Environmental Emotions, Environmental Social Justice, and Hope

by

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Abstract

Educators are faced with teaching their students about subjects such as climate change, the mass extinction of species, and environmental degradation while trying to encourage a love of nature and pro-environmental behaviour. Challenging emotions related to the environment may arise for both students and educators, and the literature highlights an opportunity for more acknowledgement and consideration for the emotional toll that can occur when learning about environmental crises. This portfolio seeks to illuminate environmental emotions and related social justice issues for the purpose of creating a tool for educators to present the topic and provide an opportunity for further questions to be raised and knowledge to be generated with and by students. This portfolio utilizes Parallaxic praxis as the methodology and consists of: 1) a literature review; 2) an illustrated short story inspired by the data and concepts considered in the literature review; 3) and a critical reflection on the creation of the illustrated short story and potential uses for it as a tool of illumination.

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Chapter One: Introduction

All of humanity will see their quality of life impacted by climate change, and preventing further damage depends entirely on changing the way that humans interact with the environment (Gallay et al., 2016). Not all of us will suffer the consequences to the same extent, with destructive environmental practices occurring disproportionately in marginalized communities (Lupinacci et al., 2017). This makes climate change, environmental degradation, and environmental justice the most important and pressing civic challenges facing younger generations (Gallay et al., 2016). Environmental education has sought to inform students of ecological crises, to encourage them to create a bond with the natural environment and to engage in personal pro-environmental behaviour (Ernst & Theimer, 2011). In recent years, there has been a desperate call to move away from personal responsibility and to instead, collectively engage in activism in order to alter the actions of governments and corporations that impact the environment on a grander scale.

However, environmental educators, advocates, scientists, and researchers alike have been so focused on trying to get people to act that they have largely ignored the emotional toll that learning about the global environmental crisis may bring. Environmental educators have a particularly challenging role; they must teach about the terrible, seemingly unavoidable environmental catastrophes around the world while simultaneously weaving in a love of nature and hope for recovery, all with limited guidance (Kelsey & Armstrong, 2012). Often, educators themselves feel emotionally worn down and are plagued with private hopelessness from the overwhelming complexity and scale of the crisis (Atkinson, 2020).

Eco-anxiety is defined as "a chronic fear of environmental doom, usually based on feelings of powerlessness about environmental change or climate change" (Perakslis, 2020, p.

80). Terms like "environmental/eco grief", "solastalgia" (Albrecht, 2006), "ecophobia" and "climate anxiety" have become more prominent in environmental discourses, but these complex, multidimensional emotional experiences deserve a closer look. The purpose of this portfolio is to: 1) explore and examine environmental emotions and the potential ways that they can manifest, and 2) consider ways that we can manage them in order to assume personal and collective responsibility for protecting the planet. The portfolio will consist of a literature review, an illustrated short story, and a critical reflection.

Storytelling

Storytelling through written or spoken word, arts and crafts, movement or music has served as the primary vehicle for explaining and understanding ourselves and the world around us since the beginning of humanity, with evidence-based knowledge only becoming established over the last two millennia (Boyd, 2018). Ang (2014) wrote that when we use storytelling for the purposes of educating, the story should be structured with a "clear illustration of the principle you are trying to demonstrate" (p. 78). I intend to prepare a fictional illustrated short story, appropriate for young adults, to be used by educators as a tool for exploring the importance and relevance of topics such as environmental grief, environmental justice, activism, and climate change.

Storytelling is an effective way of incorporating multiple subjects instead of learning about them independently of one another. It can assist students in creating crucial linkages (Doecke, 2013). Storytelling can aid in making complicated subject matter and complex emotional experiences more relatable, easier to empathize with and reflective of people's own experiences. "Narrative allows us beyond the limits of our lives, gives us access to the experience of others, to the past, the private, the imagined" (Boyd, 2018, p. 6). The illustrated

short story will seek to illuminate the significance of environmental grief in order to encourage empathy, critical reflection, and to promote further educational questions and insights.

Positionality

"Positionality is a concept that acknowledges that we are all raced, classed, and gendered and that these identities are relational, complex, and fluid positions rather than essential qualities" (Marten & Gunten, 2002, p. 46). Reflecting on positionality as an academic scholar is necessary as it can influence and enter our research in ways we may not anticipate (Charmaz, 2017).

I am a white, upper middle-class, heterosexual female and I am college and university educated. I grew up in a tumultuous home environment that was lower-class, often going without adequate nutrition and sleep. I struggled through elementary school and dropped out of high school only having reached a Grade 10 level of education. I had my son at the age of eighteen and lived on welfare for three years before completing the mature student's entry exam, taking out a student loan and attending college in the Police Foundations program. I graduated from the program at the top of my class and then went on to complete an Honours Bachelor of Arts in Political Science Pre-Law. Following graduation, I felt extremely frustrated with the state of the world and I went through an existential crisis which ended with an epiphany that education was integral to enacting change. This led me to pursue a Master's in Education for Change. Despite the sex and class related challenges that I have faced in my life, I understand the immense privileges that I am afforded through my whiteness, my heterosexuality, and now my financial position through my relationship. I previously identified as an able-bodied person at the beginning of embarking upon this portfolio, but I have since suffered immense health challenges that resulted in a leave of absence and accommodations upon my return. I am now a person with

a disability which has given me a new perspective that will undoubtedly influence the outcome of this portfolio.

I personally struggle with environmental grief. I am constantly ethically plagued by engaging in activities that contradict my values, from air travel to the less obvious and complex things such as food choices. I have engaged in personal and collective pro-environmental actions and behaviour, but I still feel that I am always teetering on the edge of finding out about the next thing that I am doing or not doing to contribute to our global demise. I have had many personal conversations with friends, family, and coworkers about the environmental crisis. Some believe that technology will save us, others are in deep denial and see themselves as removed from nature altogether. Most often, I am met with the same resounding thoughts and feelings that I too struggle with; namely, that despite my best efforts, it never seems to be enough. So, why bother?

I also experience terrible anxiety, worrying that despite my best intentions I will make an error when it comes to issues of social and environmental justice. Over the last decade, I have gone back and forth over whether I should quiet myself altogether and leave space for the people that have been silenced, the people that do not have the privileges that I have. I suffer from immense White Settler Colonial guilt. I am not declaring this in hopes of absolution. It simply influences everything that I create, write, or illustrate. It colours my entire reality and makes it challenging for me to feel connected to this small piece of earth that I inhabit because I understand the terrible atrocities against Indigenous peoples that took place for me to be standing where I am.

Dr. Jennifer Atkinson (2020), speaking on environmental grief, argued that we should redefine hope. Hope in the traditional sense can leave us feeling disappointed when we do not have the successes or make the headway that we have envisioned (Atkinson, 2020). Instead, we

should engage in what Macy and Johnstone (2012) call "active hope"; doing what we feel is right regardless of the outcome (Atkinson, 2020). The environmental crisis is implicated in everything that we do and how our entire civilization operates, which means that we must approach it from every possible angle. Even when we have the best intentions our actions can have unintended consequences; everything that we do or do not do, say or do not say, is value laden (Jickling, 2003). I feel an obligation to provide what I am good at to the fight against the global environmental crisis. I have the best intentions, and I welcome any criticism that comes my way for how I present my view on environmental grief as well as social and environmental justice. I fully expect that this portfolio will reflect the immense conflict that I feel.

Chapter Two: Literature Review

In this literature review I seek to highlight the critical work on environmental emotions and their place in environmental education. Given the scarcity of work that has been done on environmental emotions in education, I will provide a history of expectations of environmental educators leading to the recognition of environmental emotions. I will then discuss and provide justification for the themes that will be included in the illustrated short story: environmental emotions, environmental and social justice, denial and hopelessness, and active hope. The review will finish with the importance of storytelling as a way of conveying important information. I describe other storybooks with environmental themes and the lack of storybooks about emotions related to climate change.

