

Heating Up the Conversation on Climate Change Storytelling in Canada

by

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COMMITTEE APPROVAL

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Abstract

The urgency for storytelling as an environmental communication and climate justice strategy is becoming clearer and louder as the climate crisis unfolds disastrously around the world. This qualitative study explored how eleven storytellers in Canada are responding to this need and how intersectional storytelling on climate change can shape environmental communication in Canada. The study was guided by ecofeminist and intersectional theory. Data was collected through semi-structured individual interviews and then subjected to thematic analysis. My goal was to fill a gap in the literature about how climate change storytelling can evolve in Canada and produce a set of recommendations on what kind of climate change storytelling is needed in Canada right now to catalyze a socially and ecologically just future.

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Figure 1

Photo by study participant Asalah Youssef from her visual story titled Mother, Earth & I

Chapter 1: Introduction

My grandmother told me a story once
She said I was in her womb before my mother was born
I told her it was impossible, I came from my parents and them alone
Human females are born with all of their eggs she countered
Conjured and ready by the time we're sent earthside
She was born premature
April fools, no one believed she was really here
I couldn't imagine such a tiny baby, my mother barely ready to be alive
Holding the possibility of me in her cradle
I think of that story when I write
So many interconnections beyond what my clouded eyes can see
Endless unseen links for me to piece together
As I dip my pen into an ink bottle of river silt streaked with lines of childhood memory
Fossilized heartbreak and blood banked soil trailing patterns with the sand
I write what I know and I remind myself of how much I do not
Weaving ancestry, migration, guilt, possibility, hope, fear
My words can rewrite history, dredge up secrets, and tales forgotten
Draw constellations between freckle and fig and firefly
My practice, my path, my place
I carve with poetry

Background

Human-induced climate change is happening now, with those contributing the least feeling the worst impacts (IPCC, 2023). From irreversible biodiversity loss to economic disruption, climate change is unfolding at dizzying speeds and scales around the world (IPCC, 2023). Now often referred to as the climate crisis (Zeldin-O'Neill, 2019) or climate catastrophe (Fischetti, 2023), the impacts of this phenomenon go far beyond ecological systems. As not only an environmental crisis but a crisis of injustice, climate change is demanding urgent transformation across the globe (IPCC, 2023).

At this time, environmental action is undergoing a reckoning due to ongoing systemic harm and exclusion. Environmental movements in Canada have been predominantly white and settler dominated (Curnow & Helferty, 2018), leaving out or obscuring the activism of groups that are most impacted by environmental injustice and climate change. These groups include Indigenous peoples (Williams, 2012), racialized communities (Waldron, 2018), and women (Williams et al., 2018). These groups often hold necessary keys of knowledge to unlock solutions and pathways to justice in the climate movement (Cottrell, 2022). Climate justice scholarship specifically addresses this harm, focusing on how climate change impacts communities disproportionately and works to reduce marginalization, exploitation, and oppression (Sultana, 2022).

Approaches to environmental communication are being reimagined due to a lack of proven effectiveness. The practice of environmental communication has historically followed a facts-first approach; however, this has not resulted in meaningful engagement or widespread

action (Kollmuss & Agyeman, 2002; Lakoff, 2010; Yamashita, 2015). Communication and dialogue around climate change have also failed thus far to prioritize the linkages between colonialism and climate change (Harrison, 2019). This has further deprioritized attention to the social roots of climate change that must be tackled to achieve both social and environmental system transformation. Researchers believe improved environmental communication can help to increase understanding and incite action on climate change (Howarth & Anderson, 2019; Moser, 2016).

Storytelling is one of our species' oldest ways of knowing and can be a way for people to understand, process, and act on climate change (Dill-Shackleford et al., 2016; Sundin et al., 2018). Some of the benefits storytelling offers are the ability to obtain meaning and understanding of an issue and other's experiences (Archibald, 2001; Kelsey, 2014; Otto, 2017), support complex systems thinking (Talgorn & Hendriks, 2021), and move beyond environmental despair towards empowerment (Macy, 1995). Scholars are calling for environmental communication to embrace storytelling in a way that integrates intersectionality, justice, and a diversity of voices (Chao & Enari, 2021; Driver, 2023; Hathaway, 2020; Pearson et al., 2017).

Previous studies have examined communications on climate change in Canada (Callison & Tindall, 2017; DiFrancesco & Young, 2011; Gislason et al., 2021; Good, 2008; Stoddart & Smith, 2016), with scholars demonstrating the need for storytelling in environmental communication on climate change (Bloomfield & Manktelow, 2021; De Meyer et al., 2020; Jones & Peterson, 2017; Martinez-Conde & Macknik, 2017). Researchers argue that stories about the environment and climate change can hinder or heal humans' relationship to these

earthly elements because they are so powerful (Harrison, 2019; Harris, 2023; Dale, 2018). The literature identifies the power of stories to increase public understanding of and engagement with climate change science (Bloomfield & Manktelow, 2021; Lakoff, 2010), help audiences feel seen and understood in their unique experiences with climate change (Gislason et al., 2021), and create space for new narratives on climate change (Wiebe, 2019). Specifically, place-based and regional storytelling that is grounded in a particular environment is identified as significantly meaningful for challenging harmful narratives (Alderman et al., 2021) and increasing resonance of the story (Gislason et al., 2021). Despite a broad range of literature on storytelling as an environmental-communication strategy, there is a missing perspective from storytellers working on climate change. Specifically, there is a lack of literature that narrows in to focus on Canada and storytelling in environmental communication within the unique cultural contexts across the country including the ongoing impacts of settler colonialism and simultaneous pursuit of reconciliation with Indigenous peoples. As well, Canada is responsible for a legacy of environmental injustice towards marginalized populations such as Indigenous peoples, however there is a lack of scholarship on the issue in Canada (McGregor, 2018). Scholars are impressing upon their peers that it is critical to investigate this topic from the frameworks of climate justice and intersectional environmentalism (Djoudi et al., 2016; Kaijser & Kronsell, 2014; Versey, 2021).

Positionality

I am coming to this research from the positionality of a woman that spent her most cherished childhood moments alongside and swimming in the waters of Pitt Lake and Christina

Lake where my parents and grandparents had similarly grown up. I was born and raised in Coquitlam, B.C on the traditional territories of the Cayuse, Umatilla and Walla Walla, k'wík'wəłəm, S'ólh Téméxw (Stó:lō), Qayqayt, Hul'qumi'num Treaty Group, səlilwətaʔl təməx'w (Tsleil-Waututh), šx'wəθk'wəy'əmaʔl təməx'w (Musqueam), Skwxwú7mesh-ulh Temíxw (Squamish), and Stz'uminus nations (Native Land Digital, 2023). As a white cisgendered descendant of settlers, I am aware of my privilege to grow up in the Pacific Northwest of the colonial state of Canada that has been stewarded by Indigenous nations for millennia. Growing up in this place led to my close connection with nature and desire to pursue a career in the environmental field. Since completing my undergraduate degree, I have worked as an environmental educator and communicator, writing blogs, news pieces, poetry, social media posts, and more for clients across the environmental sector. My personal and professional goal is to study, work with, and write my own meaningful climate stories that envision a positive future and amplify voices that have been historically silenced.

Research Questions and Objectives

My research question is, *how can intersectional storytelling on climate change shape environmental communication in Canada to help catalyze a socially and ecologically just future?*

The purpose of my qualitative study was to use ecofeminist and intersectionality theory to frame an exploration into the perspective of storytellers in Canada on climate storytelling through individual interviews, with the goal to provide suggestions for what kind of climate change storytelling is needed in Canada right now to catalyze a socially and ecologically just future. The

following five objectives describe what I needed to learn in order to answer my research question and accomplish my purpose.

- Identify storytellers and academics in Canada producing works of and/or work on intersectional storytelling on climate change.
- Conduct a thorough literature review to identify the key areas of scholarship that inform my study topics and how they intersect.
- Interview the research participants to discover their perspectives on how intersectional storytelling on climate change can shape environmental communication in Canada.
- Conduct a thematic analysis of the interview data; and
- Draw from the research findings to produce a set of recommendations on what kind of climate-change storytelling is needed in Canada right now to catalyze a socially and ecologically just future.

Terminology and Definitions

Canada: I want to acknowledge that Canada is the colonial settler's name for the land on which I am conducting my research. To highlight this, Canada is sometimes referred to as so-called Canada or Turtle Island which is an Indigenous name for North America that many nations use (Yellowhorn & Lowinger, 2017). Due to my positionality as a settler, I will be using Canada as I believe that is the most culturally appropriate term for me to use. However, I want to acknowledge that I do not believe in the story that Canada is the rightful name for this land.

Climate storyteller: A person producing creative writing (literary nonfiction, narrative nonfiction, literary journalism, or climate fiction), films, podcasts, music, or other creative works about experiences, thoughts, or feelings related to anthropocentric climate change.

Intersectional storytelling: There is not a standard definition of intersectional storytelling, but I have put together my own definition here based on literature and the work of intersectional organizations. Intersectional stories embody the principles of reflexivity and social justice but are not necessarily about these topics (Clark & Drolet, 2014). These stories include a consideration of how intersections of identity such as class, race, and sexuality, impact a person's privilege and resulting life experience. The Center for Cultural Power (2021) defines intersectional storytelling as "engag[ing] BIPOC artists and movement groups to develop stories that disrupt disinformation and advance narrative change around social issues such as gender/health equity, climate justice, immigration & migration, civic engagement and racial justice" (para. 1). Intersectionality as a concept will be further defined in the upcoming literature review section.

Chapter 2: Literature Review

my stories are half formed thoughts and unsweet sentiments my lips won't speak aloud

words stuck in my head like maddening melodies

fault lines of memory cracked and trembling

the seductive whispers of life calling me to attention

I fall in and out of love with the world at least ten times per day

my stories are heartbreak personified

the hot rush pain of feeling too much and then nothing at all

joyous harmony battling with untampered greed

sick stomach churned with worry

knowing I won't be able to save it all

that its not the point to save it all

but I want to anyways

a painful pulling of my psyche towards intuition and the fear I harbour underneath

unravel, undo, recreate

the story is the curse of loving it all

promising to stare the blazing sun in the eye

just so that I can say

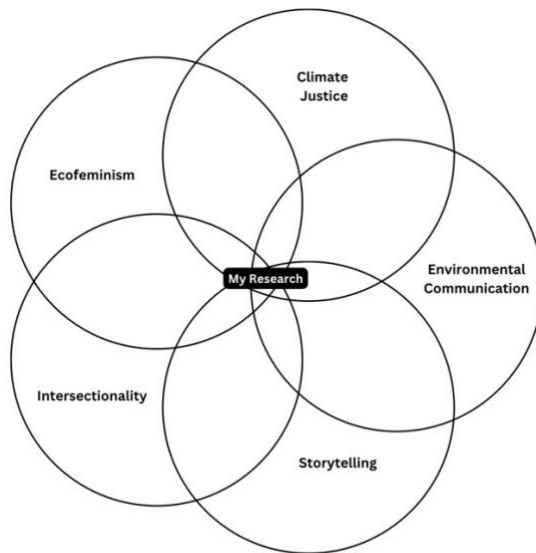
I saw it

and I tried to tell you about it too

Introduction

This literature review shares the scholarship that informed my research, including ecofeminist and intersectional theory and the academic fields of storytelling, environmental communication, and climate justice. Ecofeminist and intersectionality theories serve to lay the foundation that my study is grounded upon. Storytelling scholarship is reviewed to look at how storytelling's unique powers for engagement, learning, behaviour change, and justice. The following section on environmental communication focuses on literature related to climate change and storytelling to learn from recent works that have addressed similar themes. Climate-justice literature contextualizes the history of environmentalism in Canada and why I have chosen to specifically focus on intersectional storytelling.

It is important to note that all of these subsections contain a degree of overlap in their topics of focus. I have done my best to separate them out for the clarity of the reader, but each section contains content that could easily fit into another category. This resulted in no natural consecutive order to present the sections in. I have done my best to build each topic upon the previous. To aid in the conceptualization of these intersections, I have envisioned five overlapping circles that all revolve around my research topic in the center.



.Figure 2

Illustration of the overlap between the literature review sections.

Ecofeminist Theory

Ecofeminist theory provides the theoretical backing for my study. Ecofeminism is a school of thought that grew out of using feminist deconstructions of gendered forms of oppression to consider the linkages between domination of women and the Earth by a patriarchal society (Zein & Setiawan, 2017). Ecofeminist theory considers how oppressive systems, primarily patriarchal and ecological domination, as well as overlapping systems such as colonialism and racism, can be broken down for a more egalitarian, collaborative society (Zein & Setiawan, 2017). Ecofeminist theory is being used in this study because it embodies a holistic view that considers how “oppression, domination, exploitation, and colonization from the

Western patriarchal society has directly caused irreversible environmental damage” which aligns with the climate justice framing and goals of my study (Zein & Setiawan, 2017, p. 1).

