Sputtering Candles: The Labour of Hope in Southern Albertan Environmentalists

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Undergraduate Honour's Thesis

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March 27, 2023

ACKNOWLEDGMENTS

I want to take a moment to thank those who supported my journey in completing this honour's thesis. Firstly, to my supervisor, Dr. Jodie Asselin - thank you! You have been my guide and my mentor since before this project was in the works. Thank you for the numerous edits, the meetings, and suggestions, but mostly for believing in me and in this project. This thesis would not have been possible without your support and guidance. Secondly, to my second and third readers - Dr. Jan Newberry and Dr. Julie Young, thank you for taking the time to send me resources, lending me your personal books and cheering me along.

I also absolutely must thank the research participants in this study. Your energy and hope for a better world invigorates me and has sustained me throughout the writing of thesis. You became my friends and my confidants. I am forever indebted to your kindness and your willingness to let me trek along with you in Crowsnest Pass during the summer 2022.

And finally, although certainly not least, I owe so much gratitude to Katie. You have been my absolute rock through this project and through my undergraduate degree, often taking on the household responsibilities and caring for our fur-babies. Thank you so much for your unending support!

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Introduction

The Anthropocene:

The Anthropocene, a conceptualized new geological epoch in which humans and our actions are understood to be *the* defining element impacting our climate and environment is one that remains highly debated. Social constructions of the Anthropocene have identified over seven various Anthropocenes, while geologists argue that there is only one (Head, 2016). It is not the intent of this paper to examine these arguments. Rather, I invoke the concept of the Anthropocene to draw on Head's (2016) human-nature paradox. "Conceptualizations of human-nature relations must also recognize both human power and its embeddedness within [natural] relations. We separate out humans… [when] the evidence shows how deeply embedded we are [with nature]" (Head, 2016, p. 5). Lesley Head, an Australian geographer

interested in human-environment interactions (2016, p. 5), argues that paradoxically, the Anthropocene is “presented as a time period defined by the activities and impacts of the human, yet it is… also a period that is now out of human control.”

Understanding the Anthropocene as one that is dominated by human activities may lead to conceptions or even the romanticism of human control (Head, 2016). This sort of “hyper-humanism” (Head, 2016) discredits the agency of our non-human companions in creating possibilit(ies). I understand the Anthropocene as a geological and social epoch as culturally mediated, much like Scheper-Hughes’ (1993) understanding of emotions as socially mediated. Emotions are intrinsic to the human being and cannot be extracted from cultural and social relations, including human and more-than-human interactions. I understand the relationship of environmental subjects with the environment and with one another to be deeply social, reflecting a basic human need for moving together and feeling together (Keltner, 2023). Head (2016, p. 47) argues that the hyper-humanism of perceived control or attempts to control the Anthropocene is one that justly articulates human responsibility for biodiversity loss and climate change, yet in “other ways it is more the same and risks perpetuating a modernist understanding of human domination over nature” (p. 47).

The Anthropocene and climate change are deeply entangled through human impacts on the environment. Awareness of and navigating the complexities of human actions, industries and ecological and biological crises threatening our world comes at an emotional expense. Eco-anxiety is defined as "the chronic fear of environmental doom” (APA, 2014). Usher et al., (2019) define eco-anxiety as a specific typology of anxiety related to perceived and real environmental changes stemming from human activity, culminating in the Anthropocene. What could be more logical than fearing a future that has been so grimly described in the media? Might it in fact be adaptive?

Eco-Anxiety and Paralysis:

Climate change has the propensity for *direct* and *indirect* impacts on people (Pihkala, 2018). *Direct* impacts may include things such as existential threat and impacts on physical and economic welfare. *Indirect* impacts of climate change may take the form of psychological turmoil such as depression, anxiety, and grief (Pihkala, 2018). When related to climate change and the environment, the terms eco-grief, eco-anxiety and eco-depression have emerged (APA, 2014). Beyond Storms and Droughts: The Psychological Impacts of Climate Change (2014), formally recognizes eco-anxiety and eco-grief as common emotional reactions to climate change.

People may react variously to climate change, its existential threats, and the psychological impacts such as eco-anxiety and eco-grief. Climate change affects humans living across the globe disproportionately, with areas more vulnerable geographically (such as those closer to lower-sea levels) and impoverished communities suffering the greatest impacts. Yet the implications of eco-anxiety are not limited to individual angst but may serve as a proponent for climate change inaction in a socio-ethical paralysis (Pihkala, 2018). Understanding action and inaction of climate change mitigation efforts requires understanding emotions as an antecedent to the behaviour (Bell et al., 2021). A lack of recognition of the emotions making way for hope and action is at best a missed opportunity to address psychological eco-impacts and at worst corroboration of an "evasion of responsibility for environmental harms (Sideris, 2020).

Panu Pikhala (2018), an interdisciplinary environmental theologian and eco-anxiety expert argues that eco-anxiety has the possibility of decreasing resilience and increasing climate action paralysis through invoking hopelessness about the future. Eco-anxiety, Pikhala (2018) states, is a psychoterratic syndrome, commonly appearing as a state of apathy. Rather than apathy or a lack of caring, however, Pikhala (2018, p. 546) and Albrecht (2011) argue that "Many people in fact care too much… [and] not too little [about climate change]." Feelings of helplessness related to eco-anxiety (Geiger, et al., 2021) limit climate action (Salomon & Preston, 2017) and shut down engagement (Norgaard, 2011) despite the dire stakes (Schlegel,

2022). In psychological defense, a state of action-paralysis (eco-paralysis as termed by Albrecht (2011)) may result.

Lack of climate change action at the community level may further compound feelings of helplessness and fatalism, as children report being afraid not only of climate change, but the lack of response governments and the public are taking to mitigate climate change's effects (Hickman, 2020). While researchers seek to examine the motivations underlying active climate change mitigation efforts, the complexities of the emotional experiences about environmental change are complicated by the lack of action as people may avoid their responsibility (Mennnig, 2017). While eco-paralysis or climate inaction may in fact be psychologically adaptive for the individual, it remains communally and existentially maladaptive.

Though the American Psychological Association has formally named the emotional experiences or psychoterratic (Albrecht, 2011) syndromes of eco-anxiety, and eco-grief as 'common,' empirical research on treating the experience from a cognitive psychological perspective remains relatively unexamined. This gap in therapeutic approaches is one that misses an opportunity to motivate real, sustained environmental change. The majority of climate change research up until 2015 related to the physical and economic impacts of climate change (APA, 2014). The psychological and mental health impacts for individuals and communities are just beginning to be explored now (APA, 2014).

The biophilia hypothesis (Wilson, 1984) may provide context as to why people are developing depression and anxiety related to climate change. Wilson's (1984) biophilia hypothesis postulates that humans have an innate connection to nature and our mental and physical well-being is supported by it. Loss of biodiversity and increased environmental crises may decrease opportunities for connectedness with nature. Existential threat of humanity itself in the face of climate change and increasing global temperatures may lead to a loss of personally significant natural landscapes (Usher et al., 2019), spaces to cultivate 'awe' (Keltner, 2023), and increase precarious future-imaginations.

Bell et al., (2021) finds the existential threat of climate change to be a cultural trauma and argues that "sustenance is necessary to effectively confront the climate crisis" (p. 48). While Bell et al., (2021) understands the sustenance required to be spiritual and cultural, this project examines the emotional sustenance required for environmental subjects to remain hopeful and engaged in their efforts. Broadly understanding eco-anxiety and eco-grief (and other typologies of eco-related psychoterratic syndromes) as both the result of a lack of action and of perpetuating a lack of action requires an investigation of the emotional landscapes experienced and cultivated by active environmental subjects.

Nancy Scheper-Hughes (1993) understands emotions as being culturally mediated and socially constructed. In what ways are the relevant emotions of hope, optimism, despair, and hopelessness related to the actions or inactions of environmental subjects socially constructed and shared? In the pages to follow, this project examines how active environmental subjects remain not only engaged but hopeful. What sustains individuals emotionally to engage in this sort of work? And what exactly is the nature of environmental work in Southern Alberta? How do hope and optimism lend itself to environmental work and what is hope's role for (in)action?

Rationality of Hope:

The various emotional and active (or inactive) responses to climate change in the Anthropocene requires a management of emotions to cultivate resilience (Bell et al., 2021). Head (2016) notes that there are two dilemmas surrounding hope. First, hope articulates a split between emotional engagement with uncertainty and the implicit responses to managing these emotions (Head, 2016). Secondly, hope articulates that positive feelings and optimism are crucial to emotional sustenance (Head, 2016). I seek to expand upon the latter part of Head's (2016) articulation of hope. Feeling good may be a component of hope, yet as will be discussed in the following chapters, feeling positive and optimistic does not precede the act of hoping.

Rather, I discuss hope as a process where action and agency are the integral pieces binding hoped-for-futures and our current reality through emotional resilience. Through this articulation, hope is not understood as a discrete entity – one that can be found. Instead, hope is understood as processual, dynamic, and ephemeral and as an art that must be cultivated (McGeer, 2004). I investigate 'the art of hoping well' from my interactions and observations with Southern Alberta environmental subjects as one that is supported by nature and our non-human companions in a convergence of synchronized physiologies mediated by a labour of hope.

The Anthropology of Emotion:

Interest in the emotional aspect of human society and culture has increased over the past decade (Lutz & White, 1986). Leavitt (1996) argues that the proposed dichotomies of emotional consideration in anthropology assume that emotions are a human universal; that are either innate or nurtured. In other words, emotions are culturally specific, but humans are biologically and intrinsically emotional beings. Emotions themselves are often considered feeling-states derived from information processing that tells us something about the world or relationships around us. Psychology and philosophy have a long history of understanding emotions as a cognitive state secondarily to a physical manifestation of feeling in the body (Leavitt, 1996). Anthropologists, like Scheper-Hughes (1993) understand emotion as an "aspect of cultural meaning" (Lutz & White, 1986, p. 408) and therefore culturally variable.

Anthropology seeks to understand the whole of the individual and the communal. In my effort to understand sustained environmental effort in Southern Alberta, I look to the emotional experiences of environmental subjects as the antecedent to their behaviour. Head and Harada (2017) argue that "… emotion [is] how people negotiate everyday spaces and social processes which are ultimately situated within wider… arenas" For the purposes of this thesis, emotion is understood as both bodily and cognitive, paying particular attention to the manner in which it is socially constructed through contagion and physiological alignment. While emotions have been understood as the 'antithesis to rationality' (Ahmed, 2004) by some, I

argue that emotions play a much more significant role in labour and effort than previously considered.

Willow Staking:

Before continuing on to the following chapters, it is prudent to briefly examine an activity termed 'willow staking.' Willow staking will be brought up throughout the remainder of this thesis in fieldwork examples and musings that research participants shared during interviews. Willow staking is an activity aimed at riparian restoration. It acts in a two-fold manner. First, the willow stakes act like construction material – like rebar, in fortifying a riparian bank. Secondly, it is hoped that the willow stakes will grow into trees, providing further bank stabilization via root systems and providing essential habitat to various species. Branches of a willow tree are harvested when the willow is dormant and there are no leaves. The branches, devoid of smaller branches and leaves can be stored in water for up to a few months.

When planting the willow branches, or stakes, the branches are cut perpendicular to create sharper point. A variety of techniques are used to drive these into the creek and riverbanks of riparian areas. The technique used by the organization I conducted fieldwork with was to utilize a planting bar and a sledgehammer, to drive a one-inch diameter hole approximately three and a half feet into the ground. The planting bar is then removed from the soil, often requiring two people to help wiggle it out of the ground. The pointed end of the willow stake is then placed into the hole and a rubber mallet it used to drive the willow stake as far into the ground as possible, in an effort to increase soil-to-willow contact. Finally, the individual will use various tools including sticks, their hands, and feet to compact the soil tightly around the willow.

Conclusion:

The thesis structure is as follows. Following this brief introduction, I review the context in which this project emerged, and the methods utilized in my fieldwork and analysis. Moving

along to the third chapter, I conceptualize hope as emergent within difficult emotions and out of moments of chaos, violence, and rupture. Within these considerations, hope is articulated as a dynamic process and one that does not necessarily parallel 'blind optimism.' This review is particularly concerned with enacted agency and with the role of non-humans in the construction of a labour of hope.

A labour of hope, I argue, is often unrecognized labour of sustaining emotional resilience when environmental subjects face significant barriers, such as funding and governance. I understand a labour of hope as one that is deeply valuable and has the propensity for emotional debilitation and I argue that we, the public, the government, and businesses need to do a better job of caring for those who sustain and enact hope for our present and future world(s). Finally, in engaging a discussion of the emotional resilience demonstrated by environmental subjects, I investigate the role of connectedness with nature and a sense of awe as one that is deeply nourishing. This thesis concludes with a general review of topics and a personal reflection of fieldwork.

2

CONTEXT AND METHODS

Context:

It was the summer of 2020 and I had just taken an undergraduate seminar course titled "Anthropology of the Apocalypse" during the height of the covid-19 pandemic. Health mandates ranging from suggestions to remain home, to complete lockdowns had been shifting in and out of place for the better part of five months. What was supposed to last only two weeks was lasting nearly half a year without an end in sight. Like many others, I was feeling the effects of isolation and uncertainty. Despite the beautiful summer days and clear blue skies on the prairies that I yearn for every winter, these months passed slowly in worry.

Perhaps like many, these worries culminated in extensive thinking about and dreading the apocalypse. Society was changing, and people were angry and frustrated. And as someone who was raised in a devoutly Anabaptist home, talking of and seeing the impending "end of days," approaching had resulted in my own constant hypervigilance. In the uncertainty, I found myself consumed by worry, intellectualizing, and trying to pull myself out of these feelings of primal fear. In doing so, I used my undergraduate training in shaping curiosity surrounding my emotions and affect – the bodily sensations of my emotions. Sharing these experiences of fear in my writing is uncomfortable, vulnerable, and even scary. Yet, the confrontation of these affectual states of embodied and enculturated fear meeting curiosity shaped my questions and inquiries to follow in my honour's thesis.

It was in this state of uncertainty and discomfort that I noticed the water level of the Oldman River, a river running through the centre of our city, cutting the city into West and South/North, lower than I had ever seen it before. I recall driving across Whoop-Up Bridge, from the south side of Lethbridge to the west side of the city. I was in the passenger seat and looked to my right, expecting to see glimmering and sparkling water. Instead, I saw islands. Little islands. Islands of mounded dirt where I had perceived the water would be. In this moment, this image jarred my expectations for what I had expected to see. Further, I felt the river was lonely. Where normally the river was abounding with kayakers and people floating in small cohorts and perhaps even fishing, there remained only slow-moving water and bare spots where the riverbed was exposed.

It shook me. I was aware the summer months had been particularly hot with temperatures averaging in the high 20’s°C to mid 30’s°C. I was also aware that we hadn't received much precipitation, but I was unprepared to see the water levels of our local river system so drastically impacted. I was uneasy. Was this yet another sign of drastic changes to come to our society? Days went by, weeks possibly, and I couldn't shake this nagging feeling of doom and gloom. The summer heat persisted without reprieve. We waited for rain. I waited for the rain. Eagerly, desperately. While the city was not under water usage watches, we were

clearly experiencing a drought. I eagerly awaited precipitation and sought emotional reprieve and relief that all would be alright.

The rain did not come that summer, or at least not enough. Out of exhaustion from my own thoughts I began researching ways to reduce my carbon footprint. I watered my grass less, recycled more, tried driving less, and brought my own takeout containers to restaurants. Still, I could not alleviate my anxiety. The more action I took, the less useful it felt. As I engaged in these 'environmentally friendly' actions, I asked myself "When will it be enough?" and "How can any one person ever do enough to make a real impact?" How can we even measure these impacts? and over time, my questions shifted. In the classic tradition of paying attention to the banal, to the mundane, perhaps, my anthropological classes prepared me to examine emotions and affect as constitutive assemblages emergent in moments of encounter (Tolia-Kelley et al., 2016).