Environmental Education

Environmental education has had a strong focus on delivering the science and facts surrounding pollution, habitat loss, and endangered species (Kazina & Swayze, 2009). It has expanded beyond environmental literacy to include the expectation of helping students to develop a sense of stewardship and a connection to the environment (Kazina & Swayze, 2009). Educators are encouraged to take their students into nature as much as possible to help them build strong connections and empathy towards the environment because it is believed to be a necessary step in creating a strong commitment to protecting the environment and caring for it in the future (Ernst & Theimer, 2011). It is not enough to learn about fauna and flora from distant lands; instead, students should be engaging in and learning about their local environment as much as possible (Jickling, 2003). Helping students to become active and responsible citizens is one of the most pressing goals of modern-day environmental education (Jickling, 2003).

There has also been a call for more significant inclusion of Indigenous ways of knowing in environmental education in Canada. Indigenous views of the environment are holistic and have stewardship at the center (Kazina & Swayze, 2009, p. 25). Where the Western view of the environment can reduce it to an abstraction, Indigenous views are of interconnectedness and reliance on the web of life for our survival (Kazina & Swayze, 2009). Education in general has been significantly impacted for Indigenous students because of the lack of immersion into, for example, Nishnaabeg intelligence that honours observation of natural processes, animal teachers, and creativity, patience, love, and self-respect in favour of mastery of factual information and adherence to a standardized curriculum (Simpson, 2014).

A major part of the issue is that the land itself has been altered and damaged. Simpson (2014) makes the point that learning comes through the land; it is not enough that we include Indigenous education without the context and natural, healthy conditions where prior traditional learning occurred. All students lose out on this way of learning from the land. Kimmerer (2013) wrote:

I need to remember that the grief is the settlers' as well. They too will never walk in a tallgrass prairie where sunflowers dance with goldfinches. Their children have also lost the chance to sing at the Maple Dance. They can't drink the water either. (p. 212)

The role of environmental educators encouraging activism in their students is a contested issue. Gallay et al. (2016) insist that teachers should be preparing youth to be skilled at problem solving and able to recognize the interrelationship between environmental and social justice in order to become the organizers and activists in their own communities (p. 127). As stated in the introduction, education is value-laden; what we value or do not value comes across in the way we run our classrooms, the way we teach, what we teach about and what we exclude (Jickling,

2003). This is referred to as the hidden curriculum in education. If we do not take a stand and encourage activism in our students, then we may be unwittingly encouraging the opposite, rendering it unimportant.

Jickling (2003) writes that some critics believe that environmental educators should be more focused on providing students with the information and critical thinking skills to make the choice for themselves on how they will proceed. This criticism is based in Freire's (1972) teaching of rejecting the banking model of education where a teacher deposits information into the student's mind, and instead adopts a dialogical, problem-posing model of education where teachers and students are both regarded as valid "knowers" who jointly have something to offer each other through the sharing of their lived experiences. However, if we reframe our understanding of what an activist is, perhaps Jickling (2003) is not making an argument for teachers to insist that students engage in protest specifically. Macy and Johnstone (2012) expand on the common definition of activism to go beyond referring to someone who engages in protests and campaigns to bring about change to encompass "anyone who is active for a purpose bigger than personal gain" (p. 217).

Environmental educators are often the harbingers of doom and gloom, tasked with helping their students to become environmentally literate, aware of the crises, connected and empathetic, and prepared to protect the world (Kelsey & O'Brien, 2011). But what of the emotional impact of learning about the destruction of the planet? Kelsey & Armstrong (2012) say that more needs to be done to consider the emotional impact on students who are consistently bombarded with environmental catastrophes and ecological problems. What is the role of environmental educators when it comes to the emotional responses of their students?

Environmental Emotions

Rachel Carson's (1962) "Silent Spring", which is often credited with launching the modern environmental movement, was so powerful because she masterfully blended reason with emotion to make a plea to halt the use of harmful pesticides. Carson's (1962) work illustrated that the division between reason and emotion is a false dichotomy, and that emotion has a strong part to play when it comes to environmental issues.

Humans have no recent evolutionary experience of dealing with rapid environmental change (Albrecht, 2020). The emotional toll of both learning about and experiencing the effects of the climate crisis has been slowly coming to light over the last several decades. Windle (1992) wrote about the ecology of grief, detailing the emotional experiences of biologists and ecologists in relation to organisms and field sites. Windle (1992) described avoiding attachment and emotion towards the natural environment because we know that it is ill:

I know that some part of me resists getting to know it better—for fear, weak-kneed as it sounds, of getting hurt. If I knew as well as a forester what sick trees looked like, I fear I would see them everywhere. I find now that I like the woods best in winter, when it is harder to tell what might be dying. (para.17)

Our culture provides limited guidance for coping with illness and death of a loved one, but no way at all for how to deal with the death or destruction of a place you love (Johnson, 2018, p. 27). Windle (1992) questioned why it was that as a society we see grief and emotion related to the environment as being unreasonable compared to mourning the loss of human life, especially when we are faced with the end of nature itself.

Sobel's (1996) work on eco-phobia lays a possible foundation for how environmental educators should approach educating students of various ages on the state of the world. Sobel (1996) believed that overwhelming young children with the doom and gloom of the planetary

crisis could effectively cut them off from their roots—the ability to feel connected to and to love nature. He stressed that first students should develop empathy for the natural environment and its inhabitants, then engage in exploration, and then begin to learn and understand the need for their activism in order to protect the Earth.

The trouble is that students do not live in a bubble. They are exposed to information about the environmental crisis everywhere they turn in the form of a variety of news media, the internet, movies, books, and conversations. It is nearly impossible to control what students see and hear outside of the classroom, and so it is "important to understand how young people cope with disturbing environmental information, and how to help them integrate positive and negative experiences" (Chawla & Gould, 2020, para. 56). If students already know about the crisis, what are we doing to help them with their emotional responses, and what terms exist to help us all express those feelings?

Important Themes for the Illustrated Short Story

Solastalgia and Environmental Emotions

When we use words like ecology, ecological and ecosystem we neglect to capture "the emotional and cultural dimensions of the human relationship to land" (Albrecht, 2020, p. 13). Terms like environmental/ecological grief, solastalgia and eco-anxiety attempt to capture the relational dimension.

Eco-anxiety is recognized by the American Psychiatric Association and is defined as "a chronic fear of environmental doom, usually based on feelings of powerlessness about environmental change or climate change" (Perakslis, 2020, p. 1). Other terms that are related are "eco-fear, eco-despair, eco-grief, eco-distress, and eco-angst" (Perkalis, 2020, p. 1). Kevorkian (2004) used the phrase "environmental grief" to describe the environmental loss of ecosystems

caused by both natural and human made events and "ecological grief" to describe the grief that comes from a lack of connection and loss of the natural world (para. 1-2).

Albrecht et al. (2005) coined the term "solastalgia" in response to a growing psychological illness that is linked between humans and their relationship with the environment. Solastalgia encompasses the concepts of nostalgia and solace. Nostalgia refers to the distress one may feel when yearning to return to the past or to a place and solace refers to the comfort and strength that can be derived from a person, place, or thing. Solastalgia is a pain that can be experienced when a person is not displaced or missing where they are from, but instead remain in an environment that previously provided solace and does not any longer due to profound environmental change (Albrecht et al., 2005, p. 2). They wrote that chronic environmental stressors lead to solastalgia. Solastalgia can describe not only our feelings of loss in a local context, but also on a grander scale. Rapid globalization and widespread media have resulted in the capacity to see and understand the entire world as our home (Albrecht, 2020).

Albrecht (2019) discussed a study conducted in Hunter Valley, NSW, Australia, where the local population reported that their sense of place, identity, general wellbeing, and health were suffering as a result of the open-cut coal mining and power plants that have scarred the earth around them. An Indigenous participant noted that even Indigenous people who lack the traditional connection to the land still suffer immensely driving through the area and avoid doing so because it causes them so much emotional pain (Albrecht, 2019). Without considering the emotional connection we have to our environment, we fail to see how climate change can have a direct impact on children if they are not being displaced by a disaster, starved or deprived in an obvious way—and sometimes not even then (Plautz, 2020, para. 2).