Ecofeminism has been critiqued for having an essentialist perspective that prioritizes women’s connection to nature over other gender identities which further entrench gender binaries (Singer, 2020). To be clear, I take a non-essentialist approach to ecofeminism that embraces an intersectional viewpoint. An intersectional approach to ecofeminism recognizes and honours the origins of the movement from women of colour in global south countries leading environmental movements such as the Chipko movement in India and the Green Belt Movement in Kenya (Zein & Setiawan, 2017). This perspective is critical to my work as I employ an intersectional approach that seeks to understand climate change and related environmental issues outside of a narrow objectivist perspective. In relation to my research, ecofeminist theory offers the strengths of valuing voices from the margins and pluralistic approaches and recognizing that ‘the personal is political’ in that systems of oppression are present and to be considered in all subjects of study (Stephens et al., 2010).

Specifically related to work on climate change, ecofeminism centers the consideration of not only women’s unique vulnerability to climate-change impacts but also how systemic gender injustice must be addressed in consideration of climate-change solutions (Gaard, 2015). Greta Gaard (2014), ecofeminist writer, scholar, and activist, argued from her position as a feminist eco-critic that climate-change narratives in fiction, nonfiction writing, film, and music must use climate justice framing to present nuanced stories that create an effective road map for climate action. Her essay reviewed popular pieces of climate-fiction writing, documentary, children’s

environmental literature, and more to support the point that popular climate narratives focus on the message that climate change is a failure of technology and science, not climate injustice. This piece provides reasoning for the use of ecofeminism in my study's analysis of climate storytelling works and adds to the cacophony of scholars calling for systems of oppression to be included in environmental communications. Piersol and Timmerman (2017) add to the voices discussing the intersection of ecofeminism and storytelling in the field of environmental work. The authors pursued personal storytelling as a form of narrative inquiry to explore how recentering ecofeminist practice, storytelling, and dialogue impacts their work as academic educators. They concluded in reflection that an ecofeminist lens helps to deconstruct the pervasive anthropocentric lens present in environmental work and storytelling has the possibility to express subjectivity, value, voice, and a politicized ethic of care in relation to the non-human. Their paper is limited in its scope as it only draws upon their individual lived experiences, but this provides a depth of detail and an intimate merging of the researcher/research barrier. With this background, I see ecofeminist theory as the most relevant theoretical framework for my study of intersectional storytelling on climate change. The next section discusses how intersectionality theory works together with ecofeminism to frame my study's approach.

Intersectionality Theory

Intersectionality theory is the additional theoretical framework for my study. Kimberlé Crenshaw (2013), pioneering scholar and writer on civil rights and critical race theory, presented the theory of intersectionality as a method for exploring the various ways that identities intersect to shape the structural, political, and representational experiences of different groups. Drawing

on the example of the race and gender dimensions of violence against women of colour, Crenshaw showed how intersecting patterns of racism and sexism work to concurrently marginalize women of colour. When a solely feminist discourse or an antiracist discourse is considered, the overlapping violence of both racism and sexism are not seen together. Intersectionality rises above this view. Crenshaw's (2013) argument underpins the importance of addressing any and all topics with an intersectional lens to look at the whole picture and uncover possibly unseen dimensions of the issue. Intersectionality and systems thinking have this tenet in common. Crenshaw demonstrated that ignoring intersectionality can serve to reproduce the subordination of groups already on the margins of movements, such as Indigenous communities or women in the climate crisis. This way of seeing is beneficial for my study as it encourages the analysis of the multitude perspectives related to my research question.

Intersectional environmentalism scholarship also showcases reasoning and evidence for why intersectionality should be used in environmental research to capture the complex nature and impacts of climate change. The paper by Versey (2021), a psychologist and researcher, on the topic of climate-change planning for vulnerable communities is an example of the strength's intersectionality can offer to climate-change research. The author used compounded vulnerability models to show that increased heat due to climate change can harshly impact lower income, rural, and often Black and Latinx communities living in poorer quality housing due to their overlapping levels of vulnerability. The examples in the paper led the scholars to call for psychologists to expand research on the disparate psychological and social impacts of climate change to improve policy recommendations. This recent paper exemplifies the importance of

using intersectionality in research on climate change and highlights that climate-change-induced events such as extreme heat will impact the most vulnerable in a community more than others. Pearson et al. (2017) present similar conclusions to Versey but provide additional insight in a specific look at how social factors such as race, ethnicity, class, and gender are critical to consider in communication about climate change to enhance public outreach and effectively address climate change. Their findings showed that environmental advocacy messages crafted with consideration for the unique climate-change experiences of minority communities may be more effective for enhancing engagement on climate change within diverse societies. This confirmed that climate-change communication is received differently by people depending on their social identities. Therefore, in research on climate change communication, it is critical to uncover how these factors are or are not being considered. Hathaway (2020) looked at climate-change communication on the Green New Deal, contesting that the movement could benefit from greater intersectionality. The author used findings that social and economic inequities contribute to climate change to conclude that using an intersectional approach to climate change can serve to address the causes of climate change and not only its impacts. Hathaway (2020) employed an intersectional feminist approach which strengthened their argument by drawing from a well-known legacy of research that has been used to analyze the societal issue of gender inequality leading to critical issues such as gender-based violence. Finally, Kaijser and Kronsell (2014) explored intersectionality as a tool for critical thinking by considering its use as a method for research. The researchers concluded with key questions that researchers can use to uncover social structures, symbolic representation, and identity construction in intersectional

environmental research. Their findings can help to shape my interview questions, as well as support using an intersectional approach in environmental research.

These studies provide scholarly backing for basing my study upon intersectionality and specifically narrowing my focus to intersectional storytelling on climate change. My next section looks at storytelling to explore how the discipline has evolved and what research has been conducted on storytelling in the environmental field to date.

Storytelling

Storytelling is the method of communication that I am using to address an ecofeminist and intersectional consideration of climate-change communications in Canada. Storytelling can be pursued through oral stories, dance, music, books, and so much more but the upcoming literature demonstrates that there is a common outcome of engagement, learning, change-making, and the opportunity for justice. The literature reviewed here focuses on these powers of storytelling and begins to identify scholarship that addresses the intersection of storytelling, climate change, and climate justice. These intersections will continue to be explored in the upcoming sections on environmental communication and climate justice.

In their 2011 piece, Patrick Lewis, Professor of Education, poses the question, “If story is central to human existence and understanding why, in the research world, is there not more storytelling, particularly in the social sciences?” (p. 506). Lewis argued that storytelling is human’s central mode of meaning making, memory, and personal identity but this significance is not reflected in the academic world. This author is part of a strain of research that has been published on the need for storytelling to be incorporated across academic disciplines and

methodologies. As a primal pathway for moving through the human experience, stories have a business in all areas of life. Iseke (2013) called for a similar recognition of storytelling in light of stories' importance in Indigenous cultures and epistemologies. Through discussions with Métis Elders, Iseke (2013) demonstrates storytelling as an appropriate research method for Indigenous communities that reflects Indigenous knowledge. These authors begin my discussion on storytelling as voices that are recognizing how story can be woven through academia as it is woven through life.

Literature has pointed to strong linkages between storytelling and effective engagement that support its use in a variety of sectors such as education and public communication. This is supported by Dill-Shackleford et al.'s (2016) study that looked at the social psychology of human engagement with stories. Their paper provided an overview of current research at the time and specifically looked at how stories can be used to help shift an audience's viewpoints. Their key findings were that stories can produce greater empathy for the characters being described, including storytelling-style news reports, and that creating positive exposure towards groups through storytelling that are seen with a negative social stereotype can reduce prejudice. These findings highlight the power of storytelling as a communication strategy, especially when dealing with a polarized topic such as climate change. Gupta and Jha (2022) published a similar review on the psychological power of storytelling. Their review covered a variety of impacts with the most relevant to my study being that storytelling leads to better retention and recall of complex concepts and abstract ideas introduced through stories. The environmental literacy of Canadians has been questioned with a recent survey identifying that only 55% of Canadians feel

well informed about climate change (Learning for a Sustainable Future, 2022). This points to storytelling as a potentially powerful method to improve Canadians' understanding of climate change. Their review is beneficial to grasp an overview of storytelling's impact but does not draw on original research which hinders its strength. Hughes and Moscardo (2024) continued work looking at storytelling's ability to connect and effectively communicate. The authors studied how stories impact people's perception of a portrayed landscape. Their findings supported research that claims stories can enhance visitors' connection to particular landscapes and environments. Their results also highlighted that stories including Indigenous creation stories were particularly well-received by audiences. Hughes and Moscardo's research emphasized the power of storytelling to connect audiences to unfamiliar environments but is focused on travel motivation which limits its applicability to my inquiry into the emotional and cognitive power of storytelling. Overall, these studies taken together are evidence of the scholarship's linkage between storytelling and engagement.

Storytelling as an impactful and enjoyable mode of learning has been studied in education research. Hughes et al. (2022) shared the learnings they discovered in their pilot of creating a learning community from three university courses that used storytelling as a framework for helping students access learning objectives and think critically about others. The scholars measured their success through learning surveys done before and after course completion as well as written reflections from the students. The study concluded that stories facilitated connection to the students' learning community and had a positive impact on cross-cultural competence. Their work is an isolated example but provides encouraging findings on

storytelling's use in classrooms to facilitate learning and connection. Agosto (2013) studied elementary school children's impressions of a live oral storytelling performance to look for their resulting educational and social/emotional benefits. The study was framed on the understanding that live oral storytelling offers benefits such as the development of creativity, narrative thinking, and empathy in children. The results of the research showed that storytelling supported the students' development of critical thinking, creativity, active participation/engagement in learning, literacy, self-exploration and interpersonal skills. This study was also based on an isolated incident but continues to support past findings on the benefits of storytelling in educational settings. Blenkinsop and Judson (2010) discussed the role of story in education with a paper that argued for the use of storytelling as it is an inherent practice that students are already using to make sense of the world around them. Their discussion surveyed storytelling in environmental education as a way to capture emotions and imaginations in learning and provide an intuitive access point. This paper adds to the evidence of scholars connecting storytelling and environmental education but relies on past research rather than original to support their argument. Hofman-Bergholm (2022) proposes in a theoretical paper that storytelling along with traditional knowledge and systems thinking can be combined as a strong approach to sustainability education. This research connects storytelling to education and its potential to create effective learning.

Storytelling also has the power to influence people's perceptions and help to catalyze changed attitudes and actions. LC et al. (2022) designed comics and data visuals on human-level climate-change impacts to test if they had an impact on the viewer's perception of the climate

crisis. Their research surveyed 60 people and found that the readers connected with the human aspects of the stories and that their designs influenced readers towards pro-climate attitudes. This small-scale study is an empirical example of storytelling on climate as a catalyst for change. Mitra and Sameer (2022) also designed a study based on the understanding that storytelling is a powerful method to encourage behaviours that are regularly difficult to promote compliance with. Their paper argued that folktales as a method of storytelling may be used to effectively promote sustainable behaviours. Their paper did not draw on original research but builds the library of literature on storytelling's potential to change behaviour in relation to sustainability and environmentalism. Grace and Kaufman (2013) similarly looked to explore the power to effect change on attitudes towards sustainability. They presented story-based treatments and information-based treatments about sustainable agriculture to 142 college students and found the story-based treatments were more effective in promoting positive change in attitudes towards the topic. Their findings highlighted the storytelling methods of first-hand personal view, vivid description, and identification with the story narrator as the most effective in producing positive change. Their results are based on a small demographic sample as they only worked with college students; however, findings support the argument that storytelling can be a powerful tool for catalyzing change. These studies are emblematic of the ways storytelling can be used in environmental fields for creating positive attitude and behaviour change.

Finally, storytelling can also be a powerful opportunity for justice. Sarah Marie Wiebe (2019), professor and researcher on community development and environmental sustainability, presents mixed media storytelling as a beneficial method for community engaged research on

environmental justice, identifying storytelling as a key component of Indigenous research methods. Wiebe's (2019) [argumentative] essay articulates that a story is never just a story but can be a radical tool for social and environmental justice. A study by Cunsolo Willox et al. (2013) further demonstrates this point. Through digital storytelling methods, they found evidence for the opportunity and power of storytelling for self-determination and empowerment. This paper firstly informs my research by presenting an example of place-based climate-change storytelling with a community primarily impacted by climate change in Canada's north. Secondly, this research emphasizes the importance of storytelling for Indigenous communities as a method for preserving and promoting Indigenous oral wisdom, which contributes to cultural resurgence for Indigenous communities. The next author Jeff Corntassel, scholar of Indigenous Studies, in his 2009 study with Chaw-win-is and T'lakwadzi does not look at environmental themes, however the work is powerful in their collection of interviews with residential school survivors as a data set to demonstrate the importance of Indigenous storytelling to combat colonial narratives around reconciliation. The author identifies storytelling as a form of resistance to colonization and emphasizes that Indigenous stories of resilience are a powerful contributor to the resurgence of Indigenous communities (Corntassel et al., 2009). This adds to my research by confirming the opportunity that storytelling is a method that can benefit communities that are marginalized and most impacted by climate change. M'sit No'kmaq et al. (2021) go further than Corntassel et al. (2009) to addresses the theme of Indigenous methods by looking at how Indigenous principles can be incorporated into biodiversity conservation, where storytelling and story-listening are identified as key approaches. The relevance of this research to

my study is the authors' confirmation of storytelling as a way to honour Indigenous ways of knowing, teaching, and learning which provides additional reasoning for my strategy to address environmental communication through storytelling and emphasize its powerful potential. In the work of Spiegel et al. (2020) on exploring intergenerational environmental justice and Indigenous sovereignty, their findings conclude storytelling is critical to bring about transformation on climate and social inequity. Additionally, Cameron et al. (2021) designed a study in response to the lack of Indigenous perspectives on climate change in the Canadian Prairie provinces. Their research employed storytelling as a culturally appropriate method of research and acknowledged the increasing recognition to heed Indigenous voices on climate change (Cameron et al., 2021). These studies together demonstrate the importance of storytelling not only within environmental communications, but also as a powerful method of cultural importance to Indigenous communities in Canada. Storytelling is a beautiful method of communication that can be employed by any sector or person. The next section narrows in on environmental communication and looks to scholarship written on its past and where it can go in the future.

