survival,” characterized by staying passive and “static,” as they see their strategy as impossible and nihilistic. Although they question their “Translations in Survival,” they do not indicate breaking out of the loop of eco-guilt and self-loathing as the poem ends with the word “static.” In this sense, the reader is left with a frightening image of the speaker still trapped in this loop of constant transformations, where their mental health will only continue to deteriorate.

Cao’s “Translations in Survival” expresses “static” to convey the profound psychological burden of climate anxiety. The poem captures the dual response in light of climate change, of wanting to minimize impact and feeling helpless. The poem shows how the speaker’s tactic of becoming “static” fails to relieve their anxiety, portraying a person who lacks sustainable coping skills. Cao’s speaker is not really ‘surviving’ sustainably, as the term implies resilience and continuing to exist. Being passive and static implies ceasing to exist. The speaker’s strategy for coping with climate anxiety in the poem aligns with what Ray reports that people experiencing climate anxiety often do: they change their behavior based on “guilt” and “self-loathing” to reduce their ecological footprint (116). Ray draws on Robin Wall Kimmerer’s “practical reverence” from his work in *Braiding Sweetgrass* as a sustainable tactic not based on guilt for dealing with unpleasant feelings about climate change. Kimmerer argues that we can practice reciprocity, showing gratitude to the Earth through our daily actions. Ray argues that basing pro-environmental behavior on guilt “reduces our potential to make efforts

we are capable of” (119). Cao’s speaker is so consumed with guilt that they become “static,” ultimately not contributing in an active way to the work of mitigating climate change and harming their mental health in the process. Her work emphasizes that “survival” during climate change involves grappling with fear and realizing that being “static” is impossible. Through the anaphoras, this chant-inducing poem creates an unsettling effect, compelling the readers to verbally say the word “static” to say that they “became a boat,” which helps them empathize with the speaker’s distress.

5.2 “Silence” in Alice Brooker’s “Are Your Words Empty, or Am I Hollow?”

In her article “Overwriting Nature? Language’s Drive to Destruction,” Alice Brooker states that in her poetry, she does not attempt to communicate the degradation of our environment because although language has the power to commemorate an experience, it has the equal ability to “obliterate” it. She reflects on how, although contemporary writing has sought to “revive” nature, she fears that we end up “burying” it with “talk” and that ultimately, eco-writing “destroys” what it sets out to do: make us care about our deteriorating planet and take action. Because, for Brooker, there is no way to “communicate” the Earth’s suffering “without making it unforgivably smaller.” Indeed, she reports that when she goes outside, instead of verbalizing what she sees, she feels compelled to remain “mute” and watch the Earth “helplessly” to get a sense of the pain the Earth is in, as there are no words that can capture the complexity of the destruction it is undergoing. Her article implicitly critiques how those in power, particularly older generations, respond to climate change, which, according to the speaker, is characterized by a language of “sustainable consumerism.” Brooker, a young university student, asks the reader to consider this question: “If everyone sat with nature in silence, could something begin to happen?” Her stance suggests that responding to climate change involves a deeper, more intimate connection to the Earth, one that involves listening and being “quiet” and listening to understand the damage being done.

Moreover, these concerns align with what Ray calls “climate generation,” the cohort born in the early 1990s and early 2000s (Gen Z). Ray argues that this generation shares characteristics such as deep care for climate change and social justice and that their growing activism is influencing global climate politics (3; 6). Ray further addresses how the “polarization of contemporary politics” we see in the news today is slowing progress

needed to combat climate change and asserts that the challenge is getting older generations to “change its tune on climate change” (7). Furthermore, she notes that around 70% of this generation cares about global warming and is beginning to question existing institutions, developing their own “stories” about how society should respond to the climate crisis (7).