Hickman (2020) has studied eco-anxiety in children for years. She argued that eco-anxiety is not simply an emotional response to facts, but that it also includes a relationship to the knowledge that humans have caused it and are failing to act to stop it or reduce it (p. 414). As Johnson (2018) wrote: "I can't be alive and not take, use, and throw away, and hence I am implicated in that killing, that dumping" (p. 34).

Hickman et al. (2021) surveyed 1,000 young people between the ages of 16 and 25 across 10 countries. They found that young people are experiencing significant levels of climate-related distress and emotions across the globe, with the residents of poorer countries, generally in the Global South, expressing more worry and concern over impacts than those in the Global North. Not only were challenging and complex negative emotions reported, but there was also a high level of doom and pessimism about the future of the planet, as well as feelings of distrust and betrayal towards governments for not acting to prevent climate change (Hickman et al., 2021, p. 870). Hickman et al. (2021) argue that the climate crisis is a human rights issue, and that the climate anxiety that an individual may experience must be understood within the context of "relational, psychosocial, cultural, ethical, legal, and political factors" (p. 871). There is too much focus on individual action to quell climate anxiety rather than addressing the larger issues at play.

Many children take environmental destruction personally; they feel that what is being done to the planet is being done to them (Hickman, 2020, p. 412). Johnson (2018) says that a place is not simply a physical territory, but a spiritual and emotional landscape, that when subjected to damage, we ourselves feel the assault (p. 13). Children who try to raise awareness in others have been accused of creating anxiety in other children, with emphasis on just letting kids

be kids (Hickman, 2020, p. 413). Sobel's (1996) concept of no tragedies for young children is apparent in such criticisms.

Chawla and Gould (2020) wrote that seemingly "negative emotions" like fear and worry can represent a connection to the environment and recognition of the interdependence of the natural world. We should consider the reimagining of the concept of connectedness to include a full range of emotions and help children to integrate positive and negative experiences in nature rather than focusing solely on the positive (Chawala & Gould, 2020).

Until recently, not much had been done to explore the full breadth of emotions that may be elicited through learning about the environmental crisis. Pihkala (2021) explored the complex emotions related to climate change and the environment, noting that most research and emphasis has been placed on fear, worry, anxiety, sadness, grief, shame, hope, and empowerment (p. 9). He argued that there has not been as much attention given to emotions such as moral outrage, surprise, betrayal, isolation, desire to act, hostility, and disappointment. More needs to be done to explore and bring light to these complex and complicated environmental emotions.

Environmental Justice, Social Justice & Activism

Hidden Curriculum and Activism. Freire (1972) believed that the banking model of education serves to impregnate students with "anxieties, hopes, or hopelessness" (p. 93). If an educator resists the banking model of education, where they deposit information and values into a student's mind, they may feel conflicted about encouraging students to engage in environmental related activism (Jickling, 2003). The terminology or language that we use to refer to the environment itself can impact students; for example, referring to the Earth as a "resource" and development as "progress", or "exploitation" as development itself. We should not only create space for critical reflection and dialogue, but as educators we should make our

own positions and feelings clear to prevent unintentionally encouraging students to not engage in activism (Jickling, 2003).

Indigenous Considerations in the Context of Canada. Coulthard's (2014) groundbreaking book on the historical and present relationship between Indigenous Peoples and Settler Colonials and their structures and systems touches on land dispossession and "progress" or development in the Western view. Coulthard (2014) says that it is a profound misunderstanding to think of land or place as simply some material object of profound importance to Indigenous cultures (although it is this too); instead, it ought to be understood as a field of 'relationships of things to each other'" (pp. 60-61). Misunderstanding this vital element of Indigenous worldviews results in missing the obligation that Indigenous Peoples feel towards all people, animals, rocks, trees, lakes, rivers, and the land as a whole. (Coulthard, 2014, p. 61)

Gallay et al. (2016) and McKenzie et al. (2017) emphasize the importance of looking at environmental issues in relation to social justice. McKenzie et al. (2017) criticize environmental education as being more focused on power relations between humans and other species than it is on race, class, gender, ability, and sexuality. McKenzie et al. (2017) argue that Indigenous and decolonizing approaches to environmental education can help to connect both students and educators to the land:

By taking a holistic and comprehensive view of the environment and the concept of sustainability, the participants were able to connect the dots between the issues they were facing in their lives and historical trends of Indigenous land dispossession, slavery, discrimination, and environmental justice. (p. 133)

Simpson (2014) argues that the most significant attack on Indigenous Knowledge in modern times is land dispossession. Albrecht's (2005) "solastalgia" seeks to describe the impact

of an attack on one's sense of place, relevant to Indigenous people of Canada. It is the erosion of the sense of belonging, or identity, to a particular place and a feeling of distress about its transformation (Albrecht, 2005). It is the "lived experience" of the loss of the present as manifest in a feeling of dislocation; of being undermined by forces that destroy the potential for solace to be derived from the present; a form of homesickness one gets when one is still at "home." (Albrecht, 2005, p. 48).

Kimmerer (2013) writes about the importance of learning the names of the living world in order to build a relationship with it, to avoid 'species loneliness' where we feel terribly sad due to an estrangement from the rest of Creation. "Had the new people learned what Original Man was taught at a council of animals—never damage Creation, and never interfere with the sacred purpose of another being—the eagle would look down on a different world" (p. 211). Kimmerer (2013) ponders whether Settler Colonials can ever put both feet on the shore, "to set aside the ways of the colonist and become indigenous to place" (p. 207).

Importance of Community. Kelsey and Armstrong (2012) stressed the importance of a connection to the community and addressing concerns together. Gallay et al. (2016) also discussed the importance of "the common good, community, and ecological and cultural responsibility" (p. 114) where we feel social responsibility for each other and the Earth. Environmental issues "force us to face questions of social justice because people will have to bear unequal burdens from the lasting effects of a changing climate, with some facing displacement, famine, disease and war" (p. 113). Canada is not safe from the impact of the climate crisis despite its resource rich environment and political stability. For example, Yusa et al. (2015) warn of the potential for drought in Canada, and the real possibility of our drinking

water being negatively impacted, health risks increasing including hygiene and food-borne disease impacts.

Curnow and Gross (2020) showed that through engaging in activism collectively, students were able to better understand the complexities of environmental movements, with the added dimensions of colonialism, local histories and systemic issues of class, gender, and race. "When individuals see their fate as intertwined with that of a group, they are prepared to assume responsibility for the welfare of that group" (Gallay et al., 2016, p. 129).

Trott (2019) followed 10- to 12-year-olds in a 15-week program to study climate change and plan and implement actions at a family and community level. In focus groups, they repeatedly expressed the value of this social dimension. As a girl noted after her team gave a speech about local impacts of climate change to their city council and got permission to move ahead with a tree planting campaign, they felt that "you can actually do something instead of ignore the stuff around us" (cited in Trott, 2019, p. 53).

Denial/Hopelessness

Macy and Johnstone (2012) write about the hopelessness and despair that can come from facing the environmental crisis. "The facts of climate change, habitat loss, mass extinction of species, and mass starvation of people are hugely discouraging" (p. 186). Johnson (2018) poignantly describes the fear of letting ourselves feel emotions in relation to the environmental crisis: many of us are simply afraid that if we allow ourselves to wade, even for a moment, into the feelings of sadness for the living world that lap at the edge of our consciousness, we will find ourselves pulled so ruthlessly into grief and despair that we will never emerge. (p. 34)

Peterson and Barnes (2020) believe that a focus on negativity has resulted in a "cultural pessimism" in relation to the environment which has prevented people from taking action and

coming up with solutions to the environmental crisis (para. 8). Paralysis, denial, and powerlessness contribute to the lack of actual engagement and movement on environmental issues (Johnson, 2018).