Environmental Communication

This review section highlights the most relevant research that has been done on best practices in environmental communication with a focus on literature available on Canada. Best practices in environmental communication are often presented in literature as science communication strategies. Richards and Carruthers Den Hoed (2018) identified recommended strategies for science communication on climate change from interviews with climate scientists

and policymakers in Canada. Their research results recommended climate messaging that is direct and relevant, speaks to the audience's perspective and psychology and balances positive and negative frames. The authors acknowledged that their research is limited by their relatively small pool of 20 participants, but their empirical findings help shape this study's image of recommended environmental-communication practices. Armstrong et al. (2018) put together a guide for educators communicating about climate change that shares some good practices when discussing environmental issues. The authors recommend emphasizing hope and self-efficacy, using metaphors and analogies, and creating trust between the communicator and the audience. Dylan Harris (2020), researcher, educator, writer, and organizer, drew out lessons from interviews with storytellers in Appalachia and Alaska for recommendations to climate scientists on communication with the recognition of the benefits of storytelling for environmental communication. His research results are summarized as the importance of context and connection, the utility of ambiguity, and the importance of listening and speaking to intended audiences. This research is highly applicable to my own as it similarly uses interviews with storytellers but differs in scope and locality. The discussion adds to the voices discussing how storytelling can play into the work of science communication and how climate change can be better understood by the public. Hodson et al. (2020) studied student social media engagement with climate change and sustainability in a survey-based study that heard from 203 university students. The study looked to uncover how students were engaging with these topics online and test if the literature on best climate communication strategies aligned with their sample. The research proved that their results were consistent with the literature on environmental-

communication best practices including the strategies of personalizing the message, using a high level of emotion, and importantly prioritizing a solutions framework. The paper was written by Royal Roads University (RRU) researchers who studied RRU students, making it a close-to-home reference for this study. Jarreau et al. (2015) conducted an environmental-communication study focused on Louisiana, USA and came away with the similar recommendations to connect with the audience, tell local stories, and target the messaging. Additionally, Hawley and Mocatta (2022) articulate this optimistic, solutions-focused imagination as “fact-based dreaming.” These studies summarize some of the best practices in environmental communication being discussed and researched today.

The following studies consider the use of storytelling in environmental communication specifically. Susanne Moser (2016), independent researcher on equitable adaptation and transformation in the face of climate change, conducted a review on climate-change communication research. Based on a selective literature review with articles from 2010 to 2016, the author called for the exploration in research of “what roles varied cultural expressions such as music, poetry, and theater play in communication and engagement around climate change” (p. 361). This conclusion from a wide review of climate-change communication research began a trend of authors looking to the opportunity of artistic expressions in their research. The authors Bloomfield and Manktelow (2021), De Meyer et al. (2020), and Gislason et al. (2021) all call for the use of storytelling in environmental communication due to its benefits across the field. Bloomfield and Manktelow (2021) review storytelling in reports by the Intergovernmental Panel on Climate Change (IPCC) and suggest storytelling practices can increase comprehension of

scientific concepts and narrative rationality can increase public understanding of and engagement with climate science. A study by De Meyer et al. (2020) goes further in specificity than Bloomfield and Manktelow (2021) to say that place-based localized action storytelling can help audiences develop agency and engage in climate action. Gislason et al. (2021) used interviews with community members of rural northern towns in Ontario and B.C., to show that nuanced, place-based communication is effective and benefits from the use of stories, visuals, and practical examples, bringing this research thread on climate change and storytelling into a Canadian context. In a commentary paper, Sundin et al. (2018) argue for the increased use of storytelling in science communication on environmental topics. The authors argue for their points based on science showing that the human brain can retain scientific knowledge better when introduced as a narrative and can allow audiences to make meaningful connections to the information presented that results in better and sustained understanding. Sundin et al. (2018) acknowledge that their paper is not primary research which can be a limitation in their argument. Moezzi et al.'s (2017) work builds upon these points by presenting a review article on using storytelling in energy and climate-change research. The authors call for the field of environmental research to use more storytelling due to the benefits of providing a new set of data and voices and helping to release some rigid notions of truth in the scientific disciplines. Moser (2022) builds from this scholarship to propose a new approach that they call "humanistic environmental communication." She defines this type of communication as oriented toward human welfare and connection. Some of the main needs of humanistic environmental communication are truth telling without fear mongering, visioning alternative futures, and

fostering authentic hope. These authors together are part of a building consensus on the benefits of using story or storytelling practices in environmental communication but there is a clear lack of primary research that works with storytellers themselves or studies how these recommendations are being taken up by communicators which is a gap I address in my research. These intersections of environmental communication and storytelling show the overlap between the two topics and point to a growing body of research on how they play together. The last section of my literature review brings climate justice scholarship into the conversation.

Climate Justice

Climate justice has become increasingly considered in storytelling and environmental communication as a strategy for effective communication as well as a necessary response to the growing impacts of climate change in Canada and across the world. Climate justice can be defined as “paying attention to how climate change impacts people differently, unevenly, and disproportionately, as well as redressing the resultant injustices in fair and equitable ways” with the goals of reducing marginalization, exploitation, and oppression, and enhancing equity justice (Sultana, 2022, p. 118). Climate justice has evolved out of two key legacies. The first is the concept of respect and relationship with the environment which has been integral in Indigenous nations. This justice is between humans as well as the earth in its conceptualization (McGregor, 2018). The second is communities of colour in the United States that came together in 1991 to hold the First National People of Color Environmental Leadership Summit in response to high concentrations of toxic waste and pollution harming communities of colour more than white communities (Schlosberg & Collins, 2014). Later in the early 2000s, climate justice became

popularized from the recognition that environmental justice would need to focus more on the causes of climate change, the inequitable impacts of the fossil fuel industry, and prioritizing vulnerable communities in a just transition to a lower carbon world (Schlosberg & Collins, 2014). Climate justice can synthesize multiple perspectives on the transformations necessary to fight climate change and reduce social inequities such as respect for Aboriginal and treaty rights in Canada (McGregor, 2018). McGregor (2018), an Anishinaabe scholar and Canada Research Chair in Indigenous Environmental Justice, has identified a lack of scholarship and policy innovations on the issue of climate justice in Canada. In response to this history and gaps, I will use climate justice as a core frame for my study with the recognition that scholarship with this focus is lacking in Canada. Working from this basis of understanding on climate justice in Canada, I will focus specifically on climate justice in environmental communication.

Environmental communication in Canada has not always recognized a need for climate-justice framing. Callison and Tindal (2017) conducted a comprehensive review of climate-change coverage in Canadian news media with an analysis of prominent frames and missing voices. The article discovered that there has been a lack of media coverage on the impacts of climate change on people living in Canada's Arctic and Indigenous peoples in Canada which are some of the most vulnerable to climate-change impacts. The authors recommend the use of a climate justice frame in climate communication that recognizes the disproportionate impacts of climate change across the country. Roosvall and Tegelberg (2015) published a paper arguing that media research on climate change must be addressed in terms of climate justice but did not specifically look at the Canadian context. Lowan-Trudeau (2020) also looked at news media

coverage but focused their attention on portrayals of Indigenous environmental issues in Canada and the United States. The study undertook a comparative exploration of news media using sources from 2017 to 2020 on Indigenous environmental activism initiatives Keystone XL, Coastal Gaslink, a community-based renewable energy development, and the Buffalo Treaty. The findings confirm a lack of civic and media literacy on Indigenous rights in Canada and point towards the need for future research on the representation of Indigenous environmental issues by news media. Both Callison and Tindall (2017) and Lowan-Trudeau (2021) capture not only the lack of climate justice framing in Canadian environmental communication, but also the misrepresentation and missing voices of interrelated Indigenous and environmental issues. This is in line with what Dhillon (2017) articulates in their piece on environmental justice lessons from the Indigenous-led resistance to the Dakota Access Pipeline.

The colonial violence that fostered the ruination of the planet has, for the most part, been blurred out of focus in public dialogue. An accurate examination of the social and political causes of climate change requires a close look at the history of genocide, land dispossession, and concerted destruction of Indigenous societies and cultural practices that accompanies the irreversible damage wrought by environmental destruction (p. 235).

These findings build upon my previous note on the missing focus on climate justice in Canadian scholarship and communication, which led me to prioritize its teachings and perspectives in my study. These authors help argue for an increased use and integration of climate justice into environmental research.

Chapter 3: Methods and Methodology

reduce, reuse, recycle

take shorter showers

save the polar bears!

The hollow messages I clung to as my environmental goalposts

if you use one less plastic bag, it's all going to be alright

if you ride your bike to school, it's all going to be okay

if you don't question the oil and gas economy, the green transition will happen eventually

words written by ghosts

force fed to the public by Harper and headlines

meanwhile

taps flow brown in communities ignored

chemical run off pulses disease into mother's unborn babies

old growth ancestry felled to fill settler's saw dusted pockets

skeptics say climate change is just a scary story

while myths of unlimited growth dance in their heads

these tales of the past are as thin as the paper they are written on

the stars write directions away from this cruel place

if our eyes are still keen enough to read them

Introduction

My study employed ecofeminist and intersectional theory and qualitative methodology with semi-structured interviews to gain insights from eleven climate-change storytellers in Canada. My research question is, *how can intersectional storytelling on climate change shape environmental communication in Canada to help catalyze a socially and ecologically just future?*

My methodological objectives required to answer my research question included:

- Identify storytellers and academics in Canada producing works of and/or work on intersectional storytelling on climate change.
- Interview the research participants to discover their perspectives on how intersectional storytelling on climate change can shape environmental communication in Canada; and
- Conduct a thematic analysis of the interview data.

I interviewed a range of storytellers that represent a variety of artistic mediums, localities, and issues of focus within the climate crisis. This section reviews my methodological approaches, participants, data analysis strategy, limitations and delimitations, rigour, biases, and ethical considerations.

Methodology: Ecofeminist & Intersectional Theory

I carefully chose ecofeminist and intersectionality theories to guide my study because of each discipline's alignment with my research objectives. Ecofeminist theory research does not look to identify concrete answers but works to critically engage with multiple experiences of an issue (Kings, 2017). This description perfectly aligned with what I aimed for in my research. I

designed an initial exploratory study to delve into the unique perspectives of climate storytellers within their specific field of work. I used a post-positivist epistemology that embraces complexity, plurality, and multiple realities within knowing. My research embodies the social constructivist way of thinking that believes the world is constructed through human beings' interactions and interpretations of their experiences (O'Leary, 2021). This methodological approach was justified by my study scope. I sought to broadly explore intersectional storytelling on climate change in Canada by exploring the perspectives of storytellers focused on climate change through interviews.

My research offers initial insights into a gap in the literature on how storytellers are engaging in intersectional storytelling on climate change and how this storytelling can shape environmental communication in Canada. Given that there has been little research on this topic in Canada, I opted to apply a broader approach rather than explore specific situations in depth with methods such as case studies or phenomenology. As there has been little research on the topic of climate-change storytelling in Canada, I felt that it was better to take a broad view at this time rather than a more focused approach. My research sought to provide breadth because of the lack of focus that exists on this topic within published scholarship in Canada. Therefore, as my study title suggests, I am hoping to add fuel to this conversation so that it can continue to evolve and grow over time. However, it is important to note that storytelling is not a monolith, and different kinds and approaches have different contexts and implications. As I explained, I felt that it was most strategic to cast a wide net of storytelling for this study, but I recognize that each type of storytelling will result in different outcomes. This is out of my current scope but would

be beneficial to explore in future studies. This broad nature of my research made a methodology informed by ecofeminism and intersectionality appropriate and avoids the pitfall of having to awkwardly fit my study within a methodology that is not fully aligned.

My methodology was justified by the success of similar past studies. Dobscha and Ozanne (2001) used a feminist methodology with interviews as one method to understand the relationship between women and the natural environment. Another study that exemplifies the approach I used is Ferguson's (2022) exploration of climate-change education through interviews and document analysis with students in the Caribbean. Ferguson used thematic analysis on the data to identify codes, categories, and concepts which are processes I similarly applied. Finally, in the same vein of ecofeminist research, Windsong (2018) used an intersectional research design that employed in-depth interviews to examine how race and gender influenced neighbourhood experiences in Albuquerque, New Mexico. These three studies justified the reasoning for my methodological approach. In the upcoming sub-sections, I will discuss my participants, data analysis strategy, study design, potential limitations, rigour, and ethical considerations.