It stood to reason that if I was experiencing eco-anxiety and eco-grief, others in the surrounding community might be as well. Social media certainly depicted a relative consensus on the emotional experiences of climate anxiety and grief as influencers shared their feelings and discussed the challenges in attaining a zero-waste [carbon footprint] life. With consideration to the relatively common narrative of eco-grief and eco-anxiety, it was noted that individuals would frequently ‘take breaks,’ from social media or certain tags to eliminate climate change news from their feeds. Yet, environmental actants were less likely to be able to ‘turn off’ the news as their careers deeply engaged with climate change narratives and the public. What differed in these two contexts that allowed people to engage in environmental resilience and ground-up work in our communities without burnout and fatigue?

It is out of these questions and experiences of emotional turmoil that this project is born. In the following pages, I explore these very questions. What enables and makes it possible for those engaged in environmental stewardship to do the work? What is the emotional experience of environmental subjects enacting climate mitigation efforts in the Southern

Albertan region? What are the challenges and possibilities of this work? Further, where and how does hope exist in these spaces? I share with you the tale of hope, as located, and created and enacted by resilient folks in our Southern Alberta community who care for the land, for each other and for those who are other-than-human. This is their story, that I have been privileged to witness. This honour's thesis is about the nature of hope as enacted by environmental subjects in Southern Alberta, and the efforts of their labour. It focuses on the question of what hope is and how is it produced in political and relational contexts. Further, this honour's thesis explores notions of nature and awe as human universals in sense-making and managing complex emotions surrounding futurity and defeatism.

In all of this I grappled with my own anxiety and worries that I wasn't "expert" in the topics I was researching, as people posited my own questions about motivation and engagement back to me. This led to reflexivity and constant evaluation of my own positionality being central to this work. The individual researcher's reflexivity, however, can pose a limitation in qualitative research as it risks amplifying the voice of the researcher rather than the researched (Gilmore, 2014). Yet, the birth of my project and inquiries came out of a deeply personal emotional experience. The two cannot be explicated, the research project and the presence of the researcher hold deep biases that may be limited, but cannot be separated from one another (Gilmore, 2014). Thus, I seek to highlight the voices and experiences of the research participants but have at times included pieces of my own reflection as I seek to remain reflexive about the emotional processes I seek to understand.

Finding the Field:

As an anthropology student I sought the answers to my inquiries through engagement with "the field and, for me, the field was in my backyard – literally and figuratively. My research evolved into the epidemy of what anthropologists call a 'multi-sited' project. Traditionally, this might have meant various geographic locales, ideally far away and exotic. For me, though, the potential difference in emotional and affectual experiences regarding climate change was

exotic in and itself. Early on in the process of reaching out to organizations about my project and basically asking if I could tag along with them for the summer, my assumptions about which organizations I would be working with were shattered. I had assumed I would work alongside one organization, in a brick-and-mortar location and my volunteering would be filing or something. That particular organization no longer had a brick-and-mortar build. Others I spoke to were ephemeral in nature -- shifting in online spaces to breweries to pop-ups in city parks.

And so, my fieldwork shifted. Fieldwork, as Van Maanen (1988) so aptly articulates, "is one method -- to the question of how the understanding of others, close or distant, is achieved."(p. 18). I sought to engage in the classical anthropology fashion of participant-observation, finally understanding the challenges of balancing active participation with that of observation. I became a "professional stranger" (Van Maanen, 1988, p.2) in my own backyard, literally conducting interviews with my interlocutors in my garden as we brainstormed and consulted on the inclusion of more native species in my green space. I quickly realized how much I didn't know when I realized I did not have the contact information for any of the three individuals I was sharing a car ride into the Crowsnest Pass with -- and not knowing what to pack, what to wear and where to meet the group. I contemplated cancelling this fieldwork thing altogether that day, though remain glad I did not.

In total, I conducted 19 interviews in private offices at the University of Lethbridge, in the food court and public spaces of such institutions as the Lethbridge Research Centre and the Lethbridge College as well as in coffee shops, parks and in gardens. Interview participants were recruited via the 'snowball' method. Interviews were in addition to extensive participant observation which included community outreach events at parks to talk about food waste, pointy duty surrounding water conservation and invasive species, willow staking (which will be described in the previous chapter) and participating in Zoom meetings. I observed volunteers and employees with various organizations facilitate conversations about reducing waste at concerts in the park and outreach events at Henderson Lake who intended to teach children

about playing in nature. I learned about organizations seeking to make nature more accessible to those experiencing physical, cognitive and development impairments.

I set up tents, did coffee runs, helped facilitate fishing games for children and "tattoo" over 700 children with temporary, organizational tattoos. I also drank coffee and ate delectable sandwiches at small local cafes, spoke to ranchers and toured their land in 4 x 4's, and successfully spotted a bear in a herd of cows outside Fort MacLeod. This latter event became a running joke as those present would ask me if it was a bear every time we saw a cow). I examined my emotions walking in the parking lot after rain, seeing a crow eating a soggy Subway wrapper, and watching the water level in the Oldman River decrease throughout the summer and increase again. I hiked up to Blind Canyon and pulled invasive weeds with a group of volunteers so excited about the work, that I couldn't help but get caught up in their emotion.

I pet goats and played with dogs and learned to fish (though not well). I got outside, and I pulled weeds and reflected on the categories of what constitutes a weed versus a plant. I grew my own food -- tomatoes, potatoes, carrots, and raspberries. I toured Naapi's Garden, a Blackfoot community garden and seedbank and learned about native plant species. Lara, a watershed-steward assistant in her mid 20's and one of my key informants, and I went back to the first location where we staked willows at the end of June to view the sites where we had engaged in willow staking. In the end, I conducted nineteen semi-structured interviews, with individuals working with and volunteering with five different organizations. Thirteen of these interviews were recorded and transcribed and six were informal meetings, tours, and conversations where I took notes.

Throughout my participation in the events detailed above, I kept point form notes in either my cell phone or a small flip-pad, which I used to later write more in-depth fieldnotes about the day, highlights, and pieces of conversation that I had noted – moments in tension of communicating about water conservation with the public, moments when discussions of climate change would come up, or moments when the word "hope" was used explicitly. I asked

questions about people's involvement in our community, when and how long they had been involved for example. I transcribed the thirteen recorded interviews and coded them inductively, then went through a process of thematic analysis to find central themes and patterns.

Instead of seeking objectivity, I leaned into the experience which Van Maanen (1988) argues is the true definition of participant-observation. I sought to recreate the methodology as discussed by Gilmore (2014), in recognizing the "collision of work-worlds." Though my position is that of a student researcher, I must recognize the prevalence of power afforded to the researcher -- who is at times, unintentionally and at other times, intentionally biased. Our questions and research focuses are biased, the data I choose to collect is filtered through a personal and professional lens that frames the data in such a way that the researcher cannot be explicated from it. This continues through the process of transcribing interviews in which tones and humour may be lost, and further still through the frame of analysis whereupon the focus of categorizing data into key words or "codes," further exacerbates the issue of researcher bias. To address this, I sought to conduct a version of what Gilmore and Kenny (2014) call "collective reflexivity," as inspired by feminist anthropology. The method of collective reflexivity allows emotion and intersubjectivity to emerge, as the arena of participant observation is one in which world of work collide with one another, exacerbating and making seen the generally invisible emotionality of ethnographic research (Gilmore & Kenny, 2014).

In an ideal world, this would have led to a focus group during the analysis portion of my honour's thesis, which would have brought together previous interviewees. I had planned to show them the data I had collected and theories in production, while asking for further feedback. As those who have completed an honour's thesis know, time is not on the side of the undergraduate researcher, and I was unable to facilitate such a focus group in the eight-month time frame from the conclusion of my data collection through fieldwork and interviews. The lack of being able to connect with groups of previous interviewees in the fashion of a focus group remains a limitation of this study. Instead, I remained connected to certain key

interlocutors throughout my analysis, meeting for coffee and discussing my project with two key informants and interviewees in October and November 2022. I engaged in a few more events after the official conclusion of my fieldwork, staking more live willows in October 2022 and became a board member for one of the organizations I had the privilege of conducting fieldwork alongside in December 2022.

My continual engagement in "the field," and with key research participants (each of whom has been given a pseudonym in this thesis), has afforded the possibility to be in reflective spaces to discuss theories, ideas, and the recognition of power of representation. In fact, one such key informants became my roommate for four months during the winter months of 2022 and early 2023, during key writing times. Through it all, these spaces of reflexivity have afforded such questions and inquiries as "What is hope? And where is it found?" "Where do I engage with hope?" "Where do I engage with defeatism?" And "With whom do I, with whom do we, engage in the processes of hope and defeatism?" Furthermore, what does this mean for you? For me? And for us, together and collectively?

3

THE NATURE OF HOPE

This chapter addresses the concept of hope. Hope's nature is argued contentiously by many writers who argue, for instance that that hope is a cognitive attitude (Baczewska, et al., 2023), (Requero, 2021), emotion (Van Zomeren, et al., 2019) or a process rather than disposition(s) (McGeer, 2004), (Anderson, 2006a), (Head, 2016). Anderson (2006b, p. 733) states that hope, often remaining relatively elusive and ephemeral, is "frequently likened to the immaterialized matter of air, or sensed in the prophetic figure of the horizons, hope anticipates that something indeterminate has *not-yet become*."

For my part, I understand hope as process, and will explore it within this chapter through various key speakers and through the voices of the research participants themselves.

To do this, I draw on McGeer's (2004) argument that hope can be cultivated as a practice (Head, 2016) in what she terms 'hoping well.' As humanity grapples with challenging emotions, including grief, loss, and despair in an effort to navigate survivability, hope often emerges within these paradigms of rupture, violence, and crisis. Whilst hope is a necessary and human universal, it remains theoretically underexamined in the context of lived realities and as practice (Anderson, 2006). Hope and optimism have become circumscribed to, for, and with, one another and although the two lend nicely to each other, at least to some degree, optimism remains only a part of hope.

The immediate notion of hope may not conjure an image of defeatism or one that yields the results of inaction, yet some scholars argue just such. In the wake of popular defeatist and fatalistic climate change narratives, intense emotions and perceptions of a dire future are frequently evoked, (APA, 2014), often precipitating feelings of helplessness and resignation. Prolonged feelings of helplessness may be related to eco-anxiety (Geiger, et al., 2021) and may limit climate action (Salomon & Preston, 2017) shutting down citizen engagement (Norgaard, 2011) in climate change mitigation efforts. Albrecht (2011) has termed this lack of inaction as eco-paralysis, arguing that intense emotions such as anxiety and grief may be crippling when people care "too much." Understanding action and inaction related to climate change mitigation efforts then requires a deeper understanding of emotions, hope, and defeatist attitudes as antecedents to the behaviour and actions taken or not taken (Bell, et al, 2021).

As hope seeks action and circumscribes possibilities and challenging paradigms of immobility, optimism often remains motionless, reifying only internal dispositions that lead to inaction. Ultimately, I argue that while hope and optimism cannot be thought of discretely from one another, the entanglements of hope with optimism lend to my argument that hope is processual in nature. It is elusive, shifting and it exists as part of a continuum, subtyped by various categories, and characterized by degrees of social responsiveness and action.

Hope versus Optimism:

In engaging with environmental subjects of Southern Alberta -- those who are actively working towards a better future for our region, our world, environment, and climate, it has become apparent that hope cannot be reduced to an emotion, disposition, or simply optimism. While optimism and hope are intrinsically entangled, they are not reducible to one another. Rather, while optimism plays a role in hope, its position tends to be over-stated within Western societies (Schlegel, 2022, p. 427) where it is thought of as *the sole* emotion which facilitates the imagination of better future possibilities (Schlegel, 2022, p. 427).

Hope, when coupled with optimism, is conceptualized as a warm feeling that yearns for a positive, certain future. Hope and optimism may exist concurrently or parallel, but Head (2016) suggests that this Western concept of hope and optimism as intrinsically coupled needs to be challenged. Head (2016, p. 75) states that "associating hope only with optimism acts to close down possibilities rather than open them up." Emotions and feelings, like optimism, are fleeting. Far too fleeting to motivate the sort of persistent engagement enacted by environmental subjects seeking to mitigate environmental ruin. Emotions and feelings are far too brief for someone to haul hundreds of pounds of willows to a rocky stream and certainly to motivate several hours sledgehammering willow stakes into the ground for the sake of only a 30% chance of willow-survivability.

I've seen people disappointed and angry, and I've heard them share their feelings and thoughts about the future and what may be to come. I've heard their expressions of fear for a world for their grandchildren and great-grandchildren. The topic of climate change is fraught with feeling, affectual dysregulation, fear, and uncertainty. Yet, O'Neill and Nicholson-Cole (2009, p. 355) assert that "…although such [fear] representations have much potential for attracting people's attention to climate change, fear is generally an ineffective tool for motivating genuine personal engagement." Some participants have expressed similar thoughts.

For example, Charlotte, a long-time environmental activist, and executive director of one of the organizations, articulated such in her interview:

> *I feel like things are grim right now and it feels like every day they get slightly grimmer. So that's really hard. But at the end of the day, I think it's about that joy, you know? … That* ***has to be what drives*** *because the negative stuff can only drive you so far. The* ***fear can only drive you so far****. I mean, for me, anyway. Maybe there's other people can sort of feed off of that fear cycle and keep it going? I don't know…*

If fear is not a motivating factor for environmental subjects to engage in climate change mitigation efforts, to dedicate their careers, lives and volunteered time to the cause, then we must turn our attention back to hope and optimism and their entanglements. In such a discussion on hope and optimism, a few research participants shared the following with me in their interviews:

> Charlotte: *…I think it does make me optimistic. I'm sort of skirting around the word 'hope,' there for a second…*
>
> Spencer: *Why "skirt" around the word?*
>
> Charlotte: *I knew you were going to ask me that! So, I have done a lot of thinking about hope. There's a very smart woman I follow on Twitter who also writes a lot about climate change… One of the things she said was, "We've been hoping for things to change for 20 or more years, and nothing has happened. So, we need to put hope aside.*
>
> *And I think that really resonated with me because* ***hope for me does not lead to action****… "everything will turn out OK…" kind of thing. And I think in a lot of ways, for people who are not fully committed [to change], hope can really be an excuse. Like, "I hope it doesn't get bad" or "I hope someone does something about that." People… people can use 'hope' as a cover for things that they don't really want to engage with…"*

In contrast to Charlotte's definition, in reflecting on hope and optimism and their relation to one another, Nils, an avid board member and volunteer, shared the following with me:

> *There's kind of **two types of… or maybe a spectrum of hope.** At one end is where you can have optimism. And optimism to me is kind of "slack-jawed and sunny," you know? Whereas hope knows that there's a darkness and that there can be a darkness. Hope is like that sputtering candle… and [our organization] is kind of along the lines…*
> *Well, we know that things are dark, and we know that the light can go out. So maybe, the likelihood of that candle sputtering out is what [motivates us]… to stay in the game… they're the people who keep pressing.*

> *If you're going to move a mountain, you gotta keep your shoulder to it and **keep pushing**. Optimists at that end aren't based on that. They don't see the darkness, they're too sunny and don't seem to understand that… [the darkness is a real possibility.] They seem to be the people who believe that science will save us, that the market will save us, that the government will do something. They're the people who ask [other] people to do something.*

Mitchel, another research participant shared his thoughts on hope and optimism in the following:

> *Well… yeah. If there's no hope, then why bother **doing** anything? No, I mean… Yeah, yeah, there has to be hope that you are going to… Well, I planted my seeds just last week in the hope that they will come up… Without hope, there's just no sense getting up. But you also have to have some understanding as to why there might be hope.*

Both Charlotte and Nils had spent significant time thinking about hope and optimism in the context of their work and the environmental world. I wondered whether the topic of my research project had prompted these thoughts more explicitly or whether both Charlotte and Nils had also been speculating about the ideas surrounding emotion, motivation, and the defeatist narratives as well. Both shared that while the invitation to participate in an interview had made their thoughts a little more explicit, both had spent time thinking about hope and optimism and its relation to personality, motivation, and the longevity of the environmental movement for some time.