The Kaiser Family Foundation conducted a survey in the Washington Post (2019) which found that climate change was impacting teenagers and young adults emotionally in a multitude of ways. They felt "afraid, motivated, angry, helpless, guilty and optimistic. Optimism was less commonly reported at 29% of respondents, but motivation (52%) came close to matching fear (57%)" (Washington Post, 2019). The environmental crisis clearly results in a complex and wide range of emotions. A study conducted in Sweden showed that students tried to manage their emotions about climate change by distracting themselves by deliberately thinking about something else, doing something else or avoiding disturbing information (Ojala, 2012).

Plautz (2020) asserts that young people are carrying the emotional brunt of the environmental crisis and its warnings. Ambrose (2020) wrote that when faced with the greatest existential challenge of our generation, the ensuing climate anxiety ends up hindering climate action due to paralyzing helplessness and dread. From anxiety and panic attacks over wildfires, to fear of never being able to have a family, Plautz (2020) raises the question, "how do you raise a generation to look toward the future with hope when all around them swirls a message of apparent hopelessness?" (para. 6).

Atkinson (2020) was teaching students on the climate crisis when she overheard a student remark how depressing the class was. It inspired her to try and help her students to deal with the emotional toll and to redirect them to action. Peterson and Barnes (2020) insist that despite significant attention paid to hope in the past, the interest has waned to our detriment. They call

for "intentional steps forward to encourage hope and empowerment among students" (Peterson & Barnes, 2020, p. 19).

Active Hope

Freire (1970) said that "hopelessness is a form of silence, of denying the world and fleeing from it" (p. 91). Atkinson (2020) encouraged her students to face and accept their feelings. She reasoned that even if we fail to prevent the Earth's temperature from rising beyond target, it is better not to go beyond it even further by not doing anything. We need to resist the inaction caused by hopelessness.

Johnson (2018) says that first we should take the time to acknowledge our grief, fear, shame, and despair. He writes that the environmental movement asks us to acknowledge the guilt-ridden truth about the destruction of the world and our hand in it, and to jump straight into action. Instead, he argues that we should take the time to grieve and "mourn the passing of what we loved that will never return" (p. 59). This will allow us to "take meaningful stock of what we've got left" and to ask "ourselves how we can exist with it in a realistic yet meaningful way" (p. 59).

Macy and Johnstone (2012) make the case for developing Active Hope through facing how things are now, recognizing that the choices we make individually and collectively influence what happens next, which leads us to questioning what we hope for the future and, finally, how we can be active in moving towards that reality even if we do not live to see it. Li and Monroe (2019) found that when young people feel concern about environmental problems and believe that they and others can address problems effectively they are more likely to feel hope.

Kelsey and Armstrong (2012) stress the importance of a connection to the community, addressing concerns together, and allowing students their turn to speak, be heard and express their emotions. Ojala (2017) saw that even though the young people in her samples were much more likely to report individual rather than collective actions to address problems, they felt encouraged when they believed that others could do similar small things and together they could make a difference. In this sense, social trust gave meaning to individual actions. Ojala (2017) noted that providing children with opportunities to "concretely work together for change," for example through youth-led community action projects, can serve to cultivate their sense of hope (p. 82).

Peterson and Barnes (2020) believe that in order to teach hope "in the face of large-scale environmental and social problems" we need to show students that they have agency, how to set goals for action, how to identify the processes that underlie these issues through critical engagement, and the importance of collective action (para.19).

Snyder (2000) defines a positive sense of hope as a force for action. Hope, he writes, requires a vision of a possible future, along with awareness of pathways to reach the goal and belief in agency to achieve it. "Recognizing that children's climate change awareness often already exists—however incomplete—there is a need to develop methods that support children's knowledge, while offering empowering and constructive ways to engage with the issue" (p. 533).

Macy and Johnstone (2012) encourage people to hold onto the spark of conviction that we can make a difference through our actions by looking to inspiring examples from history, acknowledging that things can very suddenly shift, accepting our call to adventure and facing the barriers in our path with courage, thinking about our own personal instances of perseverance, and

recognizing our actions in the grand scheme of many other communities, campaigns and personal actions that are happening simultaneously.

Storytelling & Arts-Based Research

Storytelling has always been the natural way for humans to communicate complex information in an entertaining way (Ang, 2014). It helps humans to connect events and concepts (Ang, 2014). Telling stories can also help us to make sense of our lived experiences (Geia et al., 2013). Social values and wisdom have been passed down through storytelling in many cultures throughout the world, including Indigenous groups in Canada (Ang, 2014).

Macy and Johnstone (2012) take readers through multiple workshop ideas to encourage active hope. One of these workshops includes storytelling from the perspective of future historians. Macy and Johnstone (2012) insist that "while the stories told are fantasies, some may be close to realities that will occur" and that "when we carry our desired future inside us, it guides and acts through us, helping us bring it into being" (p. 173).

King (2003) believes that stories help us to critically analyze our own reality and to help us to determine our own values and beliefs which ultimately can help lead us to growth and improvement. Boyd (2018) writes that narrative stories can encourage readers to mimic or encompass traits that are displayed in the story such as "courage, resilience, resourcefulness, circumspection, and social values like generosity, sensitivity, and respect for others" (para. 37).

Ang (2014) asserts that storytelling as an educational tool should be structured and demonstrate the principle clearly. However, it depends on whether the goal of the story is to instill a principle as opposed to enhancing a perspective. Arts-Based Educational Research "is meant to enhance the perspectives pertaining to certain human activities" which includes educational activities such as short stories or literary works (Barone & Eisner, 2012, p. 95).

Adding illustrations to written work can help to illuminate themes and give readers context and information not explicitly written (Illustrated Novel, 2011, para. 8). The words and images together can provide a "narrative truth" (2011, para. 13).

Freire (1972) believed "only through communication can human life hold meaning" (p. 77). "Literary language is designed to stimulate imaginative faculties" (Barone & Eisner, 2012, p. 97), and so students reading a short story on environmental emotions would not be for the purpose of telling students how they should feel, but rather to allow students to fill in the blanks with their own personal meaning. "Readers may find themselves transported into a world that is not real, but shares similarities with their own world, their own concerns, their emotions and raises questions" (Barone & Eisner, 2012, p. 98). Ultimately, Arts-Based Educational Research requires that we ask if the work raises important and profound educational questions that would not have been discussed or considered otherwise in order to "elevate the level of discourse about educational matters" (Barone & Eisner, 2012, p. 100).

I searched for illustrated short stories about environmental emotions by searching for them on a search engine on the internet and through visiting various bookstores. I did not find any illustrated short stories that deal with the emotional challenges of being faced with climate change whilst simultaneously trying to combat the crisis through reclaiming hope and taking action. There are a few children's books that would be appropriate for a younger age group. *The Lorax* by Dr. Seuss (1971) deals with the consequences of overconsumption and environmental destruction. It exhibits environmental emotions but it lacks emphasis or discussion around potential ways to cope with them. "The Tantrum that Saved the World" by Megan Herbert and Michael E. Mann (2022) details the emotional journey of a young girl who receives animal visitors into her home who are suffering displacement due to climate change. This brings on

frustration and confusion as she begins to try and understand why it should concern her, and how she can take action through advocacy and make a difference. It explores concepts of social inequality when being faced with climate change. "Not Your Typical Book About the Environment" by Elin Kelsey and Clayton Hanmer (2010) explores environmental emotions while providing reasons for hope and ways to take action, but it is not written in a short story format, and it does not delve into more challenging and complex emotions. Overall, the search for similar resources that explore the complex environmental emotions and social justice issues showed that there are limited tools for teachers to rely upon in this area, especially for an older age group, and it is a gap that this fictional, illustrated literary piece will serve to fill.