Brooker’s poem “Are Your Words Empty, or Am I Hollow?” reflects her frustration and anxiety over the sustainable consumerism language prevalent in climate change discourse, language often used by older generations as part of their proposed solutions for addressing climate change. There are various words and phrases in the poem that reference sustainable consumerism. For instance, in regards to water, a big issue in sustainable discourse, the speaker says, “I can’t be wasting water,” or in terms of energy, “switch the lights / Out, plugs off,” and products “reusable Tupperware,” and transportation “Travelling by bus,” and finally, “Don’t waste.” These are social imperatives that the speaker is used to hearing, especially in school. Using the externalist view of the mind, the analysis reveals a young student’s anxiety about the tensions between the solutions they believe are necessary, like “silence,” and the older generation’s focus on actions like using “reusable Tupperware.” For the speaker, the older generation’s sustainable consumerism social imperatives, such as “Don’t waste,” are perceived as empty and “hollow,” failing to inspire genuine care for and attention to the environment. Consequently, the speaker realizes that the Earth needs our “silence.” Brooker’s work thus embodies the climate generation’s search for a language distinctly different from older generations that reconnects us emotionally to the Earth.

Brooker’s poem vividly portrays the generational divide in climate change responses through its distinct dialogic structure, indicated immediately in the poem’s title through its questioning. It presents a tension between two voices: the “you” and “I,” implying an interaction between an external voice of the older generations and the responses of the speaker who negotiates their words. The poem’s five stanzas, each with a headline signaled by italicization and capitalization, mimic climate news snippets or familiar directives: “Schools Celebrate Earth Hour,” and “Temperatures surge to 25 °C,” “Don’t waste,” “Stay in Education,” and “You needn’t worry,” reveal this tension. For instance, headlines, such as “Stay in Education,” signal a directive an adult or parent would say to a minor. These headlines are followed by the speaker’s emotional, intellectual, and behavioral reactions to the adult’s statements. For instance, when the headline reads, “Temperatures surge to 25 °C,” the speaker’s reaction is to “Run inside and switch the

lights / Out,” arguing with adults who suggest they go “Outside” to feel better, retorting, “But, it’s April and we’re burning.”

This stanzaic structure underscores the poem’s dialogic nature. According to Alan Palmer’s work on the externalist view of the mind, “dialogic” aspects in fictional texts signal the social nature of fictional minds (106). The externalist view understands the mind as “social, embodied, engaged, and specific,” contrasting with the internalist view, which sees the mind and its contents as private and separated from its physical and social context (8). In Brooker’s poem, two different minds are depicted. The voices of the older generation, articulated through phrases like “Stay in education” or “Don’t waste,” belong to a collective climate change discourse characterized by sustainable consumerism. The second mind is that of the young speaker, who represents what Ray calls the climate generation. The collective mind of the older generation indicates what Palmer terms “intermental” thought functioning when two or more minds share the same way of thinking (4). The poem’s distinct dialogic structure emphasizes the tension between these two different minds. Analyzing this generational tension with an externalist perspective involves examining how the speaker perceives and reacts to the climate change discourse imposed by older generations. By considering whether the speaker conforms to the directives of the older generation, such as “Don’t waste,” and the effects of this pressure to conform to the social imperatives, including “Scornful looks,” we can better understand why the speaker ultimately seeks their form of activism: “silence” with the Earth.

For example, the tension between the generations is vividly illustrated in the third stanza, which features “Schools Celebrate Earth Hour.” This line resembles a blog headline, and a quick search on Google reveals that the Earth Hour website hosts a similar blog report, such as “Millions celebrate WWF’s Earth Hour 2023, creating The Biggest Hour for Earth.” The World Wildlife Fund organizes this event, which is held annually, marked by switching off energy-draining devices and nonessential electric lights. The speaker describes how their school participates in Earth Hour by ceasing “draining electrics” and writing ideas for “change” on “recycled paper,” emphasizing their attempt to use eco-friendly products. However, the speaker highlights the superficiality of these routine gestures: if they “don’t want to keep” their “ideas,” they “May place them in only green bins.” The focus on symbolic actions like using “recycled paper” and “green bins” underscores the emptiness of these gestures. The neutral tone during their hour committed to the planet, evidenced in the simple everyday

diction, such as “the hour passes,” suggests that this hour of commitment did not evoke any genuine emotional connection for the speaker. As the climate generation’s understanding of climate change grows, these small eco-friendly gestures feel increasingly inadequate. The poem answers the question posed in the title: the “words,” including the social imperatives of the older generations, are perceived as “empty,” leaving the speaker feeling “hollow,” emotionally drained, and disconnected from the real issues at hand. In this way, the poem underscores the futility of superficial solutions that, while well-intentioned, do not engage with more transformational changes to halt environmental destruction.