Strikingly, Nils, Charlotte and Mitchel all articulate a key proponent of 'hope', that of action. Charlotte said "… hope for me does not lead to action…", asserting that hope *should* lead to action and that it doesn't -- at least not for everyone, and not always. Nils further expounded on the concept of action in hope when he said, "If you're going to move a mountain, you gotta keep your shoulder to it and keep pushing." As Nils stated, optimism and 'being sunny' are not inherently linked to action, possibility nor sustainable systemic change. As Anderson (2006a) has argued, optimism may be more of a disposition, an intrinsic characteristic of mind and character, whereas hope circumscribes action, choice, creativity, and innovation.

Geographer, Les Beck (2020, p. 3), concurs with this sentiment, "… hope" draws on possibilities that are manifested in the social world and stands in contrast to **cruel forms of optimism** or an unrealistic faith in future progress." Internal emotional validation, auspicious and contented dispositions relatively free of disconcert, free of eco-grief and eco-anxiety, in our case, maintain the status quo at best, or act in promise of a missed opportunity to address largescale climate and existential challenges threatening humanity, the non-human and our ecosystems. At worst, blind faith and its 'cruel forms of optimism,' (Beck, 2020), are a corroboration of an "evasion of responsibility for environmental harms" (Sideris, 2020). Optimism, though it may care, lacks the facilitation of reaction in social responsiveness to deep challenges, and is inadequately prepared for the longevity required to make long-lasting sustainable change.

Hope as Action:

For Greta Thunberg (2018), hope is the result of action and is everywhere, in the everyday. Thunberg (2018) urges her fellow global citizens not to seek hope, but to act. Hope leads to action and through those enacted reverberations, creates and innovates plausible new possibilities and outcomes. Optimism, while a pleasant and sunny disposition of experience does not axiomatically lead to action and therefore it does not create and enact the possibilities for changing present and future realities. In this, I find hope in the banal, in the overlooked moments and relations existing all around us. This may provide a "starting point," (Head, 2016, p. 74) for reconceptualizing and understanding our current shifting reality(ies) as we grapple to make sense of future potentialities and the outcomes they may have for our world(s). "As a process, our past and current actions cascade into futures that we are and will continue to be unable to predict" (Head, 2016, p. 76). Everything we do, every choice we make, impacts those (humans, non-humans, and environmental conditions of our world) around us. Every choice we make breathes movement and change into creation.

Other authors have likewise built on the notion of process in a fruitful way. For example, Bird-Rose, a multispecies ethnographer (2017, p. 51) conceptualizes the imagination of new ways of being human in a multispecies world through her notion of 'reciprocal capture' as an "event, the production of new, immanent modes of existence" … it [reciprocal capture] is a process of encounter and transformation… in which different ways of being and doing find interesting things to do together. Recognising events as embedded within processes, has the propensity to metamorphose the categorical models that have limited our social location to dualistic notions of progress within contemporary comforts (blind optimism). Herein lies the value of recognizing hope as processual, with the propensity to challenge current issues that may hinder action towards an empathy of caring for our landscapes and the non-human elements which constitute our world(s).

Similarly, Wolf-Meyer (2018, p. 14) states that "Articulating futures – imagining them and bringing them into being—is an active process, and rather than a posture of resignation [in

the inaction of sunny dispositions and optimism] … [a] theory for the world to come needs to instill radical curiosity." Hope is simultaneously heeded and created when we act upon affordances and possibilities that are processually emergent around us. It is not one single momentous event, not one single moment nor a single feeling -- hope, or at least the kind of hope that nourishes creativity, action and potentiality is highly constitutive and of our multitudes of current realities. Thus, shifting attitudes about climate change mitigation efforts to understanding that it all matters because it's all constitutive is a starting point to transforming blind and cruel optimism into a hope that breathes life through the enaction of possibilities. Charlotte, mentioned above, shared this notion through her idea that "two is better than three":

> *…two is better than three. And it's… sort of that reminder -- that climate change is not sort of a pass/fail situation. It's a continuum, right? And every gram of carbon that we save is a slightly better future. I mean, infinitesimally better future. But a better future… And so, I think that's such an important reminder that it ALL matters at this point. The stakes have never been higher, but* ***it all matters****. And so, for me, that's kind of motivating.*

Charlotte articulates a sense of urgency, and a recognition of what individual's are able to **do and achieve in an ongoing process**. A shift in thinking, one that is present and engaged with one's environment now and the future that one wishes not only to "preserve," but rather to create. Hope is a process. It is an ephemeral result of shifting, constitutive pieces falling in and out of place. Rather than a discrete entity to "find," hope, characterised as elusive, may evade human recognition when we seek only to acquire hope. What we are really seeking in these moments is 'sunny optimism,' and the alleviation of emotional discomfort. As a process, hope is relational and the very constitutive nature of hope requires that to 'find it,' one must enact it in a sort of feedback look, where hope begets actions, begets possibility, begets further experience of hope in a semblance of co-production (Jasanoff, 2004). This feedback loop serves to externalize and then internalize hope, in reaction to our environment, social needs and

finally of individual, affectual and emotional needs. Dissident and president of Czechoslovakia perhaps sums this up:

"Hope in this deep and powerful sense, is not the same as joy that things are going well, or willingness to invest in enterprises that are obviously headed for… success, but rather, an ability ***to work for something*** *because it is good, not just because it stands a chance to succeed. The more unpropitious the situation in which we demonstrate hope, the deeper that hope is. Hope is definitely not the same thing as optimism. It is not the conviction that something will turn out well, but the certainty that something makes sense, regardless of how it turns out." (Vaclav Havel, 1990, p. 181 - 182).*

The Art of Hoping Well:

With hope established as a process, it leaves the question about action and inaction in those who assert that they are indeed 'hopeful,' about the future (or not), and whether hope's process manages to encourage relevant action seeking behaviour from individuals as future(s) are constructed. As Nils' states 'there's two types… or maybe a spectrum of hope,' which now turns my analysis to Victoria McGreer's (2004) spectrum and continuum of hope.

Philosopher Victoria McGeer articulates a notion of hope as existing on a *continuum* in 'The Art of Good Hope,' in which McGeer (2004) makes the case for 'hoping' as a practice to be cultivated. Practice tacitly implies action, repetition and indicates that hope is a skill which unused may be utilized poorly or at least, ineptly (McGeer, 2004), and honed may be used 'effectively' (McGeer, 2004). To understand the cultivation and art of "hoping well," (McGeer, 2004), one must begin with the understanding that hope, for all its societal augmentation, remains relatively misunderstood. Philosophers and indeed humanity have grappled with the notion of hope and its characteristics and propensities for enabling and encouraging the betterment of individual's life as well as the affluence and prosperity of global societies.

McGeer (2004), much like Nils' suggestion of hope's typology initiates the discussion of a "hope continuum" by articulating 3 types of hope -- wishful hope, willful hope, and responsive hope. *Wishful Hope*, is much like the blind optimism discussed above. McGeer (2004) asserts, is a type of hope that is overtly emotional and optimistic, while its bearer abandons responsibility and accountability to carry hope through. "Wishful hope is a failure to take on full responsibilities of agency and hence to remain over-reliant on external powers to realize one's hopes" (McGeer, 2004, p. 110) This 'over-reliance on external powers,' parallels that of Nils' thoughts when he speculated that relating to climate change, optimists may at times rely more upon the government, scientists or a vague notion "that everything will be ok."

Both Nils and McGeer (2004) point to agency as an aspect of hope, in that wishing and wishful hope relinquish a degree of agency and choice in the abandonment of responsibility, instead confounding an externalizing of wishes and hopes as "optimism," and a "sunny disposition," which may not always endure hardship or "keep pushing" with the shoulder to the mountain. "In the case of climate change, the semantic latitude of 'optimism' [of hope] facilitates continued inaction," argues Wilson (2021). Bell et al., (2021) would agree, asserting that the intensity of emotions evoked by climate change narratives may result in profound degrees of eco-despair and grief, scaffolding paralysis rather than climate change mitigation efforts. (Bell, 2021, p. 1).

Although this paper does not consider willful hope to be a hope found and embedded within the environmental subjects of the research project, it is worth noting, for the purposes of understanding McGeer's (2004) continuum, that willful hope is a self-centered hope, one in which individuals consistently utilize others to achieve their own ends. Wishful hope leans heavily upon optimism and whilst optimism and sunny dispositions are not inherent deficits, they do not produce reaction and action in a caring, socially responsible manner. Desiderating such futures in which climate change has been mitigated and humanity remains prosperous, may be one way of managing intense emotions such as eco-grief and eco-anxiety, but as argued earlier in this chapter, the act of desideration alone does not ameliorate or shift our current trajectory in new ways which may yield novel opportunities.

Another point on McGeer's (2004) continuum of hope is the point she locates between wishful hope and willful hope, called *Responsive Hope*. Responsive Hope, McGeer (2004) argues, is a balanced sort of hope, one in which its bearer maintains and embraces individual responsibility. Within the paradigm of McGeer's (2004) 'responsive hope,' individuals care and attend to the – negative or positive – future outcomes that others around them may yield, shying away from the inherent solipsism found in willful hope. McGeer (2004) muses that hope's maintenance requires a level of social responsiveness, one that acknowledges an individual's hopes, dreams, and challenges (McGeer, 2004, p. 122). In this way, responsive hope denotes enthusiasm, interest and reaction to the world's challenges and the concerns of other like-minded environmental subjects as well as the concerns of future generations with an investment in the climate. Responsive hope responds not just to challenges, but to imagination and within imagination, concerning what the world might be and what the world could be.

Finally, McGeer (2004) concludes her argument that the art of hoping 'well,' means that not only must we internalize and externalize our hope through action and heeding hope's echoes through an act of scaffolding, but we must become 'supportive scaffolders,' of others hopes. "Good hope, in other words, involves empowering ourselves in part through empowering others with the energy of our hope. In this way, too, hope is a deeply social phenomenon" (McGeer, 2004, p. 108). The art of hoping well is a philosophy that I found to be embedded in the attitudes and dispositions of environmental subjects that participated in my research, who find that hope and its proponents for future-making, and imagination can not only exist, but can be done well and lead to the sorts of actions that are required to mitigate climate change and manage the water crisis. To do so, one must be attuned and informed about current crises and act in a network of uplifting individuals, of a fully realized human community amidst the living non-human species and elements of our world(s).

Embodied Hope and the Non-Human:

This chapter has considered 'hope as practice,' (Head, 2016), and as I deliberate on hope's anatomy, I wonder where hope is internalized. So far, I've discussed hope as social practice, as requiring social responsibility, and being found emergent in the actions and echoes emanating from action. However, the internalization of hope, or emotional dispositions and mental states has merited significant discourse (Gibbs, 2005) and offers yet another perspective for consideration. For instance, Anderson (2006b, p. 744) states "hope is embodied; it is held in the same bodies as melancholy and grief," and so the consideration of hope is nothing so simple and dualistic as "good" vs "not good," but a complex interplay of action, emotion, perception and most importantly, relationality all in transmission through the body. Action and perception in a semblance of co-production of such transmission (Jasanoff, 2004) facilitate the internal portion of hope, yet scholars argue against a strict dichotomy between the two (Gibbs, 2005).

The event of even 'perceiving an object without touching it partly involves imagining how it may be physically manipulated,' (Gibbs, 2005, p. 64) and this 'coupling' suggests that action is axiomatically afforded and imagined in conjecture. Gibbs (2005, p. 42) continues that "traditional accounts of how we see, hear, smell, taste and feel do not acknowledge the importance of the entire human body as it moves through the world and engages in intentional action. This neglect of the body in action has led to both simplified views of perceptual experience…" This approach matters for this study, because within this coupling of objects, affordances and conjected action, environmental subjects and individual agents can imagine taking necessary steps towards a desired outcome. Agents are able to imagine, for instance, pulling invasive weeds, hauling heavy equipment, staking willows, and picking up trash, and further, conceiving potential future possibilities as outcomes of their actions.

In this way, Jasanoff's (2004) theory of co-production lends itself yet again to motion enacting possibility, internalizing actions, and hope's potentialities as well as the recognition that each act puts into motion that which was less available to the agent's imagination prior. In

a manner of scaffolding, each action's outcomes (hope) become internalized, making the next step or action easier to scaffold into the agent's internalized model of hope. Each of these bodies hold, contain, and enact varying emotions, including grief, loss, anxiety, optimism, and hope. In other words, we cannot consider the nature of hope without considering the bodies which enact hope.

This approach however raises the question, "Are emotions only from the brain and the mind? Or can the emotions and the resultant motivation also stem from embodiment and action?" Dess (2020, p. 72) states that "the body is often involved in emotion," and emotion and the body cannot so easily be denoted as two separate entities. Rather, the complexities of the body's physiological responses to emotions (and vice versa) must be considered. For the purposes of this article, I remained significantly constrained by time and space in the exploration of these physiological changes. For my purpose, at this time as I seek to cross the finish line of my honour's thesis and undergraduate degree, this simply remains out of scope.

However, Dess (2020, p. 75) compelling states "… to regard emotion as properly embodied entails going beyond acknowledging that it involves bodily changes. Embodiment as an alternative should also challenge the popular assumption that emotion's cognitive or intelligent dimension depends entirely on the brain. Physiology tells us that the body is intimately coupled or integrated with the brain, thus, the body then ought not to be seen as a mere reactant. Rather, the body ought to be seen as an active participant in the process of making sense of stimuli and situations beyond its borders." What I mean to argue in all of this, is that if hope resides in the actions and resultant echoes to follow, then hope also fairly exists in an embodied manner, encapsulated within the human and non-human anatomies that carry 'a broad range of emotions, including painful ones… entangled in hope" (Head, 2016, p. 75).

To better understand this, I find the work of Antilla and Suominen's (2019) useful. In *Critical Articulations of Hope from the Margin's of Arts Education*, the authors articulate their own questions surrounding the notion of hope, expressing a concern that in all discussions of the nature and anatomy of hope, the content seems to be geared solely towards a 'desired

outcome or goal' (p. 61), an approach that dismisses affect and the body's role in the construction of hope. Anttila and Suominen (2019, p. 62) compellingly suggest that hope should be understood "from the perspective of a sensing, living body and in connecting to the practice." In this sense, hope, fluid and evocative, becomes conceptualized and understood not only as a social construct and process, but also as a transpersonal phenomenon 'transcending object-subject ontologies' (Anderson, 2006b, p. 736) in a notion of hope as embodied affect.

Relationally emergent and dynamic, affect "moves between bodies and is expressed as bodily background feelings that refer to bodily states not (yet) recognized as emotions (Anderson, 2006b, p. 748). These background feelings not (yet) classified or understood as emotions may permeate the body in a manner of tension or spiked adrenaline (Gibbs, 2005). Anttila and Suominen (2019) understand Anderson's (2006b) articulation of hope to mean that hope moves and flows between and, with humans. However, whilst this is certainly true, I understand affect of hope to exist not only between and with humans, but between humans the environment, between humans and other non-human species as well as between and with non-human to other non-human spaces. In the context of the Anthropocene, it would be incomplete to state that spaces without human touch exist, thus I argue instead that the affect of hope exists and is prevalent regardless of human attention.