Chapter Three: Methodological Approach

I follow the Parallaxic Praxis method to create the illustrated short story about environmental emotions (Sameshima et al., 2019).

Parallaxic Praxis

The Parallaxic Praxis method can be used not only as a research conceptual framework, but also as an educational model to structure inquiry (Sameshima et al., 2019, p. 5). The purpose of the illustrated short story is to attempt to capture the essence of issues raised in the literature surrounding environmental emotions and present them in new media. The illustrations and short story seek to raise questions and awareness about environmental emotions, which can then be utilized by educators as a tool to facilitate further knowledge generation and connection to the concepts through interaction and dialogue.

Three Phases

The Parallaxic Praxis model consists of three phases: data collection, analyses, and renderings. The data collection portion of the model was completed through reviewing the relevant literature concerning environmental emotions and relevant social and environmental justice issues.

The analyses phase is the actual creation of artefacts, in this case the illustrations and short story, and serves as a "translation of a snapshot of part of the data" (Sameshima et al., 2019, p. 8). It will be a combination of the relevant literature coupled with my own lived experiences, interpretations, and knowledge with the intention of illuminating environmental emotions and challenging existing conceptions (see Sameshima et al., 2019).

The rendering phase of the model consists of taking what has come from the analyses phase and utilizing the artefacts "as catalysts to stir conversations on the issues surfaced" (Samshima et

al., 2019, p. 9). This portfolio consists of individual renderings that will be influenced through feedback from the supervisor and the committee member. Ultimately, the artefacts are intended to reach future audiences, particularly educators and students concerned with environmental emotions. The renderings will then inform a personal reflection or self-dialogue on the making of the artefacts, the illustrations and the short story, in order to provide clarity and insight into the rationale and choices made within them. The renderings will also inform further guidance that I have developed for teachers on how to utilize this resource with students to promote further illumination and understanding of the concepts utilizing relevant Catechizations.

Imagination

The method of the Parallaxic Praxis models imagination, which suits the objective of the portfolio. The illustrated short story seeks to explore environmental emotions and the ways we might cope with them, for example engaging in active hope and using our imagination to envision the world that we want to bring into fruition without the expectation of ever fully experiencing it personally. Here the principles of active hope and the theoretical underpinnings of the Parallaxic Praxis model align: "imagination allows researchers to construct narratives, stories, and mythologies of the kind of world we wish to occupy" (Sameshima et al., 2019, p. 37).

Chapter Four: Illustrated Short Story

This chapter consists of a digitized version of the illustrated short story, *Hope Springs Eternal*.



When I was growing up, there was nothing more I wanted than to be outdoors.

I was really lucky to have a big backyard even though it was on a busy street corner. There was a huge tree that I would climb, a row of hedges I would crawl through and a small hill that I would tumble down. I was obsessed with any and all wildlife I could find back there. Chickadees in the winter, worms in the wet spring, and squirrels in the fall. And as some kids do, I tasted everything from dandelions to dirt.

I lived in Northwestern Ontario, so I was blessed with accessible hiking, and camping. I gratefully attended friends' camps and swam in the huge freshwater lake, Lake Superior. I took full advantage of it. I caught toads and frogs, went seeking deer in the woods and ran alongside them. I felt like I truly belonged outdoors.





I was also an urban outdoor dweller. I spent endless hours on my bicycle, at the nearby creeks, or atop massive hills I would sled down in winter. I hunted for crayfish, I scraped my knees, I got grass stains all over me. I froze my face, fingers, and toes. Sometimes if it was windy, I'd stand on the front lawn and wave my hands around, pretending, but half believing, that I was directing the wind. And every time it hailed, I would sprint outside barefoot, around the block on the concrete. Getting pelted with ice chunks digging into my feet. I don't know why, but I was compelled to engage in these strange outdoors rituals.



I spent as much time outdoors as possible because indoors was not a safe place for me. There was a lot of conflict and financial challenges. We lived in a large house, but it was filled with stress, anxiety, and fear. It very nearly smothered me. My siblings disappeared into the virtual world. They loved video games and the computer. But video games stressed me out. Always something coming to get you, or racing to be first, or fighting something. I wasn't looking for more unpleasant feelings.

I was looking for solace and comfort. I was looking to be forced into the present.

The older I got, the more my home life wore on me. I still turned to the outdoors to protect myself and keep myself alive as things became more dire. I would walk for hours at night, even in the dead of winter, listening to music. I lived at nearby parks in summer, playing ultimate frisbee, lying in the grass, and looking at the stars.

Of course, I was semi-consumed by my cell phone and social media. But too much connection with people in the flat 2D world of the internet zapped the joy out of me. I was reinflated living in the 3D, outside world.

As a teenager, climate change, the environmental crisis, animal rights, and social justice became hot topics. I had heard rumblings of them when I was younger, but it started to become an unavoidable stream of negative, depressing information about what humans had done to the Earth and to each other, and how we only had a limited amount of time to fix things.

I sprang into action. I had a lot of energy and empathy, and I threw it at various causes. I marched in protests against factory farming, I became a vegetarian, and I started harassing my family to recycle. I didn't claim to know everything, but I felt like if I got involved that I could really make a difference. And I cared so much. I met other people who cared, too. It was a truly diverse group of people who wanted to see a positive change in the world.



It changed how I felt about other people who didn't seem to care. And it *really* changed how I felt about the people who denied it was a problem at all. I would tell them all about rising temperatures, flooding, fires, drought and conflict. They would tell me that they didn't want to talk about it. Some of them would actually become enraged. My parents were obtuse as well. I was mocked for being a vegetarian. People who took no responsibility for the harm that they caused or were causing, past and present, deeply disturbed me. I took the destruction of the Earth personally.

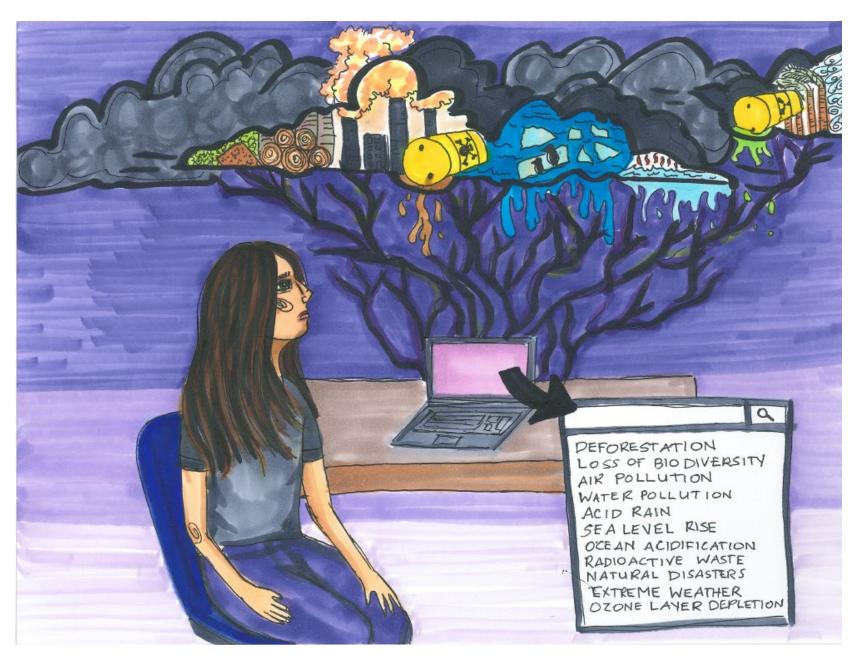


I couldn't understand how people could just turn away from what I perceived to be such an obvious truth; that the world was in pain, and we were responsible. That we needed to work together to find a solution before it was too late. Worse, over time it changed the way I saw the environment itself. It wasn't that there was anything particularly visible in my own backyard that was disturbing me. It was largely psychological. Through social media the world had suddenly become a lot larger, and I was witnessing all kinds of awful, toxic atrocities being carried out on the earth, some beyond my understanding, and it made me feel physically and emotionally sick.