Furthermore, the speaker’s internal dialogue reveals their growing disillusionment with the language of sustainable consumerism. They question the effectiveness of small gestures like “switch the lights / Out, plugs off” in combating climate change. The second stanza captures their climate anxiety and frustration with the proposed solutions when the speaker hears a weather report: “Temperatures surge to 25°C.” Knowing that such a temperature is abnormal for “April,” the speaker panics, recognizing this as a symptom of global warming. Immediately upon hearing the report, the speaker becomes desperate to do something about our “burning” planet actively. They are reminded of the various energy-saving strategies that parents or teachers at school have often reminded them to do: “Run inside” to switch off all the lights and unplug any energy-consuming objects. This reaction illustrates the well-intentioned but ultimately futile gesture, as how will unplugging all electronic devices mitigate the “happening-now” rising temperatures?

In this same scene, the poem further emphasizes the speaker’s frustration through their conversation with an adult. The speaker does not trivialize the weather report, and when the adult suggests that they will “feel better for going /Outside” due to the extreme temperature for spring, the speaker responds with exasperation: “But it’s April and we’re burning.” This interaction illustrates the speaker’s acute perceptual awareness of climate change and contrasts sharply with the adult’s more detached and unaffected response to the news. The speaker’s frustration reflects the climate change sense of urgency, as noted by Ray, who observes how the climate generation is more attuned to global warming and deeply cares about its consequences. This stanza captures how different the speaker’s mind is from that of older generations, implying differences in perceptual awareness of the environmental degradation around them. The reader can infer that the speaker is losing faith in the “words” of the adults and will begin to form their narrative

of how we can respond to the climate crisis. Another example that illustrates the divide in thinking between the speaker and adults is when the speaker reacts to the words of reassurance in the first stanza: “You needn’t worry,” a phrase older generations or parents sometimes use to calm children down if they hear alarming climate news. Instead of calming the speaker, the parent’s words deepen their frustration that the adults are not alarmed by the environmental issues around them. The “word slip through” the speaker’s “fingers like/ Water,” emphasizing its ineffectiveness. The metaphor highlights the speaker’s helplessness and illustrates how they deeply care for the environment.

The collective mind of the older generation, characterized by its many directives like you “can’t be wasting water,” use “recycled paper,” “switch the lights /Out,” and throw paper in “green bins,” places pressure on the speaker. The expectation to conform to these well-intentioned but insufficient measures creates a feeling of societal judgment and eco-guilt, exacerbating their climate anxiety. This anxiety is particularly evident in the fourth stanza, where the speaker reflects on the pressure to conform to environmental expectations. The poem shows how the speaker, an environmentally conscious individual, tries to follow all the directives common in climate change discourse, indicating how they conform to this mindset prescribed by an intramental unit of older generations. However, the language they hear, like “Don’t waste,” a ubiquitous phrase in Western culture, from forums, blogs, and social media groups dedicated to waste reduction to Eco-Friendly Products Websites, environmental NGO websites, and food waste reduction movements, constantly fuels their anxiety. The impact of this pressure is vividly portrayed when the speaker realizes they wrapped their “sandwich” in “cling-film” (line 27). The poem describes how the speaker pays the “price” for not meeting the expectation of not wasting, as they are met with societal judgment in the form of a “hundred / scornful looks,” which “wildly” emerges as others see the speaker’s “cling-film” (lines 25-29). According to Palmer, the “look” is a form of nonverbal communication, making the mind’s judgments in the poem publicly visible (113). The intensity of the judgment causes them to feel profound eco-guilt, to the point where they become uncertain of whether they should eat at all: “To eat or not to eat,” a severe reaction to the use of “cling-film” (lines 26-29). This thought report encapsulates the speaker’s struggle to conform to climate change discourse, causing them great distress. The directive in climate change discourse “Don’t waste” exposes the older generation’s value of sustainable consumerism, suggesting “reusable Tupperware” or reusable

products is not problematic in the “Don’t waste” campaign, which is ironic, as Tupperware will be disposed as some point and promotes the idea that people can buy as many of them as they like since they are “reusable.” In this way, the poem points to the irony and impossibility of directives.