What I mean to challenge, and what data from this study contests, is the notion that only humans may create and enact hope. In other words, hope as an active process of enacting potential possibilities is not exclusive to the human domain. The multitude of cascading current realities and future realities (Latour, 2004) make it impossible to confidently assess which futures are more or most plausible, let alone to know and understand the plethora of potentialities as they become enacted. Nor is it possible to know which potentialities have ceased as the ripples fade or another act is cast. Hope parallels the future in that it is elusive, shifting and never quite knowable -it is all a continuous process. By extension then, it is not only the human species which exclusively yields and controls the outcomes of these potential futures. In fact, the idea that humans may control or facilitate the control of a global future is laughable.

Though the human environmental subjects of this research project planted willow stakes with the intention of these stakes growing into trees and providing riverbank stabilization, it is entirely plausible that other than human species such as beavers and birds, acted upon these stakes to facilitate or negate the potential of willow growth. Beyond mammals, birds and creature-species which enact varying future and current reality shifts, the willow itself acts upon the ecosystem in a manner befitting the enaction of potential. "Living systems are units of interactions; they exist in an environment. From a purely biological point of view, they cannot be understood independently or apart of the environment with which they interact, the niche; nor can the niche be defined independently of the living system that occupies it" (Maturana, 1980 in Gibbs, 2005, p. 42).

The fact that humans lay claim to a desired future and hope is one that is egotistical and anthropocentric, serving to sever us from nature and the non-human entities which much like us, have the great potential for enacting novel potentials. Further, inspiration for action can be drawn from our non-human companions, whose own persistence and resilience even, may elucidate the art of hoping well. Non-human companions, at best forgotten or neglected and at worst dismissed entirely, act upon the affordances of their and indeed, our, landscapes in actions which promote and create possible future realities in an ever shifting, ephemeral state. Yet, the willow does not disengage from action despite dire stakes and fatalist narratives. The willow, and indeed, the non-human, remain what they are, in that they continue to create, to scaffold and enact future possibilities in a manner befitting the art of hoping well.

Hope in Rupture:

The imagined anthropomorphism of a willow tree and stake in the process of being harvested, stored, and planted found in a rather whimsical and possibly utopian excerpt below, is one that comes out of intentional deliberation as I played with the ideas above. Following the various interviews and conversations with research participants throughout my fieldwork, I frequently found myself deliberating on what hope looks like, and if there is an end to hope.

The temptation to succumb to such simplistic, black, and white bounded narratives is precisely what I seek to challenge in this chapter. The bounded edges of hope existing in one domain and, not in another remains fatalistic and dystopian in nature. This sort of thinking is not only reductionistic but also remiss of the opportunities to reflexively consider and facilitate relational and social responsiveness, serving to sever the opportunity(ies) to scaffold hope and imagine other ways of being.

Thus, in experimentation, I choose to include a piece that seeks to understand the potentialities of possible future outcomes in the following imaginative excerpt. Though the future and indeed a way of being for the willow has ceased in one capacity, apocalyptic even, one may argue, so too have new opportunities for growth and indeed for hope to prosper. This experiment plays on the notion of hope as embodied, emergent through and by human and non-human agents in the explication of examined relationality. This piece is not meant to afford human-like emotions to the non-human, nor is it meant to afford cognitive abilities. Rather, it is meant to evoke a sort of contemplation and radical curiosity surrounding the complexity of relations in our broader environments.

A Willow's Perspective

A breeze brushing. Birds twittering. Grasses swirling. All around, life moves slowly and in unexpected ways. The next movement unknown before it happens. And so, there's stillness. And life. Both. Life in stillness, even. The sun cascades down, touching all in warmth. Branches reach for the sky. Bright greens and muted greens reach for the golden warmth. Stillness. Quiet.

A stream ripples by. Small fish and invertebrates dance in the glittering ripples. Cattails and vegetation sway nearby. Moss inches over the pebbles and rocks, softening them. Soft, still life. Dark, calloused roots make way for new rootlings. Pushing through the bark. Pushing through the damp soil. Down and down they goes. Deeper, to spaces perhaps even quieter. To the water,

the nourishing, crisp water. The water which feeds the trunk and the branches and the leaves. Those beautiful, sun-kissed leaves. Deeper it goes.

The bright, golden rays turn pink. Then to purple, cascading soft colours over the stream and the willow, slowly fading. Finally, hushed darkness envelopes all. Hush now, a period of rest has befallen. The darkness too, is filled with life. With others, hooting and howling. Little yellow eyes scurrying. It matters not, though. Rest until the golden rays caress the leaves once more.

Abruptly, the sky is lit with bright white light. Cold, piercing white rays.- It's too early for the golden rays. Shuddering sounds breaking through the morning. No. It's too early for morning. Birds do not twitter, yet. Restful rhythms disturbed.- Urgent voices. "Maybe over here!" The shuddering noise changes in pitch. Higher. Woodchips fly through the air, and a branch falls to the ground. A branch that yesterday reached up to the sky. And again. Another falls to the ground. And another.

There's too many down to count. The voices move around in the bright, cold white light and collect each. Piling them, binding them and placing them in large metal boxes with wheels. That shuddering sound again. Lower, this time. And slowly the cold white light turns away. Moving away, and the shuddering sounds become quieter. The branches, so pain stakingly grown, are gone.

Encased and bundled in a metal box. Moving away from the quiet, away from the stream. The shuddering noise of the metal box drowns out the sounds of the swirling grasses and any chittering animals. The noise, the rumbling, it engulfs all. Time inches, crawls maybe. The voices, they're back. "Yeah, into the plastic bin!" Hands grab, and then drop. Falling into cold water. More and more bundles, piled one on top of the other, submerged in the water. The light goes out, completely at the sound of something slamming.

No golden rays of sun. No tweeting birds. No swirling grasses. Just dark, forceful rest. There is no where to go, there is nowhere to reach. No sky to reach for. No warm light to reach for. Just darkness. The clear, cold water is stagnant. Encased in a transparent, plastic box. The sun and stars don't mark time. They're nowhere to be seen. Gone, forever, perhaps. A way of being has ended. It's halted.

Days, moments, weeks, seconds. Time is irrelevant. Then, suddenly, bright light filters throughout. Voices mutter, "Umm, at least 2 more, I think." Hands grab and move. Back to a metal box. A rumbling metal box that begins to shudder in deeper tones. The metal box moves, swaying in the wind. It murmurs, cries and squeals. Bright, golden rays cascade down, and the rumbling metal box begins to slow, stopping. Voices again. Hands again. Grabbing and dropping, but not into a plastic box of water. No, this time into a small creek.

Familiar unfamiliarity found in this stream. A soft breeze, one lonesome bird twittering for away. And then, a loud thud. And another. Force is exerted by the hands, by the carriers of the voices. Each effort yields the soil beneath just a little more. Again, and again. How far does this go? And still, the effort, the force, it continues. Tightly surrounded by soil, now. The effort stops, the force stops. And the voices and the rumbling metal box fades.

Once a branch, and now a trunk? All that's left is to reach. Reach for the sky. Reach for the water. Deep, deep in the soil. And the warmth of the sun and the stars of the night sky once again keep time. Rhythm restored, a small, plush green leaf emerges.

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Head (2016, p. 77), comments in *Hope and Grief in the Anthropocene*, that "moments of rupture or contexts of change and uncertainty are the conditions that can create the spaces for such possibilities to emerge." Indeed, hopelessness is found in the redundancy of repetitive disappointment and failure. I vividly imagine that, as articulated in the excerpt above,

that in the context of the willow's changing landscape and uncertainty, its world may have appeared to end in an abrupt and apocalyptic nature. It is only from the vantage of the human perspective that one is able to externalize and recognize the hope of transplanting a willow stake and the emergent possibilities of such an action. Returning to the discourse of hope as process or enacted in actions, it is imperative to recognize that hope, or 'good hope,' will not always be one of comfort. Indeed, hope's light, much like Nils' metaphor of the sputtering flame exists in relation to the dark. I don't mean to argue that discomfort, fear, or uncertainty must be embraced, but I return to the fact that hope is not inherently 'sunny,' or optimistic and it may not always "feel" good. The production of violence and uncertainty yields hesitation and fear, and rightly so.

At the end of her interview, Ava, a city employee coordinating climate education for children and adults, tearfully shared the following with me:

> *I was at a party two years ago now and we were talking about the death… the extinction of the last black rhino… To be a person witnessing something like that… a moment in time, that is awful. But also, like… you have to see it. That's your job; to bear witness to what we're doing… [crying]… To what is happening… Like, there's power in that. So, it's dark and it's heavy. But it's got to be done. Like, we also have to take responsibility and ownership [crying] for these things.*

Conclusion:

Geographer Ben Anderson (2006) finds hope to be composed of 4 specific elements. First, hope is a process which maintains the potential of enacting and creating possibilities. Second, hope carries with it darker emotional capacities such as grief, melancholy, and a deep sadness. Third, hope "risks disappointment and has not guarantees" (Anderson, 2006b). And finally, as a process, it means that hope is everyday, and it is everywhere. With consideration, this may provide a novel starting point for re-imagining our world and future(s) with radical

curiosity. This novel starting point may also provide understanding that there is a possibility for a better future than the ones we can currently conceive.

Hope transcends thought and emotion by the very nature that is embodied, affectual and exists in a disposition of motion and flow betwixt non-human and human agents acting upon our world. Comfort and serenity are not a perquisite of hope, as the subject-object ontologies remain challenged, I am exceptionally aware that hope may exist in spaces I cannot comprehend or attune to. This, however, does not denote hopelessness or suggest that hope is lost or that uncertainty necessarily premediates pessimism. Instead, I challenge the idea that hope remains a possession (internal or external) that one can either find or improve in oneself. Hope can and should be nurtured, but not within the constraints of individuality and internal dispositions. Hope, instead, can be found when we act upon our world and heed the actions of others as scaffolding possibilities and potentialities most likely still unknown to us.

And so, hope begins with the swing of a sledgehammer. Hope begins with the trash being picked up. Hope begins with invasive weeds being pulled and with conversation in relationality with others who care. Hope begins with action and is embodied through these reverberations within and between its agent(s). Hope is not a grand, sweeping emotion, though those certainly are evoked in the field of environmental work, activism, and restoration. Hope is the accumulation of action. Hope is the embodiment of individual and collective choices made for this infinitesimally better future that we strive for. Each of these actions put into motion the possibility of hope. Hope resides in the reverberations and the ripples of these actions. Much like the ripples in a stream when a stone is cast across the water, we cannot successfully predict the outcomes of the motion of our actions, but we may rest knowing that the ripples are there, the possibilities have been set in motion.

4

THE LABOUR OF HOPE

Environmental subjects, whether volunteering or employed work hard. I came to understand the labour enacted by environmental subjects as having physical, cognitive and emotional aspects. Often, like in hospitality and caregiving settings, the emotional labour of environmental subjects is one that is ignored at best, and devalued at worst. Maintaining hope is work, and this, like emotional labour is often unrecognized. Understanding hope not simply as "blind optimism," but as a process, as discussed in the previous chapter, means that hope requires sustained effort and is one that may be tiring for individuals.

The labour of environmentalists is not simply that which needs to be completed immediately, but a work of remaining actively engaged in the environmental field, despite current trajectories of fatalist narratives which may render climate and environmental action immobile. My intent in this chapter is name this labour of hope. So too, the context of the place

where labour is conducted is relevant. A barrage of fatalist doomsday narratives, lack of public buy-in and a strenuous political urban/rural divide sustains stereotypes of environmentalism and environmental actants as in opposition to rural Alberta and conservative values more generally. In illustration of the required emotional resilience required to sustain hopeful work in Southern Alberta, I share a short journal excerpt from an observation made during a fieldtrip in June 2022.

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The sun breaks through the leaves of the towering trees. We follow the winding, trodden path through the same trees. Lara stops to admire a flower and calls me over. "A purple clematis," she exclaims. Indy and Joslyn continue on ahead of us, to the second site. The second site will hopefully have proved fruitful. A year ago, Joslyn explains, she, the previous summer field-season assistants, and numerous volunteers staked over two hundred willows.

The first site we stopped at had no growth. Just, pointy sticks protruding out of the riverbank. We had driven over two hours to see sticks protruding out of mud. Joslyn explained that "willow staking" or "live staking" is the process of planting live willow tree stakes along eroded riparian zones and streambanks. There are various methods for planting the live willow stakes, but the process used by Joslyn, Lara and Indy was to utilize a three-and-a-half-foot, heavy metal planting bar and drive it into the ground with a sledgehammer to create a hole where the live willow stake was to be planted. The soil around this streambank was "particularly rocky and challenging to work with," Joslyn continued. "Because the metal planting bar kept hitting rocks."

The second site along this stretch of Beaver Creek also yielded no new growth on the planted willows. What remained were the tire tracks of recreational vehicles that had driven through the creek, and over the willows that had been painstakingly planted. Other remaining artifacts were the echoes of misunderstanding and disrespect as signs erected to discourage recreational motorists from driving through this path had been forcibly removed and thrown to the side of the path.

Joslyn visibly braced herself. Taking a moment of silence, Lara, Indy, and I inspected the willows, searching for even the smallest amounts of fresh greenery and new growth. Alas, there was none to be found. A profound sense of disappointment filled the air, a sadness even. Frustration. Maybe anger? Lara and Indy expressed their condolences "This really sucks!" and "I'm sorry, Joslyn." I too, found myself apologizing, though still not fully grasping the magnitude of this moment.

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The moment described above is a moment that captured an all-too-frequent experience for the individuals engaged in environmental and land stewardship in Southern Alberta. One that lacked the recognition of the extent of labour involved in willow staking. As a researcher, and perhaps outsider, I did not yet understand the arduous nature of willow staking, or of environmental work, to be sure. Willow staking, or live staking, is a physically demanding and onerous activity. Lara and Indy, watershed steward assistants, would drive for hours and pick up hundreds of live branches of willows; loading and unloading them at the Lethbridge Water Treatment Centre, storing them in large bins of water until they would be planted. The morning of a willow staking event, Lara, Indy, and sometimes myself, would pile into one or two vehicles at 7 am and drive to a storage unit where we would load up the vehicle with up to 20 planting bars, weighing approximately 40 lbs each and 15 sledgehammers, alongside hundreds of live willow stakes, bundled and crammed into the back of the mid-size SUV.

The act of planting a willow stake takes care and effort – finding the right places alongside the river or creekbank, as willow stakes only have approximately a 30% chance of survival. One person would hold the heavy metal planting bar in place, and the other would swing the sledgehammer, striking the metal plate at the top of the planting bar to drive the staking bar into the ground. Depending on how moist/dry the area was, how dense the soil and any rocks and objects embedded in the soil, this process could take anywhere from ten to forty swings of the sledgehammer. Once the planting bar was sufficiently underground (at least three feet), the planting bar was pulled back up out of the ground, leaving a long, narrow hole in the ground for the willow stake to be planted in.

Depending upon how moist the ground was, this part of the process could be much more difficult than the words printed on this page suggest. Numerous times, I would have to ask for my planting partner to assist in pulling the planting bar back up out of the ground, as the moisture suctioned the bar into the soil in a manner that used both back, thigh, core, and upper body strength. Once the planting bar had been successfully retrieved from the soil, a four-foot willow stake was wedged into the long, narrow hole and tapped securely into place with a rubber mallet. In effort to articulate the challenge of engaging in this activity, it may be useful for readers to note that in a six-hour day of planting, I only planted 15 willows on my first day, while some others produced over 100 planted willows in the same time frame.