The Earth became a victim, and I was one of the perpetrators just by virtue of being alive.

The outside world had stopped being my reliable friend, my solace, my partner in being present. I only had so much control over the harm I was doing to it through personal waste generation, contamination, and carbon output.





It wasn't just the environmental crisis. It was learning about and understanding for the first time the harm that had been done by Settlers to the Indigenous Peoples in Canada.

How could I feel connected to land that had been violently ripped away from the people who were its stewards?

I felt like I didn't have any right to feel anything positive from the land at all. It wasn't even my land.

The more I learned, the more I felt like I could never do enough. It sent me into an emotional, existential spiral of doom. I felt alienated from the outside world, and it drew me inside more and more. What once was a large part of my identity had become another toxic, dangerous, and unsafe place.



I had jumped into activism, I had been extremely empathic and caring, and I really wanted change. I did everything I was supposed to do, but I never accomplished anything that obviously made a dent for the causes I fought for. I burnt myself out. I tried to turn to the other people in the community who wanted the same things I did. I explained my hopelessness, but people either disapproved of my negativity or they agreed with me but had no solutions. People were focused on pure, endless action as the solution, trudging forward like environmental soldiers, but I had become exhausted by acting. I didn't have adequate words to describe what I was really going through, and so I isolated myself from the community, too.

I stayed inside for what felt like years after that. I stopped being a strict vegetarian. I recycled but not with the same fervour. I stopped talking about it to other people, I stopped trying to convince them to care. I had accepted that this was the world that had been handed to me, to all of us, from previous generations who for the most part probably didn't know any better.

I was bitter and angry, but I felt powerless to do anything about it. The world was just the way it was.

There was no feasible way we were going to be able to undo the harm that we had caused. So why not lean in and enjoy the ride into oblivion?

It was gross, but I started anxiously consuming.



I started doing almost the exact opposite of what I had been trying to do before. I became a version of the people that I had judged very harshly for not caring. I scrolled past the people posting about the environment on social media. I intentionally ignored the news. I looked away from magazines and headlines. I zoned out in school. I didn't want to know.

I focused on the mundane, the controllable. I dyed my hair. I played sports. I dressed myself in the latest fashion. I went to parties and worked a variety of different jobs. I thought about my love life, my friends, and my family. I carried on with life ignoring these things without ever properly acknowledging how privileged I was to do so.

The truth is, I was full of resentment towards previous generations not only because they had caused so much destruction, but because they got to live in blissful ignorance.

They could just live their lives without constantly worrying about how their actions, their very being, were contributing to the total destruction of the planet. This envy was something I was unwilling to acknowledge because in my mind, it meant that I might be a bad person. To want to live in ignorance, when so much harm had been caused. The thing about feelings is if you ignore them for long enough, they start to demand your attention.



And not everyone can just turn away from the global environmental crisis.

Not everyone lives in a place that has been thus far removed from feeling the effects. Drought, famine, conflict, clean water, disease. These things never touched me personally and so it was easy to shut the blinds and hide; safe inside. The problem was that I wasn't truly ignorant to the situation. It was eating me alive deep down inside, but I continued to bury my emotions. I was still numb to it all.





As time went on, my personal life calmed down a bit and I started hanging out with people who spent time outside. I had become so disconnected that I didn't know how to meaningfully engage with the outside world anymore. At this point in time, I was still trying not to think about it.

I started to do all the things I loved before. I was biking down trails, out on the water, camping, fishing, hiking, and climbing. Gradually, I started to really pay attention to my surroundings again. I started to notice plants, insects, and animals. I started to feel wonder and amazement again.

But with all of these positive emotions, the "negative" ones began to return.



You know when you were a kid and you were swimming, and you tried to submerge a beach ball underwater for as long as you could, and eventually it would just come bursting up out of the water?

That's exactly what happened with my "negative" emotions.

I was pushing too many beach balls under the water, and I was losing my grip on them.



It all started when I saw a plastic iced coffee cup left on the stump of a tree on a hike. I picked it up and carried it out of the woods. Then it happened again on vacation, when I was swimming in the sea and realized that there was endless plastic floating around me. I grabbed one of the plastic bags in the water and began collecting as much of it as I could. And at the same time, I started to see a shift occur out of the corner of my eye. People on social media started to point to corporations, governments and institutions being to blame. They argued that too much responsibility had been put on individuals alone when things needed to be addressed from the source as well. It seemed like more and more people were becoming aware of the environmental crisis.

It was becoming impossible to ignore.

So, what was I supposed to do? I couldn't just live in denial and enjoy nature without seeing problems. But I couldn't only focus on the problems, or I'd become frozen and numb again. I needed a solution that no one had been able to provide me. I decided to take some time to reflect on why it was all so uncomfortable.



What I found was that the anger, shame, guilt, envy, and hopelessness that I had been feeling reminded me a lot of the stages of grief.

I had never realized that I was grieving the loss of a pure and healthy environment that had provided me with so much comfort and solace as a child and teen. Learning about the way that humans, myself included, were harming the Earth made me feel so alienated from it that it felt like it had become terminally ill or died. Grieving the declining health of the Earth was a foreign concept to the society I had been raised in. This is not the case for all people on our planet.

I started to wonder if anyone was talking about the negative emotions that people may feel in relation to the environmental crisis. I looked to Indigenous Peoples, where perseverance was so evident. I wondered where they were deriving their strength and motivation from to keep fighting for the Earth. My outrage for Indigenous Peoples became empathy when I suffered my own loss of comfort from the environment.

Displacement, destruction, and despair were something that the Indigenous Peoples of Canada had experienced and were still experiencing first-hand. There was a wealth of knowledge and examples of resiliency when it came to perseverance, respect for the planet, and overcoming the internal conflicts associated with being a living being with needs.

I was in awe of this resilience and I needed to try and figure out a way to harness it myself. I needed to determine how to acknowledge the state of the world without it zapping all the joy and wonder from being with nature. I needed to find a way to integrate the negative emotions with positive ones. I needed to find a way to come to terms with the conflict inside of me every time I consumed, produced waste, used fossil fuels, or acted in a way that didn't perfectly align myself with values. This is what I mean by the inner conflicts associated with being a living being on this planet! Every time I buy something, I feel guilty. If I don't perfectly recycle, I feel guilty. If I fly on an airplane, I feel guilty. If I buy produce that's from somewhere far away, I feel guilty! If I consume an animal, I feel guilty. I am filled with shame and remorse! I failed to do the mental gymnastics required to continue to be conscious and take action without seeing every contradiction, so eventually I chose to downright ignore the feelings altogether. Obviously, I couldn't continue to live in chosen ignorance anymore. And I know there are other people out there

that feel the same way that I did.

So, that's why I'm telling you this.

This is what I did to try and cope with these complex emotions.





The journey began with me trying to rectify these challenging contradictions and dichotomies. I finally found words that described how I was feeling. Eco-anxiety; a chronic fear of environmental doom. Feeling absolutely powerless. Well, if that doesn't describe me then I'm not sure what does. But it was "Solastalgia" that struck me most.

Solastalgia is when you haven't left your environment, but it no longer provides you solace or comfort because it has changed. A nostalgia for solace.

The world changed for me when I learned about the environmental crisis and I thought that what I was trying to do to help it wasn't working, and that it would never be enough. But then I had to dissect those ideas, too! Why did I arrive at such a dark conclusion?

On my journey I was exposed to the concept of deep time which is essentially that humanity's time on Earth has been but a blip in the grand scheme of things, and

it's only been in the last, tiniest fraction of our whole existence that things have started to go terribly awry.

So, while we have totally screwed up and made a mess of the Earth, it means that if we change course now, it could be enough to course correct or at the very least not make things even worse than they would have been if we had done nothing at all.