Using Palmer’s externalist view of the mind, which emphasizes how our external social and physical environments strongly influence our thoughts and behaviors, the poem reveals how individuals engage with climate action not purely because of their convictions but because of collective attitudes and the pressures of society. The speaker demonstrates desperateness and willingness to engage in pro-environmental behavior because they genuinely care for the environment. However, the only proposed solutions they know of stem from older generations because that is what adults tell them, so they conform to these directives, but as the poem shows through the speaker’s intense evaluation of this language, their language is “empty” and at times impossible to follow, causing them anxiety. By highlighting the inadequacy of the older generation’s discourse, the poem exposes the mental strain placed on young people who are deeply invested in environmental change.

The poem’s turning point occurs when the speaker considers breaking away from the collective thoughts of older generations and conventional activism. The final stanza references the “Fridays for Future” movement, the famous youth-led and -organized global climate strike movement. The speaker indicates their breaking away from the conservative older generation’s discourse by going on a strike when they are supposed to “Stay in education,” they seek more urgent responses to address climate change issues. Thus, they participate in her generation’s forms of activism which build off of those of the older generation. And yet, the speaker is also dissatisfied with the “brutal call for action” from her generation, reflecting on how these calls for action only “almost / Feels as loud a change.” As previously done so before with the directives from the collective thought of older generations, the speaker questions the gesture of going on a strike, contemplating whether their voice and using the language of climate change discourse as the older generations promote is effective and impactful enough in addressing the “exhausted landscapes.” The poem’s volta, clearly distinct from the previous stanzas as an older generation’s voice does not initiate it, introduces a pivotal question: “What if Earth wants my Silence instead?” This question challenges the current politics of climate change that focuses on a language of sustainable consumerism, and it also challenges conventional activism, which relies on banners and

words for change. The speaker's voice is "aching" from their calls for "action" and doubts whether this is the most impactful way to respond to climate change. The speaker expresses a paradoxical desire for "silence" as if retreating from both the "rumbling" noise from conventional activism and the collective thought from contemporary climate change discourse might be what they need to stop feeling so "hollow" and think clearly about what the Earth might need.

One striking feature of the poem is the absence of large-scale, politicized scientific language of climate change discourse, such as "Net Zero Emissions," "Carbon Budget," or "Climate Emergency." Brooker's everyday language shows how the speaker focuses more on the imperatives arising from scientific and politicized language. This idea resonates with Brooker's reflections in her article, where she suggests that we are "burying" the Earth with our words as they diminish and distract us from seeing, as the poem says, how "exhausted" it looks. The speaker finds the voices they hear on the news, on green movement banners, and in their schools as "hollow" because change can only be effected by becoming concerned, fully committed to the planet, and aware of the damage it is experiencing. To become more attuned to this degradation, "silence" is needed as a form of activism. The poem suggests that we can only fully understand its degradation and become genuinely committed to making a systemic change by being silent and emotionally present with the Earth.

Palmer's externalist view of the mind effectively highlights the social nature of climate anxiety and the generational divide in the poem. Throughout the poem, the speaker's eco-friendly gestures, such as participating in "Earth Hour" and turning off lights, do not involve engaging directly with nature, where one can register its deterioration. The speaker suggests that by blending out the voices from current climate change discourse and stepping outside, we can feel how "we're burning," implying that this is how we can become more perceptually and emotionally attuned to the state of the environment and thus take meaningful action. The speaker's contemplation on the voices from their social environment resonates with Timothy Morton's "ecological thought," which, for him, is a form of action that emphasizes openness to thinking about how we want to live together in the world. "Ecological thinking" for Morton is about the "what" of our thoughts and "how" we are thinking them (4). The content of the poem's ecological thought suggests that being 'silent' can be a form of activism that can connect us to Earth and can evoke an emotional reaction that the "empty" words from the climate change discourse in the poem failed to do for the speaker. The speaker's thinking is

characterized by critically questioning the voices and telling them what to do. Thus, the poem illustrates the importance of critical thinking in responding to the climate crisis.