Methodology: Arts-Based Research

My study also employs the use of arts-based research methods to thread storytelling not only through the content of my study but the delivery as well. Broadly, arts-based research is research that uses an artistic method or medium at some stage in the study, such as analyzing data or presenting findings (Greenwood, 2019). My method of art-based research for this study is research poetry. Research poetry is poetry that is based on the research data or subjects (Patrick,

2016). In this study, I utilized the research data—interview transcriptions from the study participants—as inspiration for my poetry. I also used my personal process and experience of conducting the research as the inspiration for each poem that precedes each chapter of the thesis. To be clear, these poems are not about the research subjects themselves nor directly use their words verbatim.

The premise of my study is based on the research conducted to date that acknowledges storytelling to be one of the best ways to communicate about climate change. I felt that to not include an element of storytelling or art in my study would be directly ignoring the teachings I communicated in my literature review. I believed that arts-based research was more than well suited to include in this study as it draws in my study topic to the presentation of the research itself. I chose poetry because it is the artistic medium I myself have the most experience and comfort with. The majority of my study participants also employ writing as part of their storytelling practice which made the choice of poetry feel aligned to express their thoughts I gathered in my data collection. As well, I believe in poetry's power to capture emotion and express complex thoughts which makes it an appropriate medium to choose for sharing the essence of my research.

I decided to write a series of poems to open up each chapter of my thesis that stand alone as well as overlap in their voice and theme. I was inspired by the imagery of five overlapping circles that I used to explain my literature review sections (figure 2). There is a repetition of five throughout my thesis that felt important to consider in my poetry writing. I have five chapters, five key themes of my literature review, and five themes resulting from my analysis. That is why

I decided to continue with the trend to write five poems that overlap but have their own thematic ties to the chapter. I decided to draw out each poem based on one of my interview questions that are listed in appendix A. The corresponding poems and questions are below.

- Introduction → Tell me about your storytelling practice.
- Literature Review → What stories have you been called to tell in the past? What stories are you called to tell now?
- Methods and Methodology → What is your perception of how effective storytelling on climate change has been in Canada to date and why?
- Research Findings and Analysis → How do you want to see environmental communication evolve in Canada?
- Discussion and Conclusions → How do you think intersectional storytelling on climate change can shape environmental communication in Canada?

I struggled with writing the poems for this thesis. I was challenged to switch from my academic brain to my creative brain while still merging the topic and sentiment of both styles of writing. I often write my poetry in spontaneous bursts when inspiration strikes, or I am out in nature. I went out into nature to write these poems, but I found it difficult to have the words flow naturally within the constraints I had set for myself. I had never written a series of five poems. My poetry up to this point consists of individual pieces. I hope that this writing is a refreshing and novel way for the reader to engage with the content and inspires the consideration of different methods of translating research. As a research method, I feel that the arts-based piece was much more challenging than the more established and structured use of theory and thematic

analysis. I'm proud that I persevered to include these poems when at times it felt that they would never come. I do feel that the inclusion of arts-based research methods may be outside of the comfort zone for many academics, as it was for me even with my poetry practice. However, I hope the result made the writing more accessible as it may speak to a different side of each reader/learner and may inspire more instances of storytelling in future climate research.

Data Gathering Method

Data for this study was collected through semi-structured interviews with eleven voluntary selected participants. I aimed to obtain at least nine participants because the studies I referenced as similar to my current research had both studied nine participants (Dobscha & Ozanne, 2001; Ferguson, 2022). I was also guided by Cooper and Endacott's (2007) recommendation of five to eight participants as a sufficient sample for saturation in generic qualitative research. While my methodology is more focused than generic qualitative research, I drew upon the learnings of this approach as I do not have one explicit methodology, which is similar to generic qualitative research. Semi-structured interviews are often used in generic qualitative studies and follow a flexible structure where the interview begins with a questioning plan, and then flows with the conversation to explore relevant topics and themes (Cooper & Endacott, 2007; O'Leary, 2021). I believe the semi-structured approach allowed me the best opportunity to gain authentic insights and perspectives in my study.

The semi-structured approach especially worked well because I was able to evolve my questions as I recognized that some of them may have not been clear to the interviewees. For example, one of my questions was "What is your perception of how effective storytelling on

climate change has been in Canada to date and why?” I realized after my first two to three interviews that the phrase ‘effective’ was ambiguous to my interviewees and they did not know how to answer at times due to the lack of definition around what is effective storytelling. While my interviewees knew that my study is qualitative, some of them would begin to respond by mentioning that they do not have data to reference or past research, which made me realize that this question felt out of scope for some respondents. In following interviews, I prefaced the question by telling the interviewee that I was only looking for their opinion from their lived experience, and that helped to let the answers flow more naturally from the respondents. I also felt that after I had conducted my first few interviews that the last question of my set was redundant. I was asking “How do you think storytelling on climate change in Canada can be improved?” but the answers I was getting were largely a repetition of thoughts that the interviewees had already shared from the other questions I asked. After that, I switched my last question to “How do you think intersectional storytelling on climate change can shape environmental communication in Canada?” to be more specific and elicit more unique contributions. This worked well for the most part but did still draw out similar ideas. In the future, I would work to ensure I have fewer questions or that my interview questions are more distinct to ensure that each question draws out distinct thoughts from the interview subject.

I aimed to conduct my interviews one-on-one with the participant in person. Due to the location and personal preference of each participant, I conducted four interviews in person, six virtually, and one participant elected to submit their responses in a written format due to time constraints. As suggested by Whiting (2008), I took brief reflective notes after each interview to

pull out the themes or points that stood out to me the most from the interview. My interviews ranged from 60 to 90 minutes with each participant. My study guide is included in appendix A to show the interview questions and protocol.

Participant Recruitment and Selection

My study used purposeful sampling to identify eleven storytellers and academics in Canada that are producing works of or works on intersectional storytelling on climate change. Purposeful sampling is a method to identify study participants that involves identifying and selecting individuals that are particularly knowledgeable about the topic of study (Palinkas et al., 2015). This sample was important to target because there is a gap in the literature on hearing from this demographic of people in Canada in environmental-communication scholarship. As a result of my position as an environmental communicator, I was able to identify individuals that would fit the criteria of being highly knowledgeable about intersectional storytelling. This criterion was defined by people based in Canada working on storytelling with a central theme of climate change that highlights the intersectionality of the issue. By designing this study to use intersectional theory as well as interview storytellers versed in intersectionality, there is a certain level of repetition that I recognized I may find in my data and analysis. My narrow focus in participation selection did result in many agreements between the participants to my interview questions. While this is limiting, I still felt that it was important to fill a gap in the literature because these intersectional storyteller voices are not captured in climate communication scholarship. I was inspired to create this study based on work I wished I could have had to reference at the beginning of my master's degree. While the results are not particularly surprising

or in opposition to the current literature, this work adds to the documentation that I feel is necessary on intersectional approaches to climate storytelling in Canada for this work to be propelled forward.

In my outreach to study participants, I sent an email invitation with an information letter that included the ethical considerations of the study (appendix B). In total, I reached out to 23 storytellers across Canada. I identified these storytellers through works of climate-change storytelling that I was familiar with as well as online research looking for storytellers working on climate change across Canada. Eleven respondents agreed to participate in the study, with ten people consenting to verbal interviews and one participant opting to answer interview questions in a written format. I shared a token of gratitude with each participant through a \$50 honorarium sent electronically after the interview was conducted. The study participants span a range of storytelling disciplines and localities across Canada that are outlined in table one. I aimed to invite a diversity of storytellers to participate in my study. The majority of my respondents are based in British Columbia as that is where I live, and I had the most ease to interview folks located nearby in person. Many of the storytellers work across disciplines and cannot be defined by one medium which is why I have provided a summary of their storytelling discipline and background in table one.

In my consent form for the thesis participation, I asked each participant if they were comfortable to be identified by name or if they would like to be anonymous. All participants explicitly agreed to be identified. I am aware that it is less common to name study participants and share their backgrounds in thesis research. Even with permission to identify the participants,

I considered whether or not I should keep them anonymous. I wanted to ensure their words can stand alone in the data with unbiased consideration from readers. However, after consideration, I decided that it is important to identify the stakeholders pursuing intersectional storytelling in Canada as this is a growing discipline. I want to share their work with my readers so that they may be able to engage with their storytelling and learn about the intersectional climate storytelling happening in Canada beyond this thesis. I hope that this can begin or continue a long-term engagement with intersectional climate storytelling as the work grows in Canada.

Table 1

List of Interview Participants

Name	Storytelling Discipline and Background	Location
Kamyar Razavi	Razavi is an environment and climate-change reporter at a major news media organization in Canada. He is also a PhD graduate in environmental communication and climate journalism from Simon Fraser University.	Unceded Traditional Coast Salish Lands including the Tsleil-Waututh (səlilwətaʔ), Kwikwetlem (kʷikwəʔləm), Squamish (Skw̓xwú7mesh Úxwumixw) and Musqueam (xʷməθkʷəy̓əm) Nations (Burnaby, British Columbia)
Asalah Youssef	Youssef describes herself as a storyteller, light seeker, land steward, adventurer, amateur farmer, well-being advocate, writer, and photographer working through conscious collaborations, photo stories, content creation and community engagements to inspire sustainable and regenerative practices that care for Earth, Community and Self.	Kwikwetlem and Katzie First Nation (Port Coquitlam, British Columbia)

Neil Ever Osborne	Neil Ever Osborne is a Canadian photographer, filmmaker, and public scholar. Osborne is an Explorer with the National Geographic Society, a Contributing Photographer with Smithsonian Magazine, and an Assistant Professor at the Trent University School of the Environment.	Treaty and traditional territory of the Mississauga (Michi Saagiig) Anishnaabeg, which is made up of Curve Lake First Nation, Alderville First Nation, Hiawatha First Nation, and the Mississaugas of Scugog Island First Nation (Peterborough, Ontario)
Sandra Lamouche	Lamouche is a Nehiyaw Iskwew (Cree Woman) from the Bigstone Cree Nation in Northern Alberta. She is a multidisciplinary creator and storyteller, a Champion Hoop Dancer, award winning Indigenous Educational Leader, two-time TEDx Speaker, artist, and author.	Bigstone Cree Nation in Northern Alberta
Rita Wong	Wong is the author of three books of poetry, <i>sybil unrest</i> , <i>written with Larissa Lai</i> ; <i>forage</i> , and <i>monkeypuzzle</i> . Wong has won the Asian Canadian Writers Workshop Emerging Writers Award and the Dorothy Livesay Poetry Prize. Her work investigates social issues and ecology. She is an associate professor in critical and cultural studies at Emily Carr University of Art and Design.	Unceded territories of the Coast Salish peoples, including the Musqueam, Squamish and Tsleil-Waututh nations (Vancouver, British Columbia)
Michael Christie	Christie is the author of the novel <i>If I Fall, If I Die</i> , which was longlisted for the Scotiabank Giller Prize, the Kirkus Prize, was selected as a New York Times Editors' Choice Pick, and was on numerous best-of 2015 lists. His linked collection of stories, <i>The Beggar's Garden</i> , was longlisted for the Scotiabank Giller Prize, shortlisted for the Writers' Trust Prize for Fiction, and won the Vancouver Book Award.	Unceded territory of the Lkwungen speaking people, and the Songhees, Esquimalt, and WSÁNEC First Nations (Victoria, British Columbia)

	<p>His essays and book reviews have appeared in the <i>New York Times</i>, the <i>Washington Post</i>, and the <i>Globe & Mail</i>. <i>Greenwood</i>, his most recent novel, is a national bestseller and was a 2023 Canada Reads Finalist.</p>	
Emel Tabaku	<p>Tabaku is a multidisciplinary artist, academic, and the Founder and Executive Director of RCAD Initiative: Redefining Communities through Art + Design, a community arts non-profit organization that empowers underrepresented youth through storytelling, mentorship, and entrepreneurial training. She completed her Artist-in-Residence with Youth Climate Lab, as part of the FUTURES/forward mentorship program with ICASC/Judith Marcuse Projects where she co-created and published the #DigitalArt4Climate Environmental Advocacy Toolkit.</p>	<p>Indigenous territory, encompassing ceded areas under Treaty 13 and unceded lands of Tkaronto, Turtle Island (Toronto, Ontario)</p>
Molly Foster	<p>Foster is an author, illustrator, educator, and environmental non-profit founder. She is the co-author of <i>Every Little Bit</i>, an educational children's book that teaches kids the importance of keeping litter away from shorelines and out of our waters. Foster has been named a Canadian Top 25 Environmentalist under 25 by <i>The Starfish</i>.</p>	<p>Mi'kma'ki, the Traditional territory of the Mi'kmaq people (Halifax, Nova Scotia)</p>
Kasha Sequoia Slavner	<p>Kasha is an award-winning Gen-Z filmmaker, photographer, entrepreneur, young global leader, and climate and peace advocate from Toronto, Canada.</p>	<p>Traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples covered by Treaty 13</p>

		with the Mississaugas of the Credit (Toronto, Ontario)
Celine Isimbi	Celine is an engaged community member dedicated to using her platforms, knowledge and creative, critical writing to support justice and environmental liberation in every space she moves through. As a student of the earth and a daughter of the African soil, she is a curious and engaged environmental storyteller. Her essay <i>After Apartheid, Green Spaces are still white spaces</i> , was published in the book <i>Nature Is A Human Right</i> .	Traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples covered by Treaty 13 with the Mississaugas of the Credit (Toronto, Ontario)
‘Cúagilákv (Jess Háusti)	Háusti is a Hałzaqv poet and land-based educator from Bella Bella, British Columbia	Unceded traditional territory of the Hałzaqv People of the Heiltsuk Territory (Bella Bella, British Columbia)