The point being—just because things might get really bad, even if we do see dramatic climate change, that doesn't mean that we can't make a positive impact. We need to realize that our impact, however small it may seem in the moment, is contributing to a larger change that's occurring all over the world at the same time. A lot of people are on board that we need to do something, and they might not always be the people directly around you in your life, but that doesn't mean that you're alone in this. The things you're doing might seem meaningless on their own but combined with the actions of all the other people who are working towards a better future, it might actually inspire others and lead to MORE and MORE people taking small actions that ultimately end up leading to big, monumental, ginormous changes. Changes that we might not live to see.

We are planting the seeds to a forest that we may never live to see or enjoy the fruits or shade of, but it doesn't mean it was for nothing; in fact, it's for everything.



We have to look to other monumental, IMPOSSIBLE, crazy movements that have occurred. That started small and moved so slowly at first, and then somehow encouraged other people who were like YEAH, that makes a lot of sense! And then they got on board, which encouraged EVEN MORE PEOPLE to get on board. Then all of a sudden, it's like POW. Everyone's on board! And then there's this huge, wild, bonkers movement that has out of seemingly nowhere totally, radically changed the entire world!

Slow, slow, and then EVERYTHING IS DIFFERENT NOW.

It happens all the time!



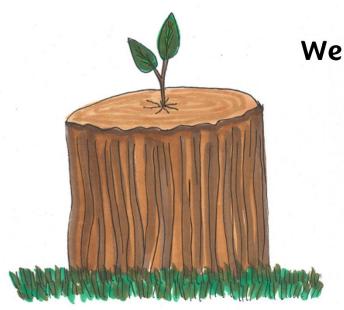
There are so many people who have been working on trying to bring about awareness and trying to do good and take care of the environment and lead by example. They are awesome trail blazers. . . no, trail SAVERS. They have truly shown us the way. We have to try and visualize the world we want, the world we want present and future humans and other living beings to enjoy, and then make choices that can help bring that future into being.

We all hold the power of creating the future in our hands RIGHT NOW.

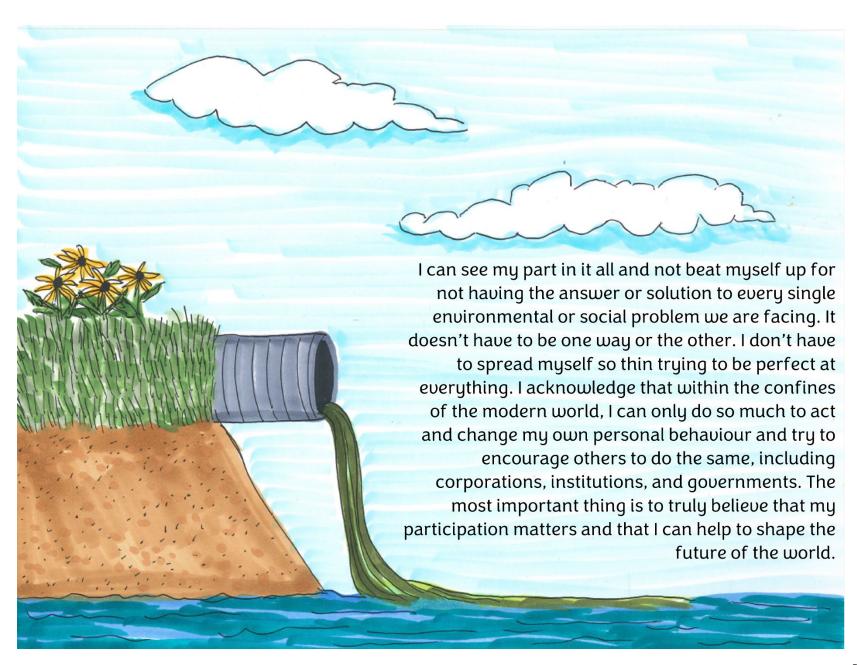
We get to make the call, even if we seem powerless in the face of large corporations and governments. They seem impenetrable but they aren't! We need to make them do their jobs better or replace them with representatives who actually want what is best for the world.



I was doing it all wrong before. I was trying to do everything perfectly. I thought the things I was doing right didn't really count if I was doing something else wrong. I was spreading myself too thin by caring about every little thing. It was too much emotionally for me to deal with. A big part of that was that I never gave myself the room to actually grieve what I had lost, and to take the time to know what was left in its place. Just because things are broken and dire in a lot of ways doesn't mean that it is unlovable or not valuable. The world changed and it didn't give me what I expected of it anymore, but I didn't even try to have a relationship with it. I just totally neglected and rejected it out of my own pain. If it was revealed that a family member had become gravely ill, would I turn my back on them? Or would I grieve what they had lost and love them simply for who they are within the confines of their illness? They are still them after all. Even if I had a part in bringing about their illness, would I abandon them? No! Of course, I would feel guilty, but

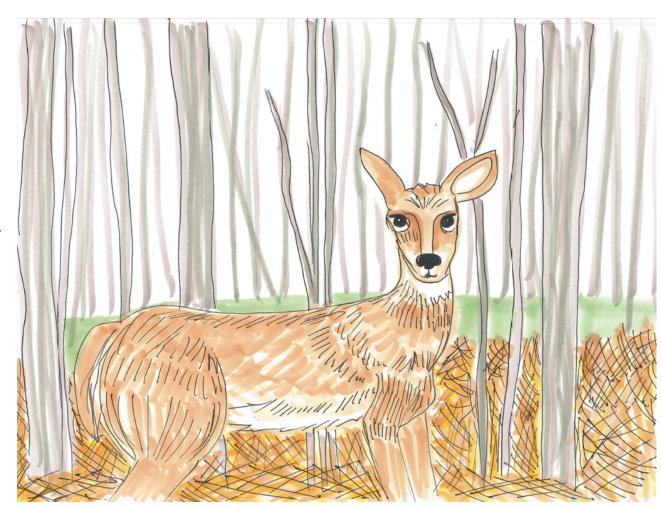


We don't abandon that which we love!



And let's not forget what we're doing it for. It's for the people who are disproportionately impacted by climate change and the environmental crises. It's for the animals and insects that can still be saved from annihilation. It's for the trees that are still standing that we can prevent from being cut down.

It's for the life that carries on in the broken places that we have scarred.





I broke down the barriers of my own expectations of myself and realized that imperfectly helping to turn the wheel and point us in the right direction is the best we can do. We have to acknowledge that our world isn't the safe and pristine place we believed it to be, but that we can show the imperfect and damaged world love and appreciation. My perception of the land *belonging* to me or anyone else is backwards.

By virtue of being alive on this planet, I belong here, and I should be doing everything I can to preserve and improve the health of the planet.

Even being a Settler, I can acknowledge that the reasons that I'm here are complicated and that a lot of damage, death and destruction has been left in the wake of the actions of my ancestors, and that some of these challenges are systemic and ongoing. But if I remain steadfast in not feeling or believing that I belong here, I risk feeling disconnected from the Earth itself. And not feeling planted leaves me in a position where I am not a very good or effective ally to the people and other living beings. Re-evaluating my perception and conceptualization of what the land even *is* will help me to stand alongside Indigenous Peoples who have been protecting it all along. We are all part of the same living system, and we need to stop seeing ourselves as separate from nature or helping "nature" like as if it is some sort of removed entity.

It's everyone's lives, health, and wellness on the line.





Acting is imperative to creating change, but we also have to take the time to feel our feelings. If the people around us don't understand, we can gently try to guide them on their own journey of

emotional enlightenment. We should take the time to acknowledge how the environmental crisis impacts us. We need to sit with and acknowledge our grief. We need to stay connected to the community of other people who care. And we must extend our unconditional love to the broken and frightening parts of the Earth.

Most importantly, remember that there is still hope. We can shape the future of the Earth together by envisioning and behaving in a way that will bring it into being, while extending ourselves forgiveness in the face of modern day challenges of being a human.

Hope springs eternal in the human breast.