These poems that address climate anxiety tell a story about young people's thoughts and how they are coping and responding to the climate crisis. Ray asserts that the stories we tell ourselves play a role in navigating environmental changes now and in the future (7). Cao's poem portrays a mind coping by psychologically "hiding" in various static objects to avoid feeling more pain from the knowledge of the Earth's degradation and their ecological footprint contributing to it. This is a tragic story of a young person who lacks "survival" skills to handle climate anxiety healthily. Brooker's poem, in contrast, illustrates how the older generation's climate discourse exacerbates the speaker's anxiety. Brooker's narrative represents what Ray would call an "emboldening story," one that challenges the narratives of older generations and illustrates a young person's ecological thinking, critically thinking about what proposed solutions to climate change are not working and what the Earth "needs" (Ray 7). Brooker's vision of environmentalism differs from older generations and conventional environmental activism in that she underscores the importance of being "silent" to listen to the Earth's suffering. Her stance is aligned with Ray's suggestion to "reframe" environmentalism in terms of "abundance, connection, and well-being" to foster a "politics of desire," that is, focusing on thinking about how we desire a future in this world (7). Brooker's silence is about thinking about the problems in the world and genuinely trying to see the degradation. Her silence represents an attempt to forge a meaningful connection to the Earth. Indeed, Brooker's poem resonates with what Tuckey argues in her ecopoetry collection, that poetry helps far more in "connecting" us to our environments than "technology or political directives" (11). These poems symbolize what Ray recommends: channeling climate "angst" into "resilience and adaptation" (7). In doing so, Brooker and Cao draw attention to their climate anxiety and frustrations with current responses to climate change, urging readers to reconsider the impact and the adequateness of the voices society imposes on us in addressing climate change.

6. Conclusion

The poets discussed in this thesis used a variety of different expressions and innovative forms to convey meaningful relationships to place and cognitions relating to the changes occurring in their places, a notable difference between the language between the younger poets Jewel Cao and Alice Brooker to those of the older, professional poets Craig S. Perez and Joan N. Kane arises. The two poems by the younger poets “Translations in Survival” and “Are Your Words Empty, or Am I Shallow?” use the language of being “static” and “silence” in response to the immense amount of climate anxiety they experience, reflecting the pressure they feel imposed by society for them to bring our planet into the next generation. By refraining from explicitly describing the degradation and the changes in the world, the poems give the reader the sense that the young speakers are already fully aware of the changes in their environment; their concerns lie in the current climate change discourse.

Cao and Brooker were born in a generation defined by climate change; that is, they grew up living with the impacts of climate change, such as extreme weather events, including record-high temperatures, floods, and disruptions in seasonal patterns. This generation learned about the environmental problems and global changes at a young age. In school, they are used to writing over “Printed ink” about what they want to change to save the planet and how they can minimize their footprint, for instance, by not wasting “water” or food. Their poems expose the psychological impacts of climate change and the language of older generations that put immense pressure on this generation. Cao’s and Brooker’s ecopoetics illustrate how the language of climate change discourse has failed to meaningfully engage with climate issues and promote systemic changes in our society. Further, their language has inadvertently pressured the young speakers to constantly think of ways to reduce their ecological footprint, contributing to anxiety. For Cao’s speaker, the young person’s mind remains “static,” stuck in a loop of feeling extreme eco-guilt detrimental to their mental health and thus not productive for the climate work. Brooker’s speaker also experiences climate anxiety induced by the voices of the older generation’s climate discourse, wishing for “silence,” a different response from conventional activism and older generation’s approaches. Their poems illustrate how there is a societal emphasis on individual eco-guilt, especially in young people, over collective action.