Data Analysis Strategy

My interview data was analyzed using thematic analysis. Thematic analysis is an approach to qualitative data analysis that follows a process of identifying, analyzing, and then reporting on patterns or themes that arise from a set of data (Braun & Clarke, 2006). I followed the process suggested by Maguire and Delahunt (2017) by becoming familiar with the data through listening to the audio recordings and reading the transcripts multiple times. Afterwards, I generated initial codes, searched for themes, reviewed the themes, defined the themes, and finally wrote up the analysis. All of my verbal interviews were audio recorded with the consent of the participants. I used the Zoom license provided by Royal Roads which ensured the data was

stored in Canada to record my interviews which provided an automatic transcription of the conversation. The automatic transcripts were roughly accurate, but each one required at least 30 minutes or more of editing to improve the readability and clarity of the transcripts. The quality of the audio recording highly impacted the quality of the transcription. In the future, I would ensure that the recording microphone is as close to the interviewee as possible and that they can speak loudly. One of my interviews was conducted in a library and the hushed tones severely reduced the quality of the resulting transcription. The first step of my process was to relisten to the audio recordings of all the interviews as I edited the transcriptions for accuracy. I then reread the interviews and cross checked my reflective notes to pull out a list of codes from the data. I conducted this coding process three times to ensure I was achieving intracoder reliability which is referenced in my strategies to achieve rigour. I then reviewed the data a second time to create a list of common themes. I created a list of eight themes that I then revised down to five main themes that comprise the answer to my research question and the recommendations I provide in the discussion. My analysis process followed an inductive approach, wherein the themes were derived from the data itself.

I believe that this data analysis process worked well for this study. I found that I had a sense of what the themes were going to be as I conducted the research, but there was value in my review and revisions as it pushed me to dive deeper and deeper into the data. I struggled at first to cut down my list of themes from eight to five, but I found that consolidating the themes forced me to more clearly articulate the responses of my interviewees. The themes I pulled out of the data are all generally broad, which aligns with my study goals of conducting a broad inquiry into

the subject. As I coded my data, I also created a mind map that captured key quotes and ideas that came up for me in the data. I also added photos from the archives of my research participants or public photos I found on Pinterest that inspired me as I was writing. I found this visual aid helpful to go back to when I was losing the thread of the research as I got lost in the weeds of my data at times. Upon reflection, I think that thematic analysis was the best choice for my data analysis strategy and would be beneficial to use in future studies of a similar scope.

Limitations and Delimitations of the Study

The limitations of my study are the use of a theory-informed methodology and the participant sample size and scope. The first limitation is that by using an ecofeminism and intersectionality theory informed methodology, I have chosen a tailor-made approach for my research, but I am lacking the guiding barriers of other methodologies, and I am subject to the criticisms of these approaches such as the essentialist critique of eco-feminism. This critique argues against the potential for ecofeminism to imply that women have an inherent connection with nature which posits them over men in terms of ecological alignment. I take a non-essential approach that disregards gender binaries and outline that clearly in my literature review section to stave off that critique. The second limitation is that the scope of my research only allows for a small sample size, so this research cannot claim to fully capture the approaches to intersectional storytelling on climate change in Canada and I did inevitably leave out certain identities such as disabled or non-English speaking storytellers that I can only point to the importance of incorporating into future research.

By the nature of my research design, I have a variety of delimitations. In relation to my chosen interview subjects, one of my delimitations is subjects outside of Canada were not included that may be more experienced or knowledgeable in my subject matter. Due to the gap of research in Canada, I am choosing to only focus on subjects and scholarship focused on Canada. Another delimitation is that I won't include subjects that are not conducting intersectional storytelling work. I acknowledge that this significantly impacts my study's scope and may exclude some participants that do have valuable insights to share on storytelling. This may also predispose my study participants to similar answers that agree with the intersectional framing of this study. This delimitation was included intentionally because there is a lack of literature on intersectional climate storytelling in Canada. While the data points may be similar or predictable to a certain extent, this does not negate the fact that these voices are missing in the literature. Another delimitation is in the focus of my study. I have chosen not to explore the power that storytelling can have to promote misinformation on climate change. As discussed in my literature review, storytelling provides a multitude of benefits for impactful communication. However, some communicators may have a vested interest in spreading misinformation on climate change or purposefully misleading their audiences away from climate action (Rodrigo-Alsina, 2019) This is a critical conversation to be had on climate-change storytelling, yet I do not believe it falls within the scope of this study. I have done my best to establish rigour through the following strategies to offset these limitations and delimitations.

Validity and Rigour of the Study

In the field of qualitative research, trustworthiness, credibility, transferability, and reliability are important to plan for to demonstrate the rigour and legitimacy of any qualitative research process (O’Leary, 2021). Cooper and Endacott (2007) present the strategies of an audit trail, saturation, respondent feedback, and fair dealing as ways to ensure rigour in qualitative research. To ensure trustworthiness, I identified my positionality and potential biases, as well as clearly describing how I am using my methodology and methods. To achieve credibility, I used the strategy of member checking to ensure the findings ring true with the participants. My first step in member checking was to share the interview transcript with each participant and allow them three weeks to optionally provide any edits or adjustments to their statements. I also sent each participant a summary of my findings from their interview with the same time period for them to optionally respond to ensure my interpretation is accurate to their intended meaning. Four of the interviewees did not respond to my invitation to review their transcript while the others replied either saying they approve the transcript or prefer not to review it. Only six of my interview subjects responded to the next email with the findings from their interview, and only one suggested a possible note of clarification. These responses helped me to understand if my results were reflective of how my interviewees intended to be understood.

Within the scope of this study, I did feel I reached saturation in my data collection. I felt that by my ninth and 10th interview, I was hearing commonly recurring themes and I felt that there was general consensus in the main themes that had been presented by other participants. To address the transferability of my research to others within similar academic fields, in this thesis I

provided a detailed description of the research context and the participating individuals so that applicability can be deduced by my readers (O’Leary, 2021). To create the conditions for reliability of my research, I conducted intracoder reliability, as well as included the questions used in my participant interviews in appendix A. Intracoder reliability is the practice of ensuring consistency in one coder’s analysis of the data over an extended period of time (O’Connor & Joffe, 2020). I did this by repeating the practice of coding my data three times to ensure I reach consistent results. I recoded my data over a period of three weeks as I read over the interview transcripts multiple times in identifying my themes and drawing out the quotes to support those themes. These strategies together are how I established the rigour of my study. The next section provides an initial reflection of potential biases, which builds researcher trustworthiness.

Potential Biases

The potential biases of my research lie in my professional and personal background. As an environmental communicator, I have done climate-change storytelling work in my professional practice, which has guided my interest in this topic. I am also personally aligned with intersectional environmentalism; however, my perspective is limited as a white woman who is not currently experiencing life or livelihood threatening impacts of climate change. I regularly checked in on my biases throughout the research process, in alignment with recommendations by Merriam and Tisdell (2016). I did this by drafting my research questions and then analyzing the questions for any leading content. My research questions were approved by the ethics board which provided an additional level of review. I also used member checking as a strategy to limit bias as I ensured my interpretations resonated with the interviewees which helped to reduce my

potential misreading of their data. I also limited the influence of bias in my interviewing by being aware of and avoiding the use of introduced content, presupposition, and evaluation in my questions (Cairns-Lee et al., 2022). An awareness of potential ethical issues helped to build the trustworthiness of my study.

Ethical Considerations

My study called for the ethical considerations of informed consent, confidentiality, avoiding harm, and integrity and professionalism (Gibson & Brown, 2009). I gathered informed consent from each study participant, ensuring they had full understanding of the study design and the use for their data before they provide consent. The informed consent form that each of my participants signed or agreed to over email communications can be referenced in appendix B. My participants had the choice of using pseudonyms if they preferred, however their work to qualify them as an intersectional storyteller would need to have been described which may not guarantee anonymity. This was clearly articulated to the potential participants to ensure they are comfortable with the potential implications of publishing their responses. All study participants elected to be identified by their names. To avoid harm, the sensitivity of critiques to communicators and storytellers on climate change topics was considered in the design of the research questions. My proposed research underwent a thorough ethical review by the ethics board at Royal Roads University and was approved.

Chapter 4: Research Findings and Analysis

I dream of my own garden one day
big cedar planter boxes with kale and peas overflowing
heirloom tomato abundance
plum juice spilling over the fingers of the loved ones I get to feed
sharing more than I keep
with the soil, with the birds, with the compost earth(worms)
a small chair, or just a stool, to sit in with my coffee cup still steaming
watching the first beams of sunlight arrive each morning
I see it all so clearly
my vision for my own garden
and the community we'd all share
each human connected to themselves, their spirit, the land, and each other
the stories we'll tell of how we made it there
gardens planted with strife and sacrifice
patient years of crops in fallow
waiting to see the seeds emerge
my garden is still a picture I paint in my head as I fall asleep
but I do not wait with bated breath for it to arrive
I will be out there sowing as long as it takes

Introduction

My research objective is to deepen the conversation on climate-change storytelling in Canada through discussions with intersectional storytellers. These objectives describe what I needed to learn in order to answer my research question and accomplish my purpose.

- Identify storytellers and academics in Canada producing works of and/or work on intersectional storytelling on climate change.
- Conduct a thorough literature review to identify what climate-change storytelling scholarship is being produced in Canada and how intersectionality may be included.
- Interview the research participants to discover their perspectives on how intersectional storytelling on climate change can shape environmental communication in Canada.
- Conduct a thematic analysis of the interview data; and
- Draw from the research findings to produce a set of recommendations on what kind of climate-change storytelling is needed in Canada right now to catalyze a socially and ecologically just future.

In my study, I interviewed 10 storytellers in person or virtually and one storyteller submitted written answers to my questions for a total of 11 respondents. The interviews sought to identify how storytelling has shaped environmental communication in Canada in the past and what directions we need to go into the future. The storytellers ranged from young students in their undergraduate degrees to authors, filmmakers, and photographers to a late career professor-poet. The interviews spanned from 60 to 90 minutes and took place over a period of three weeks in February and March 2024. The guiding interview questions are available in appendix A. I took a

semi-structured approach which allowed me to ask follow-up questions or evolve my questions as the interviews progressed. From the interviews, I processed the data using thematic analysis which resulted in five main themes that are:

- 1) Storytelling as Indigenous Recentering: Indigenous voices, knowledge, and ways of knowing must be prioritized in storytelling on climate change.
- 2) Storytelling as Climate Justice: Storytellers hold a responsibility to integrate climate justice by discussing the connections between climate change and systems of oppression.
- 3) Storytelling as Truthful Hope: Stories on climate change must be carefully crafted to show realistic paths to a more sustainable future.
- 4) Storytelling as Emotional Connection: Emotionally driven storytelling is a mode of long-lasting connection between audience and artists, communities, and land.
- 5) Storytelling as Education: There is an education gap on climate change and storytelling is the best way to teach and engage audiences.

In the following sections, I will explain each of these themes further and provide context for how the data led me to these themes. I share quotes from participants that show why their statements led me to that theme. I'd like to point out that these quotes don't cover all the comments made on the topic but provide a snapshot into the discussions on the theme. I have ordered these themes from most discussed in my interviews to least discussed. I also want to note that in each section I specify how many of the interviewees discussed that theme during their interview. However, my interviews were semi-structured and did not all follow the same path of conversation so while a topic may not have been discussed by a participant, it does not mean that

they purposefully ignored it or do not agree with the sentiments shared by the other interviewees. I am only able to speak to the ideas shared by each participant during the conversation we shared.

Storytelling as Indigenous Recentering

The most common theme that came up throughout the interviews was that Indigenous voices, knowledge, and ways of knowing must be prioritized in storytelling on climate change. Ten out of eleven interviewees made one specific point or more throughout their interview to discuss their opinion on the importance of Indigenous voices leading storytelling on climate change and work on climate policy. There were a variety of reasons for why the storytellers thought that this was key for the future of storytelling in Canada.