Returning to the fieldtrip to Beaver Creek in the aforementioned journal excerpt, it is obvious that physical stamina and resilience was required to conduct willow staking, especially in the hot summer months, in fields without reprieve from the sun's harsh rays. Perhaps less obvious, however, was the emotional resilience required of environmental actants to continue in their careers, volunteerism and everyday lives as deeply engaged with climate change and environmental needs (such as water conservation) while navigating an arena of devalued labour politics and public scrutiny. Not only had Joslyn and her volunteers dedicated hundreds of hours of labour to the zone and not seen a single willow with new growth, but backcountry recreationalists had pulled out their signs to protect the newly planted stakes and driven through them.

Joslyn, a full-time employee for an environmental organization, had to contend with not only the arduous physical labour in the actual staking of the willows, but in the discovery of the lack of growth and the public disrespect shown to her labour, she also had to confront deep emotions regarding the feasibility of her dreams and aspirations, in a "…stark disconnect between aspirations and actual possibilities…" (Pettit, 2021, p. 780). In this sense, Joslyn contended with the abstraction of labour and affective response to the public insolence of her efforts. In the practice of her taking a breath and validating her own sadness and disappointment and her continued resilience to believing and even advocating for the importance of willow staking, Joslyn demonstrated a form of emotional labour, specifically that which maintained hope through labour – or a labour of hope.

This chapter addresses key elements observed while conducting fieldwork, primarily with two organizations, including their scope of work in juxtaposition with one another.

Labour is a rudimentary composite of 'activities, knowledges, and techniques' (Pettit, 2021, p. 782) which serve to drive progress in the effect of a ratchet, not meant to go backwards or be lost. The loss of time in the form of the destroyed willows indeed is a loss of productivity. Yet the loss of hope that willows may grow in that zone or that the broader public may accede and contribute to climate change mitigation efforts would be a much larger loss for the broader community. Joslyn's continued environmental labour and continued efforts to stake willows despite the insolence demonstrated at her site of effort is commendable, yet likely remains unacknowledged. In a capitalist production system, all that matters is continued action and productivity. Yet, without the emotional labour and labour of hope, the physical manifestation of staking more willows becomes impossible.

The presumption of continual emotional fortitude in the labours of production seeks to eliminate that which makes the action possible. Hochschild (1979, p. 19) states "the very managing of emotion can be seen as part of what the emotion becomes. But this idea gets lost if we assume… that how we manage, or express feelings is extrinsic to emotion." The practices of care for self in emotional validation of disappointment and frustration, that of taking a deep breath, serve to regulate embodied emotions as affect but also are inherently effortful. As any parent may tell others, regulating a child's emotional responses is indeed effortful but also requires the skills and knowledge of self and bodily systems to be able to do so. Returning to Pettit's (2021, p. 782) definition of labour, he states that it is that "which centres the relationship between the activities, knowledges and techniques that go into keeping hope alive…"

The labour of hope, illustrated in Joslyn's encounter with her unsuccessful willows requires an internalized rationale as to why an event (the vandalized willow site) occurred, and the labour of upholding one's own hope for a better future and better outcomes – next time.

These are the strategies "… which reach across and collapse the boundaries between production and social reproduction – constitute forms of 'emotional labour,' crucial to sustaining self, family, community, and sociality in the context of capitalist systems that disconnect many from their promises of progress. The labour of hope is both an object of exploitation and a horizon of possibility which might open challenges to existing regimes of value…" (Pettit, 2021, p. 786).

Utilizing key speakers and the voices of the research participants themselves, this chapter centres on the labour of hope (Pettit, 2021) and emotional labour as constitutive, embodied practices. I begin with a short discussion surrounding the inherent disconnection of urban versus rural communities in Southern Alberta as well as the general political divide and culture surrounding environmentalism in the province. This is followed by an examination of the impacts of such tensions on environmental subjects as they seek to navigate their work, passions, and concern in what I understand as the labour of hope. An examination concerning the various elements of the labour of environmental subjects follows. Finally, this chapter considers the differential of energy required of physical versus emotional and cognitive labour and further examines the varying energy output to be indicative of a broader political landscape which undervalues some forms of labour over others, in a manner scaffolding individual and collective exhaustion into a narrative which challenges climate change action further.

Alberta: Urban and Rural:

Studying attitudes and motivations towards climate change and its mitigation efforts in Alberta is particularly relevant due to a gap in political ideologies and beliefs in climate change in the region (Davidson & Haan, 2012). Broadly speaking, rural areas are understood to be more conservative, religious, and reliant on extractive and resource dependant industries. (Davidson & Haan, 2012). Thus, the economic and political shape of rural Alberta may influence perception of environmental activism. For example, although Alberta's population represents just 10% of Canada's total population, Environment Canada (2022) reported that Alberta surpassed Ontario's production of greenhouse gas emissions as early as 2010 and remains in the top spot for GHG emissions in 2022, due to its extractive oil industry. At the same time,

Alberta is the richest province in Canada with the lowest unemployment, with the oil industry itself employing about six percent (Government of Alberta, 2020), which may facilitate economic concern with discussions surrounding environmentalism.

Beyond extractive oil industries, Alberta represents over one third of all cattle producers in Canada (Statistics Canada, 2022). Historically, relations between environmentalism, ranching and farming has been fraught. LeDonne (2021, p. 2) argues that this historical tension is not because ranchers and farmers were unaware of the value of land, but rather that "disagreements… largely resulted from those environmentalists' emphasis on the preservation of the environment rather than maintaining a role for people in nature." While there is limited space here to consider the full sweep of historical and geographic political situation in Alberta and its implications for environmental labour and labour of care, I do think these tensions are important as we make sense of relevant practices of labour within the environmental sector.

It is within the specifics of the regionally located labour practices that broader politics of care must be traced, afterall, 'regimes of value… reach across the boundaries of directly waged/non-waged and productive/reproductive activities' (Pettit, 2021, p. 785). Throughout numerous interviews, research participants stated that it was "weird" doing environmental work in Alberta, inferencing the political climate which may not always lend its unfettered support to the environmental sector. For me, this draws attention "to the inevitable gap between what is attempted and what is accomplished" (Li, 2007). Within social production and reproduction paradigms, environmental labour is subjected to constraints and opportunities as afforded by the intersection of political ideology, finances, and public perceptions. Nearly each research participant identified that conducting environmental work in Alberta was fraught with some sort of political tenson – whether individual, familial, or broader.

Lara, one of my key informants, is in her mid-20's and comes from a small rural area, approximately 45 minutes from Lethbridge. She grew up on a cattle ranch and then attended post-secondary school to learn about the environment and resource management. Lara works in environmentalism, helping to clean up invasive weeds, educating the public about water consumption and conservation and much more. In our interview, Lara discussed politics,

capitalism, and the importance of using the right language with the right people to motivate connection and action. For instance, she shared that:

> *…to have someone come in and be like: 'The way you're doing your whole livelihood [rural farmers, ranchers, etc.] is wrong'… well, people don't like it when someone comes in and tells them they should change it (even though I'm not a part of that [industry]). I think there was that [historical context] and a multitude of different factors that made those industries [rural producers and environmentalists] kind of face off and… not trust each other. I totally have family members who if I was like, "I'm an environmentalist!" they'd say no…*
>
> *...And if I said, like "You're an environmentalist!" [to her ranching father] He'd be like, "No, I'm not!" But I'm like, that's totally an environmental thing [growing willows around his dugout for some ducks to have shade and cover] you're doing for the benefit of the environment… But he'd say "Well, there's a duck who lives in there and… has some little ducklings and they don't survive very well. So maybe instead of planting [crops] and her nest getting potentially run over or the coyotes find it… maybe she can have some cover around with the willows…*

Jessica, the executive director of one of the five organizations I connected with over the summer and long-time environmental advocate, shared something similar in her interview.

> *Lately, in Alberta, with the war room and all that, you know, [being an] environmentalist wasn't the most sexy thing. So I'm excited to… show people that 20 years really can make a big difference…*
>
> *My hope is that this kind of recent global awakening… maybe not so much in Alberta… but that climate change is real and it's a real threat… and that people are also talking*

more about the biodiversity crisis. So, I think that I'm hoping that that [awareness] will translate into more environmentalism.

Finally, Charlotte, another executive director from a different organization and avid book-reader shared this:

It's so funny… cause, Alberta is such a weird place to do this work. You know, it always has been…

Lara, Charlotte, and Jessica (amongst many others) all articulated similar tensions – the concern for not being taken seriously in rural spaces if someone used the word "environmentalist" to identify oneself. Jessica went further to state that she believes she and others like her should be using the word "environmentalist" to identify themselves and to de-stigmatize the identity, role, and labour in Albertan spaces. Lara disagreed, stating that the terms and language maybe don't matter as much as actually listening to the various voices (rural and non-rural) and their needs and contributions to the land and other-than-human species. These articulated tensions are symbolic (Marchiori & Buzzanell) as acts of labour (emotional, physical, and cognitive). In both accounts, environmental subjects like Lara, Charlotte and Jessica are instinctually aware of these symbolics contexts that lend to tensions in their labour, aptly "managing [these] tensions in their… positions, social practices and daily activities… within complex interdependent human and [non-human] systems" (Marchiori & Buzzanell, 2017).

Caroline, a young adult, and student who was active in organizing youth rallies for environmental action, shared the following with me: *That was the first time that I kind of, incorporated that I am Albertan. I was reminded of that piece of my identity a lot when I was out east [Ottawa] because we would go for lunch, and we compared what our different politics were. I resonate a lot with Alberta, and that I'm from Alberta. I'm*

> *born and raised here… We have the most interesting energy debates of, frankly, any other province. And I included that in my [public forum] introduction. I said this is my motivation. This is the identity piece of where I'm from and what I'm working towards, even though I know some Albertans have different views… even with my own family.*

The recognition of a myriad of intersections that constitute her identity; environmentalist, student, young female, family member, global citizen, Canadian citizen, and Albertan citizen… I was struck by the importance and the value of adhering to the Albertan identity, particularly amidst the contestation and felt tensions. Yet, Caroline and others were passionate about the inclusion of their Albertan identity in their efforts, navigating not only the complex political tensions "at work," but in their own complex identities as they often come from rural, farming backgrounds themselves. For my part, I find Tania Li (2007, p. 2) to summarize these thoughts nicely when she articulates that "… political economy and contestation thus stand alongside the will to improve…" In the complex navigation of such tensions -political, familial, and internal - research participants in this study sought not to distance themselves from either label as Albertan, rural and/or environmentalist, holding all three in an interwoven landscape of identity.

Labour:

Labour mediates environments and human-environment relations (Pettit, 2021). Traditionally, the concept of wage is decentered in anthropological considerations of labour (Kasmir, 2022) and the attending analysis follows suit, with consideration paid primarily to the relational, social and (broadly) political aspects of environmental labour. For economist Jordy Meekes (2022), labour is a dynamic production of relationality, consisting of agency, sociality, and the reproduction of deeply shared cultural meaning. For Howard (2017), labour is about the development and/or exploitation of affordances, 'as imagined possibilities… and intentional actions and the violently oppressive capitalist market in which this work is embedded' (Howard, 2017, p. 32). The purview of labour's consideration in this chapter is non-exhaustive. Yet, the

above expositions of labour and its (anthropogenic) nature serves as an entry point to explore environmental labour and its broader implications in the context of a capitalist market and social relationality. This is important because the labour of environmental subjects must be understood as significant labour in all its forms and not just as a passion or 'for fun.'

Waqas Butt, Maira Hayat and Adam Sargent, environmental anthropologists (2020, p. 73) argue that "… it has become quite clear that a politics of work must contend with the ways in which actions and person [of labour] come to be known and valued. Not only to rethink what we mean by work or labour as categories of action, but also to imagine other… possibilities for what worlds [of work] could become…" In the context of labour and labour relations, it is important to explain that individuals come to 'be known,' in a variety of ways. Butt et al., (2020) articulated one of these ways – labour and work coming to be known through *action*, and while a significant amount of environmental work by the organizations who participated in this research project indeed conducted physical labour, other organization's domains of labour were relatively cognitive – at least insofar as deliverables might be measured. Generally underappreciated, this "environmentally cognitive labour," was a labour that sought to hold governments and policymakers accountable for actions and decisions as well as thinking and innovating novel tactics of commodifying "greener," and "eco-friendly" institutions.

Interestingly, various research participants shared with me the feeling that they weren't doing enough. Those participants who disclosed this feeling most often were those primarily engaged in policymaking, accountability, and individual attempts to mitigate their own carbon footprints. The disclosure of feeling as though one was not doing 'enough,' piqued my interest as my own experience with the feeling of 'not doing enough,' was the catalyst for this project. For some, their environmental work took the form of developing climate action committees and creating methods of reducing institutional carbon footprints. For others, their efforts to mitigate climate change took the form of individual and home life changes, including (but not limited to) composting, cooking at home more, buying local as much as possible and overall reducing their own consumption.

I came to understand the impression of 'not doing enough' as partly the result of capitalism, specifically, corporations and markets pushing off their own responsibility(ies) for climate change (Hyman, 2020). onto individual consumers. and eco-citizens demonstrating environmental care in a downloading of labour, as well as a general disregard for emotional labour juxtaposed with physical labour (yet again tied to notions of productivity embedded within capitalism) (Pettit, 2021). Hyman argues "…the focus on changing consumer behaviour… misplaces responsibility for the… emissions driving the climate crisis on to individual consumer, conveniently ignoring the disproportionate climate impact of corporate interests" (Hymen, 2020). Hymen (2020) states that nearly 70% of greenhouse gas emissions leading to climate change as the responsibility of only 100 state-owned and private investor fossil fuel companies, begging the question of who is really responsible.

Private and state-owned fossil fuel companies and decision makers were not a part of this research exploration, yet the question of responsibility and tangible action is at the heart of this project. However, in contrast, Jackson et al., (2011) argue that "…carbon emissions are also strongly linked to the consumption of private households and the choices and behaviours of individuals. Motivating consumers to adopt more sustainable consumption behaviours is therefore an important policy goal…" For my purposes, and what the rest of this chapter shows, is that the placement of responsibility and work involved in making necessary changes is a point of ongoing tension and anxiety for environmental actors of southern Alberta. In the remainder of the chapter research participants consider what their roles are and navigate complex feelings of 'not doing enough,' and wishing they made a bigger impact [on the public's behaviour, on mitigating climate change, on changing public and political opinions to act with more urgency, etc.]. I frame such feelings and their consequences as a labour of hope, in order to recognize the ongoing and difficult work of remaining hopeful and active despite personal anxieties and exhaustion.

Emotional Labour:

Pettit (2021) argues that historically, two strands of scholarship have considered emotional labour. The first has been criticized as substantiating a dualistic division between the material and immaterial labour and the second considers emotional labour to be one that requires the ‘’management of emotions of feeling rules within forms of paid labour” (Hochschild, 1983). Geographer Harry Pettit’s expansion on emotional labour focuses on what “… goes into sustaining labour power and preserving life both within and beyond the wage relation in the realm of social reproduction… expanding [the] understanding of emotional labour as the material practices, social relations, and moral terrains which go into making life worth living, emotionally and psychologically sustaining the bodies and minds of those engaged in the toil of preserving life…” (2021, p. 784).

I draw on Pettit’s (2021) moral terrains, feelings of responsibility and forms of social reproduction understanding this concern for not doing enough. Environmental subjects, including those leading environmental organizations often expressed a sense of moral responsibility in a care for the land, environment, non-human, and a sense of sustainability for future generations. In this sense, environmental subjects and those caring for the land and its future are engaged in a deep ‘affective struggle within contemporary markets amidst the structural disconnection of large populations’ (Pettit, 2021, p. 785) For my part, I consider this deep affective struggle to be played out internally and communally on the part of environmental subjects.