The older, more professional poets, Perez and Kane, use a language of kinship and draw reader's attentions to the "melting" glaciers, degraded landscapes, burning temperatures and deteriorating relationships to place, suggesting that the poets are still coming to terms with the dramatic changes they perceive in their environment and in the process of thinking about new ways to imagine more sustainable relationships with the Earth. This language is reflected in Perez's "Love in a Time of Climate Change," in which the poem uses metaphors of ecological unison to illustrate how humans might reimagine their bond to the Earth, like one to a romantic partner, that requires nourishment and care. In "Thirteen Ways of Looking at a Glacier," the poem's speaker urges readers with naturalist language and apocalyptic rhetoric to see how we are losing a nonhuman entity that has serious consequences for the human world. Similarly, Kane experiments with ancient forms, such as the wedding song in "Epithalamia," to depict how they feel alienated from the Earth because their "roof" is burning from the "hot wire." In "Hyperboreal," Kane's speaker transports the readers to the far north to show them the realities of this increasingly vulnerable landscape, defamiliarizing their traditional images of the Arctic region.

These differences illustrate the need for intergenerational dialogue about shared responsibility for mitigating climate change and changes in thinking about how to reimagine our relationship to the planet. Together, the language from these poems negotiates the human's role in all these changes, emphasizing the importance of genuine attachments to the Earth. For instance, Perez underscores the importance of a language of love in "Love in a Time of Climate Change," thinking of nonhuman entities on the planet as "kin" with humans. "Epithalamia" highlights the dangers of having a weak attachment to place which facilitates harmful exchanges with the world. "Hyperboreal" emphasizes the need for solid knowledge of our landscapes to understand their degradation. Brooker's poem makes a case for "silence," emphasizing the need to think critically about the language surrounding us. Cao's poem illustrates how young people need support in dealing with climate change.

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With increasing awareness of climate change, literature has begun exploring portrayals of it and its impacts. However, literature that addresses climate change is often classified as science fiction. This absence of climate change themes in other literary genres, including poetry, reflects a failure to rethink the human's place in a rapidly changing world. In the last decade, poets have started articulating thoughts on climate change, underscoring the growing need for scholarly attention to emerging eco-centric thought in contemporary nature poetry. Examining the work of underrepresented voices, such as Indigenous and young people, who are most vulnerable to the impacts of climate change, is especially vital for understanding how these groups emotionally and intellectually respond to the place changes around them, as well as their perspectives on coexisting with other organisms within our ecosystem. These perspectives are essential for fostering more environmentally ethical coping with climate change. Poetry by Indigenous poets such as Craig Santos Perez and Joan Naviyuk Kane and the young poets Jewel Cao and Alice Brooker employs creative language and innovative forms, often depicting vivid mental states and cognitions that are inextricably tied to ongoing degradative processes on Earth.

To explore the ecological nature of language and form in Indigenous and youth climate change poetry, this thesis adopts an ecological or ecopoetic perspective is adopted in reading the poems, focusing on the state and contents of the poetic speaker's minds. The analysis draws on knowledge of how readers understand and build a picture of fictional minds and contemporary views of the mind in literature. Most noteworthy to this analysis is David Herman's "new geography of the mind" and his concept of "enactivism," as well as Alan Palmer's notion of "social minds." Additionally, Peter Stockwell's concept of "mind-modeling" complements Palmer's approaches to examining social minds. Moreover, the rich extended metaphors in several poems are analyzed through the cognitive poetics concept of "conceptual metaphors," as elaborated by Stockwell. The analysis and interpretation of the language and poetic structures that convey diverse forms of human-environment relationships are also illustrated by tracking the minds in the poems and applying the concept of "place-attachment" from the field of human Geography.

This thesis concludes that the language in climate poetry by younger people is distinct from that of Indigenous poetry from older generations. While Indigenous poets center on an ecopoetics of kinship, highlighting the entanglements of humans and their environments at different scales and their growing attunement to the transformations

occurring in their environment, the younger poet's speakers focus on exposing how the current climate change discourse negatively impacts them, portraying their perceived ineffectiveness in addressing climate issues in a way that encourages humans to care for their environment.