In the vein of prioritizing Indigenous voices, I want to highlight the contributions of my two study participants that identify as Indigenous women. Both Sandra Lamouche and ‘Cúagilákv (Jess Háusti) emphasized the importance of authentic collaboration with Indigenous communities around environmental communication and storytelling as well as climate policy. Sandra observed in Canada that, “There are environmental programs, but they sometimes don’t even talk about the Indigenous people from that place. It’s just like it feels like it’s over their head to include Indigenous people sometimes.” In response to the question about how she’d like to see environmental communication evolve in Canada, she also added that “there just needs to be more collaboration, more diversity too, and Indigenous voices need to be more included.” To the same question, ‘Cúagilákv (Jess Háusti) emphasized the importance of centering human rights and Indigenous rights as key pathways to resolving the climate crisis. These sentiments

were reiterated by the other eight study participants that discussed Indigeneity in relation to climate storytelling.

An expression that repeatedly came up from the study participants was the importance of recentering Indigenous ways of knowing and being in relation to storytelling and human's relationship to nature. Kasha Sequoia Slavner said "I think we really need to highlight and position Indigenous ways of knowing." Kasha spoke to this point as a way of storytelling on climate solutions with attention to the inherent and ancestral knowledge held by Indigenous communities on their lands. Asalah Youssef added her recognition that storytelling is a way of being in Indigenous communities: "Especially when we look and learn from Indigenous cultures in Canada, their stories, their struggles, their beauty, their connection to land is shared through storytelling." Asalah discussed how storytelling is natural for all humans but especially Indigenous cultures and how that long-standing tradition should be prioritized in environmental storytelling spaces. Michael Christie also acknowledged that he has seen some progress in this direction by saying "I do see glimmers of reintegration of Indigenous culture into the dominant culture and Indigenous teaching, knowledge, and wisdom. I think we have an enormous opportunity to become a leader in Indigenizing our country in a really exciting way." Michael did not share any specific examples of this, but Rita Wong referenced Lee Miracle's (2017) book, *My Conversations with Canadians*, when discussing directions for settlers to take in recentering Indigenous systems. Rita remembered that Lee had said "decolonization isn't about how Indigenous people fit into colonial systems. It's about how you fit into our Indigenous

systems.” These opinions from the research participants spoke to the common theme of prioritizing Indigenous ways of knowing in climate-change storytelling.

The interview participants also highlighted how key it is for Indigenous people to be at the forefront of storytelling on climate change because they are one of the most impacted populations of the climate crisis. Asalah Youssef said, “environmental injustices are affecting communities in very different ways and specifically Indigenous peoples need to be given that space to share their personal stories of land.” Her answer speaks to the priority of Indigenous voices in stories on climate-change impacts not only in Canada but around the world. Rita Wong also reiterated this point by saying “I can’t emphasize enough how important that our narratives around climate change need to be decolonial ones that are working with Indigenous peoples and centering their experiences and their knowledge.” Celine Isimbi agreed with those sentiments when she spoke about how she wants to see environmental stories told from the communities that are most affected by climate change.

I would like for Indigenous community members to be telling the environmental stories, Indigenous youth to be telling the environmental stories. I want Black youth to be telling the environmental stories. I want the descendants of Africans who fled the US South to come up North to be able to tell these stories. (Celine Isimbi)

Celine spoke to these points from her lived experience as a member of Black African communities that have been displaced from their land. Celine shared that her family is from Rwanda and the Democratic Republic of Congo, but she grew up in Cape Town, South Africa due to displacement. These points from Asalah, Rita, and Celine exemplify the point that

Indigenous voices are essential to prioritize due to their positionality as directly impacted by the climate crisis. Their perspectives align with climate justice which was the next most common theme discussed by the research participants.

Storytelling as Climate Justice

The second most frequent theme expressed by the interview subjects was that storytellers hold a responsibility to integrate climate justice by discussing the connections between climate change and systems of oppression. Eight out of the 11 participants discussed climate justice in their interviews. The theme of climate justice came up naturally in most discussions, but I did ask one interviewee specifically about climate justice as an additional question related to their work as a journalist which opened a conversation on how journalism can be used as a tool for justice. Climate justice was most commonly raised in relation to the responsibility of storytellers to highlight injustices connected to the climate crisis. This was most often discussed in relation to the intersectionality of the climate crisis which showcases how climate-change impacts will hit some communities harder than others. Emel Tabaku, spoke to this intersectionality from her perspective.

Intersectionality in the climate justice space prompts a consideration and a look at all other social issues that intersect with climate. For example, when you have forest fires in BC or flooding, many people can't relocate or find new homes because of the rising costs and the lack of affordability. (Emel Tabaku)

Kasha Sequoia Slavner also spoke to this intersectionality in reflection of her documentary and filmmaking work looking at climate and peace.

When I first started the project that I'm working on, the conversation around demilitarization and climate justice wasn't really present. Conflict and climate change weren't really being talked about in global forums. And I often think about it from the perspective of policymakers or leaders who are not living those experiences. It's almost a framing of well, how could they possibly be connected? But for everybody else who's actually actively living it, how could it possibly be disconnected? (Kasha Sequoia Slavner)

Celine Isimbi discussed a similar point to Kasha which she framed as the "true story of the environment." She spoke about how her environmental education courses in her undergraduate degree usually began by talking about Rachel Carson's book *Silent Spring* and the resulting wave of environmental action that took place in the 1970s. From her perspective, that is starting the conversation much too late in history and excludes how colonization is connected to the climate crisis or in her words, how "our current environmental crisis begins with the first settlers' ships onto our different lands." She also said that she thinks this approach is the key to inciting action on climate change.

I think that once we center storytelling that focuses on the displaced, colonized, prisoners, immigrants, refugees, all these people that have been made to be removed from their environments and continue to be removed from their environments, is when we begin to get to environmental communication that is able to move people to action. (Celine Isimbi)

‘Cúagilákv (Jess Háusti) echoed this point in her statement on how she would like to see environmental communication evolve in Canada: “I think storytelling focused on our individual and collective power to halt the root causes of climate change – capitalism, colonialism, and patriarchy – is an essential part of our pathway to addressing the climate emergency.” Rita Wong summed these sentiments up well by reiterating twice through her interview that “there is no climate justice without social justice.”

Some of the interviewees discussed the importance of storytellers to also be story listeners by amplifying the voices of those that need to be most heard in conversations on climate justice. Asalah Youssef brought forward the example of the Fairy Creek movement, which was a movement of ongoing civil disobedience led by Indigenous communities in protest of old growth logging on Vancouver Island, as an environmental movement that was buoyed by storytelling.

We have to bear witness to people’s stories and receive them and hold them and think. It gives us such a deep look and a deep understanding about what it is that people are experiencing the inequities, the injustices of land and of people. (Asalah Youssef).

Rita Wong shared a similar sentiment in her answer to how she would like to see environmental communication and storytelling evolve in Canada. Firstly, she prioritized that the voices of Indigenous storytellers should be listened to, learned from, and respected by non-Indigenous people. She also discussed the importance of people of all backgrounds to come together in “overcoming the violence and trauma of colonialism.” Emel Tabaku also reflected on this question by sharing a question she thinks storytellers should be asking themselves: “Is this your story to tell? If it’s not your story, but you’re passionate about something, then find

collaborative opportunities to amplify stories from the voices of those who are directly impacted.” These thoughts shared by Asalah, Rita, and Emel speak to their belief in the importance of considering whose voices should be most heard on a subject.

Finally, storytelling on climate justice was also discussed as a way to begin envisioning new systems that exist without injustice to land and people. I will discuss this sentiment more in the next section on storytelling as truthful hope, but I wanted to raise the point here in relation to climate justice as it was mentioned by one interviewee. Kamyar Razavi shared that he thinks “by re-centering climate through justice...the ripple effect of that is to at the least envision a new kind of political economy that is not so detrimental to people and environment.” This idea that storytelling can help to create new possibilities and ideas for a world with less injustice towards people and the environment is a key theme that many of the interviewees spoke about.

Storytelling as Truthful Hope

This section unpacks the theme shared by seven out of 11 respondents that stories on climate change must be carefully crafted to show realistic paths to a more sustainable future. I summarized this theme as ‘truthful hope’ because it came up in many interviews that neither a ‘doom and gloom’ nor a ‘sunshine and rainbows’ approach to climate stories will be useful in addressing the climate crisis. The storytellers talked about sharing stories that are authentic, truthful, relatable, and inspiring as a powerful way to connect with audiences and help open hearts and minds to systems and ways of living that prioritize people and planet.

Kam Razavi was able to talk about this theme from his experience studying and practicing solutions journalism. Solutions journalism is a practice of including solutions to a

problem in a piece of journalism rather than only reporting on the problem itself and stopping there.

When you include responses to a problem, that gives people a sense of efficacy, or agency, or even hope. I think any good story has to have a kernel of that. Solutions suggest that there's another way out. And I think that is very important with climate change, because otherwise it's very easy to shut it off. (Kamyar Razavi)

Kam was clear to point out that stories about solutions should not gloss over the seriousness of the climate crisis or present the solution as a silver bullet to clear all ails. He believes that “the magic formula, if there were to be one, is underscoring the severity of the crisis while also offering some kind of response or remedy to the problem.” Kasha Slavner also pointed out that stories on solutions should not create a false narrative that the ‘fix’ or ‘solution’ to the climate crisis will be simple. She advocated instead for sharing stories of communities gathering together to tackle systemic injustice. She believes that this style of stories is the way to create meaningful climate storytelling.

Balanced narratives...highlight the injustices and the destruction and uncertainty and loss that comes from climate change, but also position models of community leadership. Past models of successes and victories, and also current moves towards seeking justice. I think we need more stories that really showcase how do we move forward. (Kasha Slavner)

Neil Ever Osborne was able to provide a personal example of seeing the effectiveness of this style of storytelling. Neil was the inaugural climate editor at the Weather Network, and he saw the most viewership on stories that were locally focused, human-centric, and presented a

transformative solution. He said that one of the best performing stories published during his tenure was about how to install solar panels which he saw as exemplifying those three conditions for a successful climate story. These accounts show a common theme in believing in stories that are honest about the problem but show realistic solutions can draw in audiences.

Michael Christie shared a similar but unique point to his fellow interviewees that I want to highlight. He reflected on different narrative structures from his experience as an author of bestselling novels. He shared that the story of climate change could be taken in two directions – a contamination story or a redemption story. A contamination story is likened to the story of the garden of Eden where a mistake is made that can never be reversed. A redemption story also has a mistake but there is an opportunity to grow, learn, and make changes for the better. He believes we must carefully tell a redemption story on climate that engages with the possibility for hope and new systems that improve upon the current unsustainable ones. Michael also focused on the role of storytellers to imagine what is going to come next for our climate and the people living on this planet to help create new narrative frames that inspire audiences. This echoes the sentiments of Linda Hogan (1996) in her book *Dwellings*, “We need new stories, new terms and conditions that are relevant to the love of land, a new narrative that would imagine another way” (p. 94).

Asalah Youssef also engaged with this idea of storytellers being in an opportunistic vantage point to bring new ideas to the minds of audiences.

Being a storyteller is believing that new worlds are possible, and that through storytelling we can amplify the good work being done and help create and nurture and grow new

possibilities ahead. New ways of relating to one another, new ways of relating to earth, and also reconnecting. (Asalah Youssef)

Asalah's work as a visual storyteller engages with community members to share stories of working alongside the land which allows her to amplify what she refers to as 'the good work'. Sandra Lamouche also related her practice as a hoop dancer to showcasing new possibilities for audiences. The hoop dance is a representative storytelling method that can showcase destruction, rebirth, and new life through the movement of the hoops. She shared that she reflects on how we can recreate our world and society and tries to represent that through her dancing: "It's a struggle you're going through trying to maneuver these hoops to come out as something beautiful again." As Michael, Asalah, Sandra, and the other storytellers spoke about, there is a key thread of bringing out the beauty, the hope, the spark that can light embers that burn ideas of moving past climate crisis into climate action into their audiences.

Storytelling as Emotional Connection

A recurrent topic discussed by seven out of 11 of the storytellers was that emotionally driven storytelling is a mode of long-lasting connection between audience and artists, communities, and land. This theme often came up as the storytellers discussed their own practices as well as why they think storytelling is an important method of environmental communication. The thoughts centered around the importance of emotional connection in a story's ability to have a long-lasting impact on the person hearing it. The storytellers also discussed how people are often more likely to sit with a story such as a novel or documentary longer than they would with a news article or other facts-first piece of communication that can

allow the ideas of the story to sink in more deeply. Both sentiments came up in relation to storytelling being a natural form of communication for humans that has been a part of all cultures for millennia. In the following paragraphs, I will share the words of the storytellers that brought out these ideas.

The notion of the ancestral instinct of storytelling came up in multiple conversations as a reason for how impactful storytelling on climate can be. Kamyar Razavi spoke about this as far back as the days of hunting and gathering.

People connect to stories of others. It goes back to evolution—Oh, don't cross that hill there's a tiger lurking in the bush, right? You share that story. So even in this day and age of social media and Tik Tok and AI and chatbots, the best way of communicating is just what our ancestors did, sitting around the fire and sharing stories. So just relaying stories of others like you doing things is a very, very effective strategy for getting people to pay attention. (Kamyar Razavi)

Kam's referenced that his comment on sitting around the fire was a quote from Anthony Leiserowitz who is the founder and director of the Yale Program on Climate Change Communication. Asalah Youssef also spoke about this ancient tradition of storytelling in her interview. She said, "What's beautiful is that storytelling is not something new in environmental work. Storytelling is in our bones as humans. In our species, we are meant to tell stories." 'Cúagilákv (Jess Háusti) spoke from personal experience of how she connects to storytelling from her personal ancestry. She shared that she comes "from an oral storytelling culture that positions [her] voice within a continuum of collective knowledge, wisdom, and responsibility."