For example, Lauren, a volunteer with two separate organizations and taking on the duties of a climate action committee at her place of work shared the following with me:

> *But even in our household… there’s so much more we could be doing. It’s so difficult to do it. The systemic barriers to just putting in solar panels or turning off the gas line to your house… It’s almost impossible for us to make these things happen. So, making it*

[climate change mitigation] on each person to do… it just aggravates me to no end. It's almost impossible to do… Like, to be the perfect environmentalist…

Emelie, a woman in her early 30's, working for an environmental impact assessment company shared the following with me:

I definitely think… Like, me seeing other people or even talking, you know, with you… I'm like… I can make time to go out and volunteer. Why am I not volunteering? I have the time…

Both women shared a sense that they could be doing more or doing something differently to make a bigger impact. This isn't an uncommon narrative. In fact, the majority of research participants I engaged with were employed by an environmental organization (of some type) and volunteered in their spare time to do things such as invasive weed pulls and willow staking – physically demanding labour, on top of personal choices to shop sustainably, recycle, compost, bike or take public transit to commute. Each aspect was layered with a cognitive and emotional load of considering what the implications of each action may or may not have. Emelie explained further:

I do feel kind of guilty. Like, getting single use cups [for example] … I want to make sure that I'm like carrying a cup with me, because I easily could have done that. Even though it's only one cup… I still would think that it makes a difference.

This sense of being able to do more and guilt comes out of an ethics of care (Tronto, 1993). Practices of care and caring are the constituents of all "that we do to maintain, continue, and repair our world so that we can live in it as well as possible… include[ing] our bodies,

ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (Tronto, 1993, p. 1042). In a practice of caring, emotion is intrinsically embedded with one another in a 'range of social, political, and environmental… contexts' (Bowlby, 2012). In these broad social and environmental contexts, care is found in both the physical and emotional support that is delivered in caring for and about the environment, the future and each other (Buser et al., 2018), and in this, both contribute to a labour of hope (Pettit, 2021, p. 785).

Labour of Hope:

The labour of hope accounts for the daily practices 'that sustain a vital sense of hope for the unfolding future,' (Pettit, 2021, p. 786) through a variety of physical, mental, and emotional strategies. The emotional labour instigating such variable strategies generally remains invisible to the naked eye and perhaps may not even be conceived of as emotional labour. We might begin, then, by considering how exactly it is that environmental subjects seek to make the world a better place (Prentice, 2020). As the engagement with climate change appears ever-eminent, I wondered when people ever get a break. If environmental subjects are deeply engaged in emotional and physical attributes of a labour of hope to sustain not only themselves and their very engagement, but in an effort to sustain their communities at large, how do these environmental actants manage without burning out?

> Caroline a young environmental activist introduced earlier in this chapter shared the following:
>
> *… it's [the emotional labour] been a big contributor of why I haven't been able to sustain my energy and love for this as long as possible… I did burn out, frankly… It's often the same people in a lot of these spaces. And like, people get tired. It's frustrating… Not even frustrating… hard, I guess [to sustain energy] …*

The Cost of Precarity:

The emotional landscape of environmental work described by many research participants is abounding with emotion and care. Care extended in many directions, for instance, care to the environment, care about other-than-human species and care to the future, this latter was often in the context of concerns around having children in this political, economic, and environmental landscape. As one participant stated, "What sort of world will they [children and grandchildren] have?" As should be evident by now, the effort of caring about and for the environment wears heavily for many. Environmental subjects navigate tense political and cultural identities, frustrations, and hope on a daily basis, and as a consequence, they run the risk of becoming depleted.

Jessica, the executive director introduced earlier in this chapter, has a long history of experience in supervising and managing employees. She noted that employees, colleagues, and peers working in the environmental sector can feel very disheartened in their work and the productivity they're able to put out, noting how "*…People get down in the dumps, especially in the environmental sector…"*

Jessica's comment is not unique. Nearly all of the research participants in the study shared with me moments of feeling burned out or tired… some discussed the longevity of their careers and what else they could be doing elsewhere, though all continued with the sentiment that they couldn't leave environmental work permanently as it meant too much to them.

> *I will never leave the conversation [of climate change] because of the urgency of the issue… But I'm also allowing myself to try out a few new things, after a little bit of burnout, frankly.*
>
> *… everyone's tired… And we can't… can't do the same thing... It's not something I want to abandon. I have such deep roots… that's where all my connections are. Like, if I wanted to start a project, I could find people [to help]. But… I'm tired…*

Compassion fatigue and burnout are the cost of long-term caregiving (Pihkala, 2019). "Those who have enormous capacity for feeling and expressing empathy tend to be more at risk of compassion stress" observes Figley (2003, p. 169). The conversation of compassion fatigue has generated much scholarship but remained almost entirely in the nursing and hospitality sectors. However, like Pihkala (2019), I find that the concept of compassion fatigue is relevant to environmental workers, activists, and advocates as well. Managing emotions in a labour of hope against stark and dire climate narratives is strenuous at best and has the potential to be debilitating.

Other common issues in the sector such as contract work and unstable funding, create circumstances ripe for burnout and stress. The vast majority of environmental workers I met with this past summer were contract-based workers, meaning that they may have a six-month, one-year or two-year term. When asked if they planned to continue to work in their current fields, whether that was public education about climate change, or staking willows or grant writing for environmental funds, each of the participants expressed a deep desire to continue their work – iterating that it resonates with them and is valuable and urgent. But each individual also expressed significant concerns about the longevity of their work, considering how they might be able to pay for a mortgage on a six-month based contract (and possibly having to move multiple times a year), how they'd afford having children or if their position and contract would even be renewed. Ava, who was introduced in chapter 2, shared the following concerns with me:

> *This is part of my existential question, where I'm like "I need a job." My contract has been extended. It finished in June. I heard from my manager like, only in the last six months… We've known the funding is up in the air, but she repeatedly said, like, don't go. Don't apply for any other jobs. Like, we'll figure this out. You know? It'll all be good. So basically, in the end of May, might have been early June, honestly, she was like "So, we're out of money at the end of June, that's the end of the money." I'm looking at my life and my*

choices and this industry. I'm looking at the government, and I'm thinking like, what are my options? Like, what am I doing here? In a perfect world, we'll figure out a way to continue this program… we'll find a corporate sponsor. But it's going to be, probably, a one-year or two-year temporary contract and like, I have a mortgage.

Ava continued,

And so, now my job is… Not even… I'm looking at my body of work and everything I've done in the last six years, and you know, managed to do… and now I'm going to [have to] watch this devolve. It will become an example of a failed project at the school district who didn't want to do them in the first place, because, and I quote "When this project fails, how much is it going to cost me…? Like, they're [school representatives] are not into it. And now if we're not there because our leadership [government] is not continuing to fund it… It's frustrating! It's personally frustrating because now my reputation is kind of embroiled in this idea…

Such constant frustration and hopes as expressed by Ava and others even in terms of job security is one that yields emotional turmoil and precarity. Pettit (2021, p. 788) makes sense of this sort of emotional and labour precarity in the following:

"…promises are never kept, generating a constant state of unpredictability and possibility. This cycle of hope and frustration demobilizes their resistance movement… while they struggle to produce and maintain the hope… This labour of hope keeps their association alive, but also generates frustration…"

In remaining subject to funding, the environmental sector in Alberta remains subjected to affective governance, as well. Noguirea (2021), argues that workers engaged in emotional labour, with a narrow avenue of negotiation (in terms of employment, contracts, funding, and

projects) are subjected to a 'constant state of unpredictability and possibility' by and through a governance of affect.

"Labour precarity is constructed… not simply through direct control but also through 'regulatory arrangements'" (Prentice, 2020) that devalue workers, labour, and the efforts implicit in such tangential labours as emotional and hopeful. Such regulatory arrangements are not simply as limiting as employment contracts and funding, but also the types of projects that receive funding and the types of (qualitative) data and outcomes that are expected to be returned. And as Ava shared above, the personal becomes deeply entangled with the outcomes of labour. Fundamentally, the labour of hope is profoundly emotional, and the value of physical and tangible outcomes of labour are intrinsically connected to this labour of hope, and the of personal.

Differential Value of Labour:

Desideration of the exploitation of a labour of hope begins with the recognition that varying forms of labour are differentially valued. It may be abrupt to state that material labour is always valued over immaterial labour, especially as an academic student who recognizes the value of mental labour. Emotional labour within other types of labour (cognitive or physical) is assumed to be included. The assumptions of emotional labour as "easy," or "should be included," provide the grounds for an exploitation of care.

For Marx, the strain between physical, cognitive, and emotional labour begins in the tangibility and concreteness of labour (Butt et al., 2020), as 'concreteness,' he argues is a human universal whereas abstract labour and its outputs remain culturally specific. Indeed, practices of caring, whether for the land, future generations, or for the self in the labours of effortful work, can appear abstract and subsequently undervalued, at least to the eyes of those embedded within a capitalist system of production. Tangibility and concrete output is much easier to recognize as labour, and it's certainly easier to recognize how much effort went into

planting willow stakes, for example, than it is to recognize the efforts of maintaining internal hope, and that which allows individuals to continue in their work.

In the case of environmental labour, environmental subjects enact emotional labour in three ways: caring *about* the environment, caring *for* the environment (Pettit, 2022) and the labour of continuing said care. Care work, in public and private sectors, tends to be devalued (Pettit, 2021), and especially so when that labour isn't visible. It is all too easy to disregard the emotions of caring about something as extrinsic from the act of caring for something. Hochschild (1979) argues that emotionality, the expression of emotions and the feeling of emotions are deeply embedded. "Feelings do not erupt spontaneously or automatically in either deep acting or surface acting. In both cases, the actor has learned to intervene – either in creating the inner shape of a feeling or in the shaping the outward appearance of one" (Hochschild, 1979, p. 36). I do not mean to imply that the hope, resilience and perseverance of environmental subjects is merely a display. Contrary, I mean to argue that emotions and certainly hope, do not exist as a tangible, discrete item – but as a process (as will be articulated in chapter 3).

Within this process of hope, then, the labour of such hope and its efforts have merit in the production of work. Yet, the labour of hope, is subject to hegemonic capitalism, which automatically "imbues them with a contradictory politics: while they do open up horizons of possibility through social action, they end up re-inscribing extant hierarchies through curtailing possibilities for… systemic change as they render the individual responsible for their futures" (Pettit, 2021, p. 784). In other words, a labour of hope and its effects may be exploited by those seeking to transfer the weight of climate responsibility to those who already care about and for the environment.

Conclusion:

Paramount to productivity, hope involves emotional labour as exerted and embodied by environmental subjects. Typically, material productivity is valued over immaterial productivity and labour, yet I argued in this chapter that the manifestation of physical and material outputs

in productivity is not possible in the environmental realm without the nurturing of hope by and for environmental subjects. Through navigating complex relationalities in a political and cultural context, environmental subjects and their labour may become exploited due to affective governance of precarious employment and funding opportunities. This sort of exploitation, or downloading of care, originates in the lack of responsibility for climate change and greenhouse gases by large corporations, who quite readily accept the consumer's and environmental subjects' caring in lieu of their own.

It is important to recognize that remaining hopeful requires work, work that is often being completed by people facing multiple barriers: the enormity of the climate change and the challenges posed and the systemic issues with precarious employment and lack of consistent funding. At times, a disinterested or even contrary public, and the susceptibility to political will through their variable interest in short term funding for such initiatives pose even greater challenges to the work of sustaining hope. How the public, the government and businesses ease the burden for environmental subjects to ensure that work of hope remains sustainable? And ultimately, how might we care for those caring for our land(s) and future generations?

5

Feeling Together

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Sitting at a picnic table at Todd Creek on the first day of 'real' fieldwork with a group of watershed assistants, I explained my project briefly. I had already explained the project to the executive director, Jessica, but it was the first time Joslyn, and I were spending time together in person. Sitting at the table, wind gusting around us and each drinking either a cup of coffee or a hot tea from a thermos, I asked "So, why do you do it?" Joslyn and Lara looked at me. Indy had walked closer to the bank of the river, taking photos of the water. After a moment of quiet, Joslyn swept her arm out around her, gesturing to… well, everything. "This is why I do it," she said quietly. I made a mental note of that moment and recorded it in my fieldnotes. But she had gestured to everything. How could I ever make sense of what Joslyn meant when she gestured to everything?

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Introduction:

The labour of hope, as discussed in the previous chapter, demands significant energy. Environmental subjects practicing the art of hoping 'well' through a labour of hope may become depleted and are at risk of experiencing burnout and compassion fatigue. In this chapter, I explore the aspects of environmentalism that are nourishing and help to maintain emotional wellness. Nourishing elements of environmentalism with respect to the labour of hope include concepts like Keltner's (2023) notion of 'wild awe,' and Rickard and White's (2021) concept of nature connectedness and the vagus nerve activation response, which may help with a variety of health issues (including psychological issues such as depression, anxiety and thus eco-grief and eco-anxiety).

First, I explore a notion of nature connectedness, (Rickard & White, 2021) referring to the relationship an individual has with the natural world. I draw on Rickard and White's (2021) term in my understanding that environmental subjects experience not only greater connectedness with the natural environment through immersion but through deep relationality and curiosity about our non-human companions. Connectedness can be further understood in the scaffolding of supportive relationships in a network of labour that exists between organizations and individuals. Next, this chapter links examples from my fieldwork with Keltner's notion of wild awe, understanding awe as an emotion emergent in moments confronting the vastness and complexity of our world and universe. The voices of the research participants and my own are found in the following pages as we examine strategies for nourishing the self in relation to the labour of hope.

***

The sun is blazing down and as we trudge up the cow-trodden path single-file. Someone behind me rolls their ankle in the deep, muddy trenches left by the cattle, likely just a few weeks before we got here. Our single file parade of 17 comes to a halt and we take a short break. I notice Lara gazing longingly at the sparse shade positioned off to the left of our path. I consider breaking away from the group to seek reprieve in the shade, but as I do, the single-file parade begins once again. It didn't look this steep from where we had parked, I mused to Lara.

Lara agreed. Indy was up ahead and didn't look like he had even broken a sweat. Meanwhile, sweat dripped into my eyes and stung. The elderly woman behind me, Susan, wearing a white bucket hat commented that a breeze would be nice.

I agreed with her. A breeze would be nice but alas, not a whisper of wind can be heard. In the hollow of the mountain, grazed and trodden by herds of cattle, the landscape is tough and muddy. There is no shelter from the sun here. I'm a participant observer, I tell myself, "So do what the others are doing." It takes everything in me to look up at the mountainous views that the rest of the volunteer party is gazing at. There's sweat running down my back and into my eyes. The water in my backpack somehow spilled and has seeped through my backpack, causing uncomfortable chafing.

Before our hike began, someone mentioned that they drove down from Calgary to volunteer today. I wonder to myself why anyone would drive more than two hours to volunteer? Not my idea of fun. Did they regret it now? My breath is laboured, and I hardly take notice of the others around me as the trek up the side of the mountain continues. When we stop for another short break, I glance around me and notice that I am in good company, as others (all but Indy) struggle to catch their breath, are soaked in sweat.

The trek feels like forever. We are supposed to come to a clearing – Bertha Echland's old homestead, where the group will pull invasive burdock. After two and a half hours, we have not yet made it to the historical cabin and homestead clearing. Someone suggests we stop for lunch in the sun. We all take the opportunity to rehydrate, and I'm surprised that no one is speaking. For a group of 17, we're awfully quiet. And then someone stands up and walks over to a small, ordinary-looking (to me) mound of grass, grins widely and enthusiastically wave the rest of the group over, whilst holding a finger to his lips to gesture we should be quiet.