Zusammenfassung

Mit dem zunehmenden Bewusstsein für den Klimawandel hat auch die Literatur begonnen, sich mit der Darstellung des Klimawandels und seiner Auswirkungen zu befassen. Literatur, die sich mit dem Klimawandel befasst, wird jedoch häufig als Science-Fiction eingestuft. Das Fehlen von Themen zum Klimawandel in anderen literarischen Gattungen, einschließlich der Poesie, spiegelt ein Versäumnis wieder, den Platz des Menschen in einer, sich rasch verändernden Welt, neu zu überdenken. In den letzten zehn Jahren haben Dichter begonnen, Gedanken zum Klimawandel zu artikulieren, was den wachsenden Bedarf an wissenschaftlicher Aufmerksamkeit für das aufkommende ökozentrische Denken in der zeitgenössischen Naturdichtung unterstreicht. Die Untersuchung der Werke von unterrepräsentierten Stimmen wie indigenen und jungen Menschen, die am stärksten von den Auswirkungen des Klimawandels betroffen sind, ist besonders wichtig, um zu verstehen, wie diese Gruppen emotional und intellektuell auf die Veränderungen um sie herum reagieren und wie sie das Zusammenleben mit anderen Organismen in unserem Ökosystem sehen. Diese Sichtweisen sind von entscheidender Bedeutung, wenn es darum geht, umweltethische Wege zur Bewältigung des Klimawandels zu fördern. Die Poesie indigener Dichter wie Craig Santos Perez und Joan Naviyuk Kane sowie der jungen Dichterinnen Jewel Cao und Alice Brooker bedient sich einer kreativen Sprache und innovativer Formen, die oft lebendige mentale Zustände und Erkenntnisse beschreiben, die untrennbar mit den fortschreitenden Zerstörungsprozessen auf der Erde verbunden sind.

Um die ökologische Natur von Sprache und Form in indigenen und jugendlichen Gedichten zum Klimawandel zu erforschen, wird in dieser Arbeit eine ökologische oder ökopoetische Perspektive bei der Lektüre der Gedichte eingenommen, die sich auf den Zustand und den Inhalt der Gedanken der Sprecher der Gedichte konzentriert. Die Analyse stützt sich auf das Wissen darüber, wie Leser fiktive Seelen verstehen und sich ein Bild von ihnen machen, und auf zeitgenössische Ansichten über die Seele in der Literatur. Von besonderer Bedeutung für diese Analyse sind David Hermans „neue Geographie des Geistes“ und sein Konzept des „Enactivism“ sowie Alan Palmers Begriff des „social minds“. Darüber hinaus ergänzt Peter Stockwells Konzept des „mind-modeling“ Palmers Ansätze zur Untersuchung des sozialen Geistes. Darüber hinaus werden die reichhaltigen „extended metaphors“ in mehreren Gedichten mit Hilfe

des kognitiven poetischen Konzepts der „conceptual metaphors“ analysiert, wie es von Stockwell entwickelt wurde. Die Analyse und Interpretation der Sprache und der poetischen Strukturen, die verschiedene Formen von Mensch-Umwelt-Beziehungen vermitteln, wird auch durch die Verfolgung der Gedanken in den Gedichten und die Anwendung des Konzepts der „Ortsgebundenheit“ aus dem Bereich der Humangeographie veranschaulicht.

Diese Arbeit kommt zu dem Schluss, dass sich die Sprache in der Klimadichtung jüngerer Menschen von der indigenen Poesie älterer Generationen unterscheidet. Während sich die indigenen Dichter auf eine Ökopoetik der Verwandtschaft konzentrieren und die Verflechtungen zwischen den Menschen und ihrer Umwelt auf verschiedenen Ebenen hervorheben, konzentrieren sich die Sprecher der jüngeren Dichter darauf, aufzuzeigen, wie sich der aktuelle Diskurs über den Klimawandel negativ auf sie auswirkt, indem sie ihre wahrgenommene Ineffektivität bei der Bewältigung von Klimaproblemen auf eine Art und Weise schildern, die sich auf die Menschen auswirkt, um für ihre Umwelt zu sorgen.