Multiple storytellers shared that they felt emotional and personally relatable stories are what would be most likely to drive a listener or reader to action. Celine Isimbi shared that she chooses to write personal narratives because of the medium's potential for connection.

I think the emotion and the feelings and the meaning that's invoked within personal narratives allows for people to connect on a person-to-person basis. That connection is so vital, I think, in driving action and in ensuring action is being taken. (Celine Isimbi)

Kasha Slavner also spoke about the advantage of emotional stories to drive action in relation to her documentary work.

I think why I'm drawn to documentary as opposed to reporting or journalism is because it's really emotion-based work. It's about reflecting the emotions of people, and also allowing people to see those similar experiences within themselves and those who they're seeing on screen. And I think that's really effective in experiences being able to transform people's mindsets and actually galvanize action in helping people process those emotions. (Kasha Slavner)

Michael Christie reflected on this opportunity to combat disconnection in his work as a novelist.

I think that disconnection is what keeps us from organizing. It keeps us from empathizing. It keeps us from really feeling the true tragedy. And so, storytelling for me is about building connection between a reader, between the characters themselves. I think in the books that I've written as the story goes on, there's a coming together and people understanding of one another. (Michael Christie)

In our conversation, Michael talked about how a story can carry audiences through the journey of the characters that can help them connect to a topic such as old growth forests which feature prominently in his novel, *Greenwood*. He spoke about how he believes that his job as a storyteller is to emotionalize a topic and deepen his readers understanding of an idea, while telling a good story of course. The thoughts shared by Celine, Kasha, and Michael are emblematic of the opportunity they see for powerful storytelling to have an impact on climate action. The theme of storytelling as emotional connection represents connection not only between storytellers and audiences but also as people to each other, land, and themselves.

Storytelling as Education

The final theme that I drew out of my interview data is that there is an education gap on climate change and storytelling is the best way to teach and engage audiences. This theme came up in only five out of my 11 interviews; however, it played enough of a substantial role in those conversations that I felt it deserved to be the fifth and final theme of my results. The storytellers that spoke to education have all been educators themselves or are currently in environmental studies, giving them personal experience to reflect on the intersections of storytelling and education. In these conversations, education and communication often overlapped and were used as two very similar methods to the same means of greater understanding and engagement with the climate crisis. Storytelling was brought up as an effective education method for studying environmental topics specifically. Land-based education is also thought to be an essential part of environmental communication moving forward in Canada. These ideas are in response to the belief that there is a lack of climate literacy and appropriate environmental education in Canada.

Molly Foster is an environmental educator based in Nova Scotia and had specific reflections on the lack of localized environmental education she sees in her province.

There aren't a lot of place-based learning resources in schools that are made specifically with Nova-Scotia in mind. Having an entire unit about Florida's flooding is all well and good but what about the record floods we've been having in Nova Scotia? Why not take this opportunity to really drive home what needs to be fixed here – our coal heavy energy, our shoreline debris, our wildfires? (Molly Foster)

Sandra Lamouche also spoke about the lack of environmental education she has seen in Alberta as a parent of two sons in the public education system. She reflected that, "I would like to see more environmental education in the education system across Canada because in Alberta we don't really have a lot of that." Kam Razavi added on the specific lack of knowledge on the climate crisis that he observes through his work: "There's a big education gap. The average Canadian still doesn't make the connection between energy burning fossil fuels to make energy and climate change. Education around the environment, economics, energy literacy, I would say that's what has to change." These opinions set the stage for the directions the interviewees want to see environmental education to go in.

Molly Foster spoke eloquently about how storytelling can be used as a method to educate and inspire audiences about environments and climate in Canada.

When you combine history, environment, culture, and real data, it becomes a perfect educational storytelling storm. I try to weave that tapestry together. Storytelling offers nuances that traditional education doesn't: it can make room for disagreement and

discussion, it can comfort and disturb us in the same sentence. At the very least, it makes for a much more interesting and relatable lesson for the listener. (Molly Foster)

Her words that a story has the power to comfort and disturb us in the same sentence connects back to the theme of truthful hope where stories have the power to be honest about the climate crisis but also share an impactful and moving message. Asalah Youssef also shared some of her thoughts on how she sees storytelling as a missing puzzle piece in the education system: “Seeing storytelling as deep knowledge and providing resources, funding, and curriculum education in that realm, I think is really important for moving forward in our country.” The ideas of these young women speak to the synergy between storytelling and environmental education working together.

In the conversation on education and storytelling, multiple interviewees brought up the importance of land-based education that takes students outside of classrooms and into nature. Kam Razavi spoke clearly to this thought when he shared how he sees environmental education evolving “I think one way that can be really useful is through nature-based education, actually taking students out into nature. I think that that’s an effective intervention.” Kam is a university professor in addition to his journalism work which gives him additional perspective on environmental education. Rita Wong also shared how important she believes land-based education is and spoke to how she is working to include more in her classes at Emily Carr University.

A couple of years ago I took my class out to the inlet on the north shore, and we did a paddle in one of those large ceremonial canoes with Takaya Tours. And I think that one

paddle was probably the highlight for many of them in the class. To be out on the land and to be doing the things that we're talking about as opposed to just talking about them.

(Rita Wong)

As a final note, Asalah Youssef also spoke to the importance of educating youth on how to story tell to share their own stories and experiences.

I think it's important to nurture an intersectional creativity focused lens in youth on not only processing environmental grief or the environmental movement or land-based connection, but also providing that mentorship to know how to express that in each person's unique way. I think that's fundamental for another wave and a growth of environmental storytelling in Canada is planting that seed early on in youth. (Asalah Youssef)

These ideas come together to create a theme around storytelling being a powerful way to enhance environmental education that may be lacking in Canada as well as connect to the land and stories on the land that have a strong impact on their audiences.

Analysis

The themes that make up my results are Indigenous recentering, climate justice, truthful hope, emotional connection, and education. I derived these themes by coding my interview data to identify the most repeated ideas through my interviews. I framed each theme with the wording of 'storytelling as...' because all the themes represent how storytelling has the power to embody or achieve that theme. For example, storytelling as education represents how storytelling can be a powerful method to educate as well as storytelling should be taught so that more people can

harness its power in their own lives. In the description of each theme, I did my best to summarize the ideas that the interviewees shared and then demonstrated those thoughts through the articulation of their quotes in the results section. In the following sections, I discuss how the themes of my research interrelate and overlap with the available literature on the topic.

Storytelling as Indigenous Recentering

Indigenous recentering was the most prominent theme in my interviews which is reflective of recent scholarship that recognizes and advocates for the importance of Indigenous voices and leadership in climate spaces. Indigenous communities are among the most impacted by the climate crisis in Canada (Williams, 2012). As well, there are calls for Indigenous leadership and decolonization in climate research and policy as a way to support climate solutions for all (Deranger et al., 2022). However, as I noted in my introduction, there is a lack of academic literature on the importance of Indigenous storytelling on climate in Canada. In this section, I will review the literature that is available on this topic and how it connects to the responses of my interviewees.

The literature acknowledges the current lack of storytelling on climate from Indigenous voices and misrepresentation of Indigenous issues when they are discussed (Lowan-Trudeau, 2021; Cameron et al., 2021). These ideas were reiterated by the responses to my interviews in their suggestions for Indigenous people to be given greater respect and recognition for their knowledge of climate solutions and personal experience with climate injustice. The interviewees highlighted how Indigenous communities are some of the most impacted by climate change in Canada but are disproportionately unheard on the issue. Ecofeminism theory connects these two

factors from the perspective that oppression is related to environmental damage. An example of this is that biodiversity is being lost at unprecedented rates around the world, but the diversity of ecosystems is declining less rapidly on Indigenous peoples' lands (Swiderska, 2020). As Indigenous lands are being encroached and polluted, both people and the environment are being simultaneously harmed. My interview respondents align with ecofeminist scholar Gaard (2014) that believes climate-change narratives should use a justice frame to discuss climate action. The interviewees articulated an essential factor of this justice frame is to ensure Indigenous voices are heard more frequently and by wider audiences on climate and environmental issues.

I recognized an overlap in discussions from literature and my interviews on the legacy and importance of storytelling in Indigenous communities. Storytelling is recognized as a culturally appropriate research method, a way to preserve and promote Indigenous oral wisdom, and a form of resistance to colonization for Indigenous communities (Corntassel et al., 2019; Cunsolo Willox et al., 2013; Wiebe, 2019). Scholars have also emphasized the importance of storytelling for and by Indigenous communities in work on all areas of climate change (Cameron et al., 2021; Spiegel et al., 2020). My interview responses echoed these points on the legacy and importance of storytelling within Indigenous communities with a specific focus on connections to land. Two of my interview respondents are Indigenous but there was an overall recognition between the non-Indigenous participants of these same ideas. I see a parallel to this in the papers that I have cited by both Indigenous and non-Indigenous authors. I think this speaks to a growing understanding of how storytelling and communities that have practiced storytelling are undervalued but a shift may be happening towards greater positive recognition.

My interviewees also emphasized hoping to see a recentering of Indigenous ways of knowing and being in relation to storytelling and human's relationship to nature in Canada. I find that a lot of the literature that speaks to this point is based upon a discrete piece of research that uses storytelling as a method for research with Indigenous communities. Indigenous ways of knowing and being are often explored within the confines of academic research. I couldn't find literature that specifically discusses Indigenous voices and storytelling in Canada as a method for improving environmental communications. The interview respondents spoke to the expertise, value, and engagement of Indigenous peoples they believe will be essential to more effective environmental communications in Canada.

Storytelling as Climate Justice

The connection between storytelling and climate justice was a topic I expected my interviewees to raise. While I didn't ask a specific question about climate justice to any respondents other than one, all the storytellers were chosen because of some focus on intersectionality in their work. I used this as a determining factor for interviewee selection because intersectionality is one of the theoretical frames of my study. I observed that this predetermined focus on intersectionality created a common frame of mind from the storytellers. I noticed a repeated pattern of the interviews to speak unprompted about climate justice themes such as how climate change is interconnected with other injustices and systems of oppression such as racism, sexism, and colonialism. This resulted in their comments reflecting the perspective of climate justice whether they specifically used the terminology of 'climate justice' or not. This went hand in hand with many of the storytellers expressing that they felt the

interconnections between climate change and other issues are underrecognized and underrepresented in discussions on climate. Specifically in relation to how climate change is often discussed as a purely ecological crisis with lacking focus on how certain people such as women are dominated alongside nature. Climate justice and ecofeminism share many ideas but none of my respondents brought up ecofeminism specifically. That being said, the interview data showed many signals of ecofeminist analysis including the recognition that systems of oppression are present and to be considered in all subjects of study (Stephens et al., 2010).

The words of the storytellers who spoke on climate justice are reflected in the literature I reviewed on the importance of climate justice in environmental communication and storytelling. My interview data captured storytelling as a method to pursue climate justice as well as raise awareness on the connections between marginalization and injustice within the climate crisis. The papers by scholars Callison and Tindall (2017), Dhillon (2017), and Lowan-Trudeau (2021) in my literature review share these ideas. The storytellers' comments were also in line with scholarship on intersectional environmentalism that recognizes an intersectional analysis of climate issues results in wider systems thinking outcomes (Pearson et al., 2017; Versey, 2021).

Despite some literature reflecting these ideas, there is also recognition that there is a lack of scholarship and policy innovations on the issue of climate justice in Canada (McGregor, 2018). The interviewees echoed that lack of focus on climate justice but in the fields of environmental communication and education in Canada. Points related to this discussion on climate justice communication can be found in academic literature but often in less specific terms than expressed by my interviewees. Some scholars such as Roosvall and Tegelberg (2015)

do speak quite pointedly to a need for climate justice framing but not within the context of Canadian issues and systems. My interview data raises the point that there does seem to be a lack of literature on the specific topic of both environmental communication and climate justice in Canada. I hope that my research can point to an opportunity to study this intersection further as the storytellers in my study demonstrated knowledge and lived experience to share on the topic.

Storytelling as Truthful Hope

The theme of storytelling as truthful hope discussed how most of my interviewees think that stories on climate change should be carefully crafted to show realistic paths to an ecologically and socially just future. The element of hope is present through stories of solutions that are locally focused, human-centric and showcase transformation. The element of truth underscores the requirement to be authentic and honest about the seriousness of the climate crisis that does not ignore the grief, fear, and anxiety that are also present in these conversations. Each interviewee that spoke to this topic placed varying degrees of importance on the balance between honesty and fear in conversations on climate change. Some authors have recommended a balance of positive and negative frames by climate communications rather than leaning one way or the other (Richards and Carruthers Den Hoed, 2018). Generally, my interview data showed that only-fear based messaging would not be well received by audiences. However, some spoke to the importance of the catharsis provided by frank communications on how hopeless and distressing this moment in ecological history can feel for many people that are tuned into the harrowing scientific predictions. Some believe that going to these ‘dark’ places is actually

essential to move through these feelings towards action and reconnection with the earth (Macy, 1995).