All 17 of us huddle around the mound of grass, and I have no idea what to expect. I think to myself that maybe it's a mouse nest and I'll want to scurry away quickly but remain transfixed on the grass mound. The air becomes still and hushed for several moments. No one moves. Perhaps we forgot to breathe. And then, the littlest of chirps can be heard. A bird's nest! We listen for a moment longer and then move away, smiling to each other and whispering

in hushed tones. One of the participants tells us what bird it is – though, I don't recall as I write this now. Having moved further away, all eyes remained transfixed upon the small mound of chirping grass. A small bird landed on the mound of grass – the mother.

Though exhausted from two and a half hours of steep mountain hiking in uneven terrain, and at least another four hours of hiking/weed pulls to go, the energy of the group suddenly came alive. Chatter and soft laughter were heard throughout as volunteers packed up their lunches and got ready for the remainder of the trek to Echland's homestead. Though only the beginning of our workday, all were rejuvenated in spite of the blazing sun in heat conditions that could and had given past volunteers heatstroke on this very same hike and weed pull.

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Awe and Inflammation:

Traditionally, awe has been considered a spiritual emotion (Gottlieb et al., 2018) and ignored as a distinct emotion (Monroy & Keltner, 2021). In an expansion of scholarly inquiry, positive affective states have been mapped and the distinct characteristics of awe have become explicated (Monroy & Keltner, 2021). Awe is a positive emotion that enables its bearer to experience the vastness of the universe and of life, "arise[ing] in encounters with stimuli that are… beyond one's current perceptual frame of reference (Keltner, 2023; Monroy & Keltner, 2021). Dacher Keltner, a cognitive psychologist at the University of California Berkley, argues that "Awe is the feeling of being in the presence of something vast that transcends your current understanding of the world," (p. 7) where awe is a reverential feeling, either of fear or of beauty, reminding its bearer of the largeness of our universe.

This immenseness, Keltner (2023), the author of *Awe: The New Science of Everyday Wonder and How It Can Transform Your Life* and cognitive psychologist at the University of California Berkley, argues, can be physical, temporal, or semantic. In other words, awe can be about ideas and understandings of how our world works. While the enormity of the universe and its (im)possibilities may be unsettling, awe challenges the dichotomies of current (scientific

and non) perceptual understandings of our encounters and the limits we may place upon such theories. In theses encounters of challenged limitations, one may only proceed by invoking radical curiosity.

In a study conducted by Keltner (2023) in an effort to understand the nature of awe and its implications for health issues, they found a positive correlation between awe and predicted lower levels of inflammation. In an effort to combat bacteria and viruses, proinflammatory cytokines are released into the body, which in turn heat up the body to kill the pathogen (Keltner, 2023, p. 118). Though simplistic, the relationship between inflammation and major mental health conditions, including depression, chronic anxiety and even despair (all varying responses to climate change in the form of eco-grief, eco-anxiety, and eco-despair) can be linked to the fact that the body does not discriminate between physiological threats and social threats.

Keltner (2023) argues that awe is the 'antithesis' (p. 118) to such social threats causing inflammation linked to physical and mental health issues. It is incomplete to conceive of climate change as only a social threat, yet it is also not a physiological threat that is present in the body in the form of a pathogen. Climate change exists somewhere in between – very real, existential threats to the ways in which people and the non-human live their lives and is embodied as social threat. "Everyday awe, then, can be a pathway for avoiding chronic inflammation and the diseases…" (Keltner, 2023, p. 7).

Wild Awe:

Nature is one of the most common elicitors of awe (Bai et al., 2017) and contact with the natural world promotes better health outcomes, including the reduction of inflammation and reduction in depression and anxiety symptoms (Hartig et al., 2014). E. O. Wilson claimed that humans have an inherent affinity for the natural world (Keltner, 2023), calling this affinity "strange sympathies." One such affinity for nature is the "rich palette of passions we feel" in relation to and in the immersion of nature (Gottlieb et al., 2018). Keltner (2023, p. 125) argues

that in these passions for the beauty of nature we find “the resource abundance (or scarcity) and safety of a locale and orient us and those moving in unison with (in the context of our evolution) to set up camp in what we would call home.”

In other words, humans are naturally attracted to nature because it reminds us of who we are, of our positionality in the context of evolution, our smallness, and our greatness, and allows us to find where we belong. Belonging in this sense, making sense of the transcending vastness of the universe and our worlds, we find connection – to each other and to our non-human companions. Keltner (2023) and Gottlieb et al., (2018) state that awe, transcending the self and the ego, heighten our awareness of community. “Feeling awe, we place the stresses of life within larger contexts” (Keltner, 2023, p. 118). For my part, I found that environmental subject’s perspectives were often permeated with biophilia and interconnectedness – of being part of something larger than oneself, and perhaps even large than one lifetime.

Mayer et al., (2009) and others have identified reciprocal relationship between an individual’s connectedness to nature and their emotional and mental well-being. For many, this is an intuitive concept. When thinking about coping strategies for mental health concerns, people will often note their need to get outside, be in the sun and get exercise. In fact, physicians and mental health workers may prescribe outdoor activity and mindfulness exercises for elevated stress levels and the resulting mental health concerns. In a 2013 study, White et al., examined the impacts of exposure to nature and found that it can ‘help restore depleted emotional and cognitive resources’ (p. 40).

White et al., (2013) explored the differential impacts of varying outdoor and green spaces emotional and cognitive restoration, finding that woodlands and blue spaces (like rivers, streams, lakes, and oceans) were the most restorative and that visits to urban green parks were the least restorative. Kaplan (1995) referred to this characteristic of nature-emotional restoration as the Attention Restoration Theory, or ART.

In this, Kaplan (1995) found that the depleted psycho-physiological resources such as emotion, cognition, attention, and other physiological markers of stress may be mitigated and well-being nurtured (Rickard & White, 2021). Wild awe, natural awe, serves to remind us of the

inherent beauty surrounding us and as part of an ecosystem, reminds us of the beauty that we are and have the possibility of enacting change through individual and collective agency.

Porous Bodies and Synchrony:

Though certainly non-exhaustive, I want to pause here with an illustration on the wild awe and natural connectedness in discussion. This chapter opened with a recounted narrative from my fieldwork, the trek in Blind Canyon for the purposes of an invasive weed pull. The narrative recounts the first two and a half hours of an eight-and-a-half-hour day of work, yet throughout, the volunteers (and me, surprisingly!) remained upbeat and positive, sharing food with one another, pointing out a little garter snake that slithered through the tall grasses. One volunteer even took off his shoes and waded through a shallow, clear stream upon our trek down to the vehicles. I share this in reminder of the narrative shared in the opening of this chapter, and now share another moment from my fieldwork, which starkly contrasts the first example.

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Joining the Zoom meeting to discuss waste reduction strategies and opportunities for the city, I noted an air of exhaustion. I speculated that perhaps the exhaustion I noticed was a bias of my own Zoom-fatigue, the culmination of nearly three semesters of online studies via videoconferencing. As introductions were passed around the Zoom meeting, one member strikingly said “Rebeca, you want to know what motivates me and keeps me working in environmentalism? Fucking rage...” All members of the meeting chuckled – some muted, some unmuted.

The meeting’s agenda consisted of a discussion of the rollout of a curbside organic’s recycling program (composting) for the city, and the expected responses meeting participants had of the city’s residents. Most comments were that the city’s response to the blue bin

recycling program a few yeas back had been relatively negative and tiresome, and that they anticipated a similar reaction to the organic's curbside program anticipated to rollout in June 2023. As part of the rollout, the meeting leader (and executive director of another organization) asked for volunteers to manage tabling events during weekends throughout the summer to spread awareness about the new composing program and to educate the city's residents on the specifics of what can and cannot go into the composting bins.

It was a challenge for members of the working group to volunteer their time for the tabling events. Individuals volunteered for one-to-two-hour increments and at times didn't show up. A few of the tabling events had to be cancelled due to a lack of volunteers committing to the event day. I volunteered to attend as many of the events throughout the summer as possible. Due to previous volunteering and fieldwork engagements, I was able to attend three. The first tabling event was at a community garage sale in the Victoria Park neighborhood on the south-side of Lethbridge and was meant to be accompanied by two or three volunteers at any given time. Throughout the morning and afternoon, I often found myself alone at the table as the other volunteer had left.

***

Being a brand new (and somewhat outside) volunteer and interested in researching the interactions of "insider" volunteers with the public, I found the challenge of obtaining volunteers for tabling at a public event in the city puzzling. Volunteers for the Blind Canyon weed pull discussed at the beginning of this chapter were often not associated with the organization hosting the weed pull and drove two or more hours to Twin Butte in the Crowsnest Pass to participate in the weed pull. The Blind Canyon weed pull volunteers were exposed +29°C temperatures, uneven terrain and other environmental elements that stressed their bodies. Lara shared with me that she and a few other volunteers had succumbed to heatstroke the previous year during the Blind Canyon weed pull.

In contrast, tabling for the purposes of promoting the organics recycling program required that volunteers set up a table in the shade, often listening to music and talking to residents of the city about the program and what they might expect from the program in the following year. Despite discrepancies in the physical effort and climatic stressors on the body (altitude, temperature, uneven terrain, wild animals, etc.), there were more hours volunteered in a harsher climate that required the cost personal investment, including the costs of travel time and gas and risks for bodily harm and illness. This narrative is not unique and was found repeatedly throughout my fieldwork. As discussed in the previous chapter, I made sense of this as the various components of labour that exist within environmentalism – emotional and cognitive labour in a labour of hope as being taxing.

What makes the labour of hope more sustainable in particular contexts? Repeatedly, my fieldwork indicated that there was something about being outside in nature, being in the mountains and near streams that yielded more volunteer hours of work than volunteered hours of work within an urban landscape. White and colleagues (2013) investigated the relative impacts of various natural landscapes on emotional and mental restoration, finding that woodlands, coastal regions, and landscapes near bodies of water were the most restorative (2013, p. 40). Though it isn't clear why these particular landscapes have a positive effect on mental health, other than its reduction of negative emotions, the effects of the White et al., (2013) have been reproduced by various methods and by various researchers (White et al., 2013, p. 47). Theories of explanation include that it is the actual natural environments themselves that help to reduce negative emotions and/or that social interactions in these spaces and the activities engaged with may facilitate emotional restoration.

Keltner (2023) addresses this in his book, positing that awe is not only an emotional emotion, but one that articulates the basic and universal human need of synchrony. Awe, Keltner (2023) posits, has a taxonomy in what he terms the Eight Wonders of Life – moral beauty, collective effervescence, natural or wild awe, musical awe, visual design, stories of life and death, epiphanies, and stories of spiritual or religious awe (Keltner, 2023). Keltner (2023) posits that awe, the transcendence of current understandings of the world and its complexities

is one that rooted in attunement to our surroundings, utilizing various senses, including sight, sound, and touch.

> "… see how often the sensations that arise during mystical awe, and all encounters with the wonders of life, involve touch, feeling embraced, a warm presence, and an awareness of being seen – clues, perhaps, to the deep origins of emotions" (Keltner, 2023, p. 17).

Awe serves as an emotion that may regulate hormones and neurotransmitters released during negative and/or positive affect and through action-in-unison, these very emotional and physiological states may converge in collective actors (Keltner, 2023). Keltner (2023) and colleague Stacy Bare collaborated on an experiment that investigated the physiological states of rafting research participants in wild awe, on a river. Keltner and colleagues gathered measures of stress, PTSD, and well-being in their research participants by asking participants to spit in vials (which were assayed for cortisol levels) before and after a river rafting trip. What Keltner and colleagues (2023) found was that the cortisol levels and hormonal physiologies of raft-mates synchronized. Their behaviours also converged, as rafters emoted and vocalized together, through laughter, screams and *oohs* and *ahhs* (Keltner, 2023).

> The porous bodies of raft mates were merging… the reasons why rafting might benefit us are many: the endorphin high of physical exertion, recreating with others, enjoying a breather from life's hardships, the sights and scents of trees and sounds of the river. In more fine-grained analyses, we found that it was awe that brought the mind-body benefits of being outdoors… (Keltner, 2023, p. 131)

Awe engages various processes of synchrony, including changes to our hormonal and physiological responses, increased prosocial behaviours that allow us to be more attuned to the

world and individuals (human and non-human) around us (Monroy & Keltner, 2022). Monroy and Keltner (2022) argue that awe increase our sense of belonging and finally engages a 'heightened sense of meaning,' all of which promote unison. Riedl (2022, p. 160) argues that "… the human species has a natural tendency to strive for synchrony…" Though it wasn't evident at the time of volunteering and hiking up to Blind Canyon, the landscape made it so that we moved in unison. We moved up the mountain slowly, in single-file formation. Each of our steps mirrored that of the person in front, being led by one another. This sort of movement promoted longer engagement, as it became socially uncomfortable to step out of formation. At one point, I distinctly recall considering giving up and heading back down to my car, rather than continue the arduous trek up to a canyon in the sweltering heat. What kept me going was the movement and the effort of the people in front of me and behind me.

Collective Effervescence:

I make sense of the shared emotional experience articulated at the beginning of this chapter through the notion of collective effervescence. First introduced by Emile Durkheim (1968) in *The Elementary Forms of Religious Life*, collective effervescence is the shared social emotional arousal experienced in religious and secular rituals (Wlodarczyk et al., 2020). Through shared social feeling, 'we develop a shared awareness of what unites us,' (Keltner, 2023, p. 97). For Keltner (2023), collective effervescence is found in the "unison of movement" (p. 97). Keltner (2023), collective effervescence is intrinsically linked to the physical embodiment of moving in unison.

> We are quick to move in unison with others. In doing so, we feel what others feel, through empathic processes in the brain we shall soon consider. As we become aware of folding into collective movement and feeling, we invoke symbols, images, and ideas to explain what unites us – vast experiences require vast explanations (Keltner, 2023, p. 131)

One of the simplest ways that people synchronize their movements is in the act of walking. Rebecca Solnit (2014) argues that walking creates a sense of awe, one in which boundaries of the self are decreased as people become more aware of their environment. In bodily and cognitive attunement, individuals may become more aware of the rhythms of our social worlds, constructed around similar notions of time (Solnit, 2014). Employees getting a lunch together, or a school bell ringing and children running across a schoolyard, for instance. As the individual self becomes decentered, openness and increased prosociality may emerge, not only in human-to-human connections, but also between our own minds and bodies as embedded within nature (Keltner, 2023, p. 104). As we notice the snake slithering through the grasses, or the wind rustling through the leaves, a wonder of life permeated with awe and curiosity shifts our being into unison with those (human and non-human companions) around us. These inclinations of awe remind us that we are part of an interdependent collective, freeing us from the emotional burdens of the self (Keltner, 2023, p. 98).

Stopping for our lunch during the Blind Canyon trek, even in the blazing sun, the attentions of environmental subjects were collectively shared and directed at the bird's nest. And at the little snake slithering through the tall grasses. Gazing upon the remains of Bertha Echland's homestead, environmental subjects were reminded of their location in time, betwixt the historical past and potential future(s). Glancing at the towering mountains, sharing food, laughter, and words of encouragement with one another, a greater sense of meaning was cultivated. A collective sense of reverence for beauty beheld in the Crowsnest Pass hummed over the day. Environmental subjects created future possibilities for these mountains and for their homes. Through these action, collective identities as Albertan environmentalists and volunteers, as labourers of hope, synchronized.

Touch and Emotional Restoration:

We've discussed at length the value of nature connectedness for the human mind and wellness, as well as the differential impact of various natural landscape for mental and

emotional wellness. Rickard and White (2021) explored whether certain activities in various landscapes lend to enhanced mental wellness outcomes and found that the sense of touch and sound were significantly correlated to emotional restoration. Throughout my fieldwork I noticed an increased attention to enhancing the sense of touch. During Nature Play Day, various environmental groups set up a booth to provide education and "bring the outdoors," to children. Pramova et al., (2021) argue that "sensory engagement is a prerequisite for positive affective and cognitive states to arise, as well as for connectedness" (p. 357).