Chapter Five: Reflection

Catechization Process

The catechizations themes most suitable for the self-reflection and evaluation of the written rendering are *mimesis* and *evanagnostos*. Mimesis refers to the act of mirroring or echoing works or themes (Sameshima et al., 2019, see p. 14). Evanagnostos is the evaluation of the legibility or ease that an audience can read or understand the transactional dialogue (see p. 17).

For the illustrated portion and for the combination of the renderings, the catechization themes used for reflection were mimesis because the written and illustrated story directly echo and relate to one another; *intertextuality*, which is how the ideas and themes work, implicate, and intersect with one another; and *aporia*, which promotes reflections on that which puzzles or appears to be incongruent. Using the catechization themes to review the renderings of the portfolio creates a systematic analysis of the various modalities.

Process of Creation

Written Short Story

The short story is not autobiographical; it is largely a fiction. There are distinct differences between my own life and the protagonist, but there are similarities. I did draw on my own personal experiences and emotions and, in this way, the work does directly mirror experiences from my own life. I coupled that with the findings from the literature review as well as anecdotal emotions and sentiments that other people have expressed to me over time when discussing issues related to the environment and social justice.

I wrote the short story first over three sittings. When I initially wrote it, it felt like three separate pieces, heavily influenced by the intended accompanying emotions and concepts I

wanted to get across to future audience. I sought to create an illustrated short story that was legible and easy to understand from the perspective of the future audience because environmental emotions are not something that has received much attention. The concepts will be introductory, even if the actual emotions are familiar.

Section One

The first section delves into the past and attempts to weave childlike wonder with experiences in the outdoors. Not everyone is blessed with access to the outdoors in the way that people who live in Northwestern Ontario are. I wanted to honour my own experiences in nature growing up in Thunder Bay, but I also wanted to couple it with urban experiences so that it is relatable and accessible to a larger audience. I touched on how technology can be an escape for young people, but that being with nature is an alternative that can provide comfort and connection. This was meant to subtly reflect the experiences of the intended audience, ages 12-18.

I touched on important concepts like community and activism. I tried to give an honest account of what activism can feel like. It is exciting to get involved and to meet other people that are passionate about similar causes. It can be extremely rewarding to feel like you are out there doing something and trying to make a difference. It can also be disappointing because things often move a lot slower than you expect.

Section Two

The second section explores the emotions that can come from learning about various environmental crises. I included complex emotions and experiences like bitterness, anger, frustration, hypocrisy, self-isolation, anxiety, envy, fear, self-pity, and guilt. I wanted to capture

a broader spectrum of emotion and illuminate some of the more taboo and challenging feelings young people may experience.

I chose to write this story from a first-person perspective because emotions are so personal, and thus should be easier to relate to as opposed to using "we" language and perspective. This part of the story in particular is intentionally self-centred. The protagonist focuses on their own emotions and their lack of connection with others and the outside world. It is a stream of consciousness that is meant to transact some level of anxiety, hopelessness, and stress to the reader.

Section Three

The third section is meant to bridge the gap between the protagonist's love for the Earth and the challenging emotions of learning about the environmental crises and accompanying social justice related issues. It was the fastest, most fluid part to write because I personally presently reside in a state of active hope. This section sought to introduce future readers to words and concepts such as solastalgia, eco-anxiety, deep time, active hope, acknowledging our feelings and grief, agency, importance of community and conviction that what we do can make a difference even if we do not live to see it.

Mimesis is an interrelationship or imitation of the essence of another piece of work. In particular, this section was heavily influenced by the essence of *Active Hope* by Joanna Macy and Chris Johnstone (2012). I reflected on and tried to capture the most salient and important parts of the book in order to make the subject matter more relatable to a younger audience, easier to digest, and more fully what it was (Sameshima et al., 2019, p. 19).

Illustrations

After completing the written portion of the story, I reviewed it and highlighted the portions of it that I thought would be illuminated further through illustration. The illustrations were not completed in a chronological order despite being identified as such and numbered. I drew whatever was most compelling to me emotionally each time.

I rarely drew conceptual drawings beforehand. The vast majority of the illustrations were completed in one sitting only using the written story as inspiration. This method would be considered intertextuality. Intertexuality is where "one artful work refers to another" (Sameshima et al., 2019, p. 21). When I finally combined the illustrations with the written piece, I was surprised to find that it altered the story in a way I did not expect. Certain illustrations that were meant for one place ended up in another. Intertexuality also refers to when "meaning is altered, when interpretations are placed next to each other across a variety of media and 'read' differently depending on the placement" (p. 21). I found that certain illustrations did not compliment the portions of text that they were intended to accompany. They proved to be more impactful and appropriate elsewhere.

The illustrations also transformed the story into a more cohesive and coherent piece. It feels less like three separate pieces with the illustrations woven throughout. There are also some illustrations that did not end up making the final cut. Under some circumstances, it made more sense to leave a visual pause. In parallaxic praxis, the nothing is just as important as the something in the creative process. The concept of 'ma', the nothing in contrast to materiality or 'something', is intentional space that is left in order to allow expression and knowledge to be birthed (p. 39). A lack of illustration acknowledges the presence of the future reader, leaving space for them to interpret and fill the spaces with their own conceptualizations.

Challenging Themes

Indigenous Peoples & Social Justice

It was incredibly challenging to adequately depict the challenges faced by Indigenous Peoples of Canada, both past and present. I struggled between the contradicting feelings of wanting to depict these challenges, but also not feeling like I was doing the various experiences justice. This is an example of aporia. Aporia within the Parallaxic praxis catechization practice is when, in this case, the researcher embraces the uncomfortable and puzzling aspects. I wanted there to be an obvious need for justice to come across whilst simultaneously showing that self-resiliency is ever present. I do not feel confident or comfortable that I am the person that should be trying to bring awareness to these subjects. I hope that future readers can build upon what I have provided through *Hope Springs Eternal*.

Chapter Six: Worksheet

Intention for Educators

Hope Springs Eternal is an illustrated short story that is suitable for ages 12 and over. This

worksheet can be utilized by educators who wish to explore environmental emotions and related

social justice issues. This worksheet is intended as a guide for educators to assist students in

interacting with and creating dialogue surrounding the illustrated short story, to expand on and

create new understandings. Note, the Catechization worksheet, with the theme definitions as I

have used, are available with in Chapter 3 of Parallaxic Praxis (Sameshima et al., 2019) and

available here. The worksheet is open access is intended for practitioner use (Sameshima,

personal communication, May 29, 2022)

Mimesis

imitation; reproduction; representation by means of art (Online Liddell-Scott Jones Greek-

English Lexicon, 2018) imitation or making a likeness

(http://logeion.uchicago.edu/index.html#mimesis)

• refers to a reproduction or a mirroring. After reading Hope Springs Eternal, how are ideas or

authors' works re-created or mirrored? In what ways are the artefacts mirrors/echoes of your

thinking?

Intertexuality

That which is woven; textum (Perseus-Tufts Latin Dictionary, 2018)

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• is the relationships between texts. How do the illustrations and written story in *Hope Springs Eternal* work in combination with each other? What commonalities do they have? How do the artefacts working combination to teach us something anew?

Antiphona

Sounding in answer, concordant; responsive to (Online Liddell-Scott-Jones Greek-English Lexicon, 2018)

• expands on intertextuality. The Greek term antiphona refers to "harmonies." We might ask after reading *Hope Springs Eternal*, now that we have named some commonalities, how do they work together to teach us something new? What can we learn from these commonalities? In what ways do the materials, the model, or our discussions teach us?

Evanagnostos

Easy to read; easy to expectorate, pronounce (Online Liddell-Scott-Jones Greek English Lexicon, 2018)

• refers to the Greek word for something being legible and easy to read (Wordreference.com, 2018). When artful works are congruent in readability with the audience, capacity for transactional dialogue and understanding are enabled and the impetus for rippling effects

initiated. Questions to ask may be: What is it in the artwork that speaks to you? What do you notice in the artefact that speaks a truth about a particular experience?

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