Most booths provided some sort of sensory enhancement or tactile function for children. One such organization, had a game designed to teach children about fishing and about species at risk here in Alberta, namely the Westslope cutthroat trout, where children used a modified fishing reel with a magnet on the end to "fish" wooden fish out of a box. During the first fieldtrip to look at previously planted willow stakes at Beaver Creek (talked about in chapter 1), Lara, Joslyn, Indy, and myself picnicked our lunch on the ground. Lara picked a wild strawberry and showed it to me, while Indy got up close and personal with various insect species in an effort to get photos to later share on Instagram. Genuine playfulness was exhibited when Indy and another volunteer took off their shoes after pulling invasive weeds at Blind Canyon and cooled off in a small, mountain creek.

Mattens (2016) argues that the immediacy of the sensation of touch is one that captivates our attention, and this may help us to partially make sense of the discrepancy in response to tabling about waste reduction strategies in urban areas versus hiking and pulling invasive weeds. While the tabling events discussed throughout this chapter in urban areas of the city were often visually stimulating – the area was busy with garage-salers and music festival-goers roaming around the parks, and the volunteers engaged the public with a waste and recycling sorting game, the sorts of tactility and touch were limited to human-made materials. A table, a camping chair, cardboard with printed images of various recycling or waste materials, and so on.

In contrast, during volunteer events in Blind Canyon to pull invasive weeds or to plant willow stakes (and swing a sledgehammer), environmental subjects and volunteers were

exposed to more natural environments. Running streams, mountainous views, grasshoppers, and little slithering snakes. Individuals were touching the willows, and the cold water in the trickling streams and getting mud and other environmental debris under their fingernails. Rickard and White (2021) argue that this touch may be especially important in emotional restoration from various natural landscapes. “Barefoot running improves sensory feedback from the ground… may literally be a step in building such connectedness while also enhancing psychological well-being through enhanced feelings of restoration” (Rickard & White, 2021, p. 977).

Alignment and Contagion:

> … our biological rhythms synchronize with those of others… as our bodies and physiologies align with those of others, so too do our feelings. The study of emotional contagion finds that as individuals share spaces… their feelings come to resemble one another's. The default self assumes our feelings are unique; the more likely truth is that we are nearly always feeling together (Keltner, 2023, p. 100).

Positive affect becomes quite literally, contagious. By aligning with one another, acting, and creating with one another we begin to feel together. Feeling together shifts people away from an egocentric perspective towards one that approaches complexity with curiosity. Charlotte touched on this idea in her interview:

> *For me, it is about that joy and wonder of the natural world… I’m not saying people aren’t important, but it’s kind of a secondary factor in my motivation. I believe that coming out of that is the opportunity to create a sort of… fully realized, connected… communities. Communities that are connected to nature more fully.*

In these moments of aligning with each other and with our landscapes, we also align with our non-human companions. Charlotte, the executive director and long-time environmental subject talks about the importance and value of connecting to our 'fully realized human communities' through an understanding of our interconnectedness with nature. Transcending the ego and approaching the social and natural world with curiosity is one that provides space for 'a share[d] attention to what is transpiring… and combining separate perspectives into a collective consciousness or extended mind" (Keltner, 2023, 109). Non-human species are deeply engaged in the process of creating possibilities and enacting hope, contributing to a collective and interdependent possible future(s) may act as such an extension of embodied hope.

Invoking a metaphor of a spider outsourcing information processing to its web and environment in an effort to decrease cognitive effort on processing through the central nervous system is relevant, through the theory of extended cognition (Japyassú & Laland, 2017). The theory of extended cognition posits that cognition may 'exist outside the limits of the body, encompassing objects from the environment' (Parise et al., 2020, p. 1) A non-human species, the tasks of information processing on a spider's central nervous system are great. The spider utilizes the web to navigate its world in a mode of extended cognition. By building a web, the spider appears to "offload" cognitive tasks, such that it may return to them at a later time (Japyassú & Laland, 2017). Similarly, humans are exposed to not only to continual sensory and information input as we navigate complex social and natural worlds, but also the resultant emotional implications of information overload.

I understand environmental subjects to engage in a *sharing* of cognitive and emotional burdens with each other and with our non-human companions. This chapter considers the interdependence and sharing of effort in a labour of hope with our non-human companions. As the mallet drives the willow into the soil and the willow slowly reaches its roots out into its environment, the reverberations of the actions of the actor remain ever present. The willows, and other non-human actants, have the great propensity of serving as an external memory, whereupon the energy of a labour of hope is externalized to the willows and to the landscape.

As future hopes have been set in motion, the exerted energy reverberates and yields an externalized, and sometimes physical, manifestation of its labourer.

Although outside the scope of this thesis and my argument that environmental subjects labouring in the process of hope rely upon our non-human companions to physically manifest an externalization of emotional and cognitive hopes, recent research has begun to consider the possibilities that non-salient species may utilize extended cognition. Parise et al., 2020 proposes that extended cognition may be found in plant species as they 'manipulate their root influence zone and the mycorrhizal fungi that associate with them' (p. 1). Although plants certainly do not have a theory of mind and do not have a central nervous system composed of a brain and neurons, plants are increasingly considered cognitive species as they make decisions and interact intentionally with their environments (Parise et al., 2020). Classical views on cognition have been contentiously debated (Parise et al., 2020), but from a post-cognitive perspective, it exists in the environmental interactions, sensations and responses that occur as an individual navigates its world.

Non-human species, recognized as interdependent, are collaborators within our worlds. "During experiences of wild awe, we may sense that we share… consciousness with other species…" (Keltner, 2023, p. 137). It is not only the collective consciousness of our (human) interdependence with the natural world that sustains a labour of hope, although it is a large piece. Hope cannot exist is isolation. Pramova et al., (2021) states that to be connected with nature is to experience an awareness of interdependence of the self as embedded within nature. The inherent potential for depletion and the burden of maintaining a labour of hope is one that environmental subjects share with each other through intense networking via awe with and of the natural environment and all its inhabitants.

Again, I return to an example from my fieldwork to illustrate what I mean about the embodiment or externalization of hope in our non-human companions.

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On June 30, 2022, Lara, Indy, Joslyn, myself, and another volunteer from a different organization made the drive out to a ranch near Pincher Creek. The ranchers, Les, and Sylvia showed us the utmost hospitality as they greeted us on the driveway with wide smiles. Les and Sylvia gave us a brief tour of the farmhouse and the property, before guiding the way out into the fields where willows had been staked the previous winter. In November 2021, Sylvia told me, over 25 volunteers came out and staked willows for them. The small SUV that Lara and I were in rocked back and forth as we followed Sylvia, Les, and the others through the field. We came to a stop and Lara, and I followed the others through the grass, to a dugout, a pond of sorts, used by ranchers and farmers to water stock. This was the second time we had been out this summer looking at willows that had been previously planted. Unlike the first time, at Beaver Creek, we found growth.

Les was the first to find growth and he hollered "Hey guys! Over here! I found one!" We rushed to Les' side, looking where he was pointing. Sure enough, there was about 3 inches of growth on the stake. 3 inches of bright green growth. "It even has leaves!" Joslyn exclaimed! Sylvia was next "Look at this one! It has more growth than the last one!" Again, we all rushed to Sylvia's side and *oohed* and *ahhed* at the bright green shoots protruding out of the ground. I knew what I was looking for now, and we all spread out – like an Easter egg hunt. Indy hopped onto the bank of the dugout and cried out "These ones are doing great!"

We spent nearly 30 minutes looking at the growth on over 150 staked willows. Each of them embodying the hope and the efforts exerted by its labourer. "Joslyn's willow-babies!" Sylvia joked. We laughed and smiled, each of us taking pictures of the shoots of hope the willow-babies had grown. Before long, we headed over to a new area of the riparian zone that needed some willows and began the arduous task of planting another 300 willows that day.

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Returning to the site of their own efforts and labours of their hope just eight months prior, Joslyn, Les, and Sylvia were overcome with joy and awe in seeing the growth the willows had sustained. Sylvia mentioned that the spring and summer so far had been rather chilly, and

she hadn't expected much, if any, growth when coming out here. Surprised and excited, a renewed energy rang out around us from the mid-morning until late afternoon, as the sledgehammers continued to swing and ring in the heat of the sun. In the swinging of the sledgehammer and the mallets, not only was a process of hope enacted through labour, but those hopes and the cognitive and emotional energy behind the actions became externalized and housed within the willows themselves. Hoping the willows would grow, and having created the ripples for new potentialities, emotional energy was given a reprieve as the willows must now do the work.

Imaginations of Care:

Mentioned earlier in the chapter, environmental volunteers found themselves situated in a historical place – Bertha Echland's homestead. Amidst a beautiful landscape and a vast mountainous range, moving in unison, neurophysiologies converged. In this state, individuals made sense of their place in a new form of immersed belonging and interdependence, through an experience of awe. Keltner (2023), argues that "every experience of awe… links you to the past, to other's experiences of the sublime…" (p. 121), through imagination. Imagination is a significant part of experience (Asselin, 2021). Jodie Asselin (2021), an anthropologist interested in human-environment relations understands imagination as a sense itself (p. 52). As people navigate perceived pasts and projected, hoped-for futures, imagination becomes a key sense in understanding the now.

Like Asselin (2021), I found myself drawn to concepts of time and the ways that environmental subjects made sense of the now by capitulating back and forth between imagined pasts and futures. Environmental subjects enacted the imagined and hope-for-futures by engaging a labour of hope, by staking the willows, by pulling the weeds and through many other activities. Olivia, a senior environmental student at the University of Lethbridge shared the following with me:

For me personally… my motivations are that I used to love going hunting and camping all in one little area that my family knew. And nowadays, if you roll up, like the party is just clearing out. There's mattresses, there's bottles, there's cans, there's logging roads. Going all over the place is that like when I was five, I was hearing about how they'd be reclaimed, and now they're still sitting there, so it's kind of like well, what the heck?

Like. I love this place. I love this area. I love what it is. And just like seeing it is just so… It's changed even in just the past 20. Years it's like, well, this is insane. Something's gotta give. And so, for me it was like well… I'm going to have nowhere to take my kids camping or hunting or hiking...

They're all going to be a provincial park we can't access 'cause it has to be protected [because] no one respects the land. It's all torn apart and it's not even somewhere you'd really want to go anymore. It's so sad, it's just trashed. And it's like, so heartbreaking to see.

Olivia, and others, shared their motivations for their volunteerism, education, and general motivation of doing restoration, conservation. and other elements of environmental work. In most accounts, environmental subjects recalled fond childhood memories of engaging in their local landscapes, through outdoor sports and a general appreciation for the natural environment. As the narrative continued, most environmental subjects recalled a change in the landscape or of non-human populations, with deep sadness. Contemplating fond childhood memories and deeper historical pasts (such as Bertha Echland's homesteading experience), individuals engaged in understanding uncertainty through imagined and projected futures about what might be left behind for their children.

Asselin (2013) argues that imagination is a sensory tool allowing for potentiality to be experienced by individuals in the present by using memory, and that this informs how people engaged with their environments. In this manner, environmental subjects exist not only in the present, in the now, but simultaneously engage with other temporalities. Memories serve as a connection to the past and as connections to fond memories and loved ones. While

imaginations of the future connected environmental subjects to future generations, their own and not and loved ones yet-to-come. The landscape and our non-human companions served as the coupling between past, present and future in these imaginations through a landscape of caring about not only the present, but past and future as well.

Conclusion:

Awe permeated my fieldwork and my experiences with awe have deeply influenced this chapter. I came to understand awe as an intrinsic part of being for environmental subjects and those engaged in conservation and climate change mitigation efforts and one that was sustaining in the face of emotional depletion inherent of a labour of hope. A sense of intimacy through shared awe and converging (neuro)physiologies in an act of 'feeling together' (Keltner, 2023) reminded me and others that we are connected and not alone. I was reminded to step away from sight alone and engage in an anthropology of senses (Asselin, 2023), as research participants and I considered our emotive interdependence.

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Standing next to the tree, Lara, and I both looked up. Our arms wouldn't touch if we both hugged the trunk from either side. Words escaped me. I looked at Lara, and our eyes met. She smiled and looked back up to tree. Without uttering a word, we were feeling together. Struck by the enormity of its growth, I felt small. Lara felt small. But together.

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Sharing awe with others has a significant utility in its own right, one that doesn't always have to encourage immediate action. But one that moves people into unison and one that removes barriers of isolation. I found that environmental subjects explicitly sought wild awe, as Joslyn gestured all around her to articulate her motivation for her work. Seeking wild awe and natural connectedness, environmental subjects actively engaged in a process of restoration and self-nourishing. The more we seek awe, the more we find awe.

“The more we practice awe, the richer it gets” (Keltner, 2023, p. 106).

6

Conclusion

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Spencer: *What do you hope for?*

Jessica: *What do I hope for? …I think ultimately, I hope for people to just care more about the environment. And I think that's only going to happen if people actually spend time in nature and are connected to it and experience it. I think it's a big mistake that we're so disconnected from nature. You know we live in our house, and we have our little yard, but unless we purposely go out… We have to drive to a park to experience nature. I think that's really a problem. Like that's why we're so disconnected… So yeah, I think my hope is that people will just like, care more once they have more opportunities to experience nature and be in nature.*

***

Over and over, environmental subjects expressed a future hope for others to care about the environment and to get to know nature, through experience and being immersed in it. They expressed an intuition on the connection between spending time in a place, caring about a place and caring for that place. But for Southern Alberta environmental subjects, this place is not relinquished to one type of nature or one type of landscape. Some had been born in raised in British Columbia and others as far south as Mexico. What each of them had in common was a deep feeling of care for the land and the world, which they acted upon in a process of a creating possibilities.

Southern Albertan environmental subjects engage in a labour of hope, whereupon hope is a contingent and cumulative process. The remain hopeful, though, I have argued, is work itself and requires emotional and cognitive effort to sustain oneself. While the loss of an ecosystem or another species is indeed horrific and requires our collective attention and grief, I believe the loss of hope may be the deepest loss of all. And so, I posited a question in chapter 4 – how might we (the public, government, and businesses) care for the carers of our landscapes, world and indeed of our futures?

Hyper-humanism currently colours the understanding of the Anthropocene. Although the recognition of our complicity in the effects of climate change and its harms are rightly just, it risks 'much of the same' (Head, 2016) in that people understand this geological epoch and our world as one that can be controlled by human actions. On the other side, a lack of action remains complicit in the harms afforded to our human and non-human companions in climate change and the risks at stake are utterly dire (Schlegel, 2022). Though eco-paralysis in the face of such dire stakes is not devoid of feeling, it is perhaps devoid of actively caring about and with other worldly actors.

My answer to this is one that draws on Jasanoff's (2004) idiom of co-production and McGeer's (2004) continuum of hope. We must care for the carers of our world (environmental subjects, willows, and other non-human companions) by recognizing individual agency. And by

acting upon the afforded hope emergent all around us. This requires that we approach our worlds – human and non-human companions with curiosity and empathy, one that responsibly and socially scaffolds the hopes of all-others with deep consideration. This socially responsible curiosity is one that may afford us connections of awe, as we our understanding of our world and the world(s) around transcend us. We need to imagine new ways of being in community in a multi-species world, one that shifts away from hyper-humanism and recognizes hope's potential as great.

Like Charlotte, I am inclined to believe that there is a possibility for more fully realized human communities and connections when we learn to hope well. Despite eco-anxiety, eco-grief and eco-angst, climate action efforts can be scaffolded in an effort of hope by paying attention to the emergent and dynamic hopes surrounding us. I am curious to see where humanity takes us and what sorts of futures we may imagine for ourselves and our world when we enact the art of hoping well.

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