The conversation on hope versus fear in environmental communication and education has been ongoing in scholarship for some time now. Scholars have found that hopeful, solution-based messages may be more effective in producing pro-environmental behaviour than fear or guilt-based messages leading to recommendations to emphasize hope and self-efficacy in environmental communications (Armstrong et al., 2018; Merkel et al., 2020). As discussed by my interview respondents, the utilization of a solutions frame is also getting more attention by scholars of environmental communication (Hodson et al., 2020).

My wording of the theme as “truthful hope” is similar to the language that Hawley and Mocatta (2022) use to articulate optimistic, solutions-focused imagination as “fact-based dreaming.” I particularly appreciate this turn of phrase as it speaks to my interviewees’ emphasis on imagination and the role of storytellers to bring new narratives and possibilities to audiences. I do think that storytellers often share a dreamlike quality in their ability to transport spectators to new worlds—whether dystopian, utopian, or something new altogether. The element of visioning alternative futures also echoes the aforementioned sentiments of Hogan (1996). The discussion by my interviewees and these scholars emphasize how alternative futures can be empowering and meaningful in climate storytelling work. In my perspective, this ties into the points storytellers shared on teaching people how to story tell and baked into that is the ability to be open to new possibilities and new ways of operating societal systems. Their thoughts reflect the principles Moser (2022) articulated as humanistic environmental communication which speaks to

a further need for focus and discussions on its practice. The overlap in my interview data and the thoughts of these scholars' points to an opportunity to expand examples of the practice of truthful hope in storytelling on climate change in Canada and conduct additional research on how this is received by audiences.

Storytelling as Emotional Connection

This theme speaks to the opinions on how emotionally driven storytelling can be a powerful tool for connection. In many of my discussions with interviewees, disconnection was touched upon as one root cause for the apathy and lack of action we see today on climate issues. Research does back up that people that spend more time outdoors have a greater connection to nature which results in pro-environmental attitudes and behaviours (DeVille et al., 2021; Mackay & Schmitt, 2019). But what does the research say about storytelling being a mode for emotional connection and environmental action? Scholarship has identified that storytelling can help build deep relationships between audiences and storytellers as well as the human brain retains information better when presented as a narrative (Bayer and Hettinger, 2019). Additionally, stories create empathy with the described characters (Dill-Shackleford et al., 2016). These ideas were directly reflected in the comments of the interview participants. Especially the storytellers that work in the realm of fiction spoke to the importance of building relatable and engaging characters that audiences can see themselves in to be able to engage with to the topic of climate change. Research backs up the belief that narrative structure through storytelling specifically influences engagement with climate change through emotional arousal (Morris et al., 2019). These authors validate the view of storytelling as a powerful avenue for emotional connection.

As a counterpoint, some people do not believe in the inclusion of emotion as a productive strategy in communication on climate change. For example, my interviewee Kam Razavi shared that he has come across people that do not believe in solutions journalism or see an overt use of emotion in climate stories as a biased perspective. Depending on the method of storytelling, the degree of emotion that is included may be more or less appropriate. However, the literature does still stand that stories may create an emotional connection whether that is the intended outcome or not.

As I researched literature on this topic, I had a strong inkling of what I would find based on the resonance of the interviewees' comments on this theme. It seemed to me as I was interviewing the storytellers that their perspective on the power of emotional connection was much less intellectual and much more instinctive. I could feel it as I listened to them and leaned in a little deeper at some point in each interview, waiting with bated breath for what they would say next. Most of them shared with me personal and vulnerable stories of their spouses, children, parents, the worries that keep them up at night, and the practices that light their souls on fire in their work. It is affirming to see the literature backing up how important and effective storytelling is for emotional connection, especially on climate change. But if you ask me? I think we already knew that from the instincts of our hearts.

Storytelling as Education

The participants in my interviews that discussed education shared observations that there is a lack of climate literacy and appropriate environmental education in Canada. The interviewees also shared that they see storytelling as the best way to teach and engage audiences

on climate change. I didn't expect education to be one of the main themes in my interviews. It was only discussed by five respondents, but as I mentioned, the depth and lived experience present in the insights felt significant enough to raise in my results. As well, since this thesis is the culmination of my master's in environmental education and communication, I felt that it would be remiss to exclude the connection between these two very interrelated fields. I have often felt that education and communication are striving towards the same outcome through different methods. In this context, storytelling as education was brought up by my interview respondents related to education they have led themselves and environmental education that they have been students of. Generally, the discussions on environmental education pointed to a severe shortage of any sort of education on climate in some places in Canada, or a lack of education that taps into the pressing issues of that location. This reminded me of scholarship on the importance of place-based storytelling which led me to identifying a strain of research on place-based education that shares similar values (Ardoin, 2006; Webber, 2021). This speaks to the interrelations between storytelling on climate and education on climate in Canada. Reports do show that that curricula across the country are lacking content on the scientific consensus of climate change, impacts and future risks, and adaptation and mitigation options and that almost half of Canadians do not feel well informed about climate change (Learning for a Sustainable Future; Schatz, 2021). These findings emphasize the importance of focusing on environmental education and considering how storytelling may be able to support this pursuit.

The respondents spoke to their own experiences with the power of storytelling to teach on climate specifically. Scholarship discussed throughout this thesis points to storytelling's power to

create lasting engagement with a topic (Gupta and Jha, 2022; Sundin et al., 2018) Literature does not provide a consensus on what is the best way to teach on climate, but research does support the belief that storytelling is a promising tool for climate education (Hofman-Bergholm, 2022). I see many opportunities for climate storytelling to be brought into educational spaces, whether through documentary as discussed by Kasha Sequoia Slavner or a children's storybook like the one written by Molly Foster. Even the poetry of Rita Wong or literary fiction of Michael Christie could be brought into interdisciplinary studies on literature and environment. Similar to my points on the lack of recognition of interrelated systems in climate justice, I think there is a lack of recognition of how interrelated climate education is to all subjects. Public schools traditionally take a siloed approach—one hour for math, a different hour for science—but where I see the potential is breaking down those siloes and articulating to students how climate is relevant to everything. As the climate crisis advances, I see each sector of the economy and therefore each job, being impacted by climate events. A solid foundation of knowledge on climate and environment may not only create more engaged citizens but better prepare students to be resilient in their careers through the climate crisis.

To offer an additional personal reflection on the topic, I now work in the field of experiential education with a focus on environmental themes. Through my work, I had the privilege to attend The Global Summit on Climate Education in January 2024, hosted by the Global Education Benchmark Group and the Klingenstein Center at Teachers College, Columbia University. The conference brought together teachers from the United States and Canada to discuss climate education for grade school students, in the classrooms as well as through external

programming. One example that has stuck with me was a delegate who shared that they had designed a course that combined studies on religion and environmental science through a storytelling framework. Those were two topics I would have never thought to bring together but reminded me of the transformative and transdisciplinary power of storytelling to teach as well as facilitate learning. Students were given assignments that all required an element of storytelling as part of their submission, which I also feel grateful to have experienced myself through many of the courses of my MAEEC program at Royal Roads. Storytelling on climate change may be lacking evidence-based studies in scholarship at this time, but this example shows that there are innovative teachers and students pioneering this intersection in classrooms around the world today. This literature and my personal reflection emphasize the importance of including storytelling in education with specific benefit for environmental education.

Analysis Reflections

The results of my study and the ensuing analysis confirmed much of what I already suspected about climate storytelling in Canada. Many of the ideas shared from the interviewees can be backed up by current literature or connected to similar research studies. However, I was intrigued often by the connections the interviewees made without my own prompting. For example, none of my questions asked about Indigenous voices nor did I bring it up first to any of the storytellers, but it was still my most commonly discussed theme. As well, I did bring up climate justice first to one interviewee, but the rest of the participants brought it up on their own accord as a central way to how they see their practice and how they want to see environmental communication evolve in Canada. This showed me that it is not only literature but also

practitioners on the ground that are thinking through these connections. With that being said, my small sample size captures the perspectives of only 11 storytellers in Canada.

I found that my in-person interviews lasted longer and often became more personal in nature than my virtual interviews. That face-to-face connection and my ability to bring along a coffee or tea as a token of gratitude to the interviewee felt meaningful in creating a rapport for the interview and our ensuing conversation. However, I can only speak to my perspective as one of the two people in the interview conversation and I did not survey my interviewees on their comfort levels during the interview. I did also have genuine conversations during my virtual interviews. I regret not being able to interview all of my respondents in person, but I am grateful for the technology that allowed us to meet without the travel-related carbon emissions that it would take me to reach across the country. I did also get significantly shorter answers from my interviewee that responded in a written format, and I was unable to ask any follow up questions which limited the depth of the responses. However, I felt that their perspective was extremely valuable regardless of their ability to talk in person or not.

Chapter 5: Discussion and Conclusions

bearing witness to honest truth
opening up heart and soul to the genuine experience
of each soul
we're marked each time
an invisible ink
spelling out their story
traced along the veins and wrinkles making up your own
listening deeply to the voices that have been silenced and ignored
stepping into the role of receiver
honoring the vulnerability, but not stopping there
we need all the new ways and old ways and ways in between
the queer ways and creative ways and decolonial ways
the ones that see the world without the blinders of colonial conditioning
as we listen, and are heard
the margin of possibility grows

Introduction

My research has led me to the belief that a story is always being told when we're talking about climate change. There is the story of Canada as an oil and gas economy that can never change. There is a story of ancient trees, vast lakes, and towering mountains that draw millions

to this land each year. There is the story of ‘explorers’ and there is a story of colonizers. There is a story of a nation committed to equality, justice, and environmental transformation. Stories are so powerful, that they can dictate the directions of our lives. The stories we subscribe to guide our actions—where we work, how we build our communities, who we vote for. These actions crescendo to the shared direction of a nation. My perspective on the answer to my research question now is that the power of intersectional storytelling can be harnessed to transform environmental communication in Canada for the understanding and inspiration needed to create a socially and ecologically just future for all. Stories are not set in stone. They change as we do, and we can continue to rewrite the course of our human and more-than-human world through the stories we tell. Stories can be as well as create Indigenous recentering, climate justice, truthful hope, emotional connection, and education. The findings of my literature review and research underscored the established power of storytelling with directions to how it can be used for climate action. The following reflections and recommendations explore this answer and share recommendations for storytellers conducting this work.

Reflections on My Research Objectives

The final objective of my research study is to draw from the research findings to produce a set of recommendations on what kind of climate-change storytelling is needed in Canada right now to catalyze a socially and ecologically just future. When I reflect on this goal, I no longer resonate with the framing of the question after the experience of conducting my research. I have identified some conditions that I will share from my research findings that are emblematic of deeply resonant climate stories. However, I think asking what “kind” of storytelling is needed

right now may be too prescriptive. I have come to the conclusion from my research that *all kinds* of intersectional climate storytelling are needed from a diversity of the voices that have been most left out of climate spaces. Each method of storytelling has its own strengths and weaknesses, but I see the push needed for a diversity of methods that can reach varied audiences across Canada. I see a need for storytelling for justice and action as well as for emotional processing. Each community and person have their own experience of climate change and as the impacts of the climate crisis become stronger and more frequent, there is a pressing need to give impacted people an outlet to work through those experiences. Storytelling to spur audiences to action as well as stories to soothe our souls are needed. Overall, there is an intersectional storytelling-shaped gap in communications and justice on climate that can be a key piece of the greater puzzle.

As I write this, the debate on a carbon tax in Canada is raging across government parties and creating division, a litany of hate comments online, and misinformation abound on how it may make life easier or harder for Canadians (Wherry, 2024). While the details of the debate are not relevant here, the use of storytelling is. There are competing stories being told that have the potential to lose the plot of the carbon tax very quickly. This debate would traditionally be seen as a battle of policy and ideology but from my perspective, it is a discourse of story versus story. Time will tell which story wins out, but this example underscores the importance of harnessing storytelling in environmental communications across sectors.

Based on these reflections, I would like to change my recommendations to directly address storytellers and organizations creating stories on climate change in Canada. I want these

recommendations to provide a guideline for key considerations when creating climate stories rather than prescribing exactly what kinds of stories may be best. While I do my own storytelling work, I am junior in this field, and I want to humbly translate the wisdom from my interview subjects into these recommendations.

Recommendations for Climate Storytellers in Canada

For a moment, I want to address the reader. You may not be thinking of yourself as a climate storyteller. Some of the folks I interviewed that have been nationally and internationally recognized for their bodies of work even hesitated to connect with the label of storyteller. However, I want to start this off by saying we all have a story to tell, and that story likely intersects with climate in some way. I encourage you to go into this section with an open mind whether you label your work as climate storytelling or not and I hope you get some value from these recommendations in the form of reflection questions.

Key Questions to Ask Yourself When Creating Climate-Change Storytelling

- 1) Should this story be coming from my voice, or should I work to make space for the voices of others with more lived experience on the topic?
- 2) Have I considered how the Indigenous voices of this land are being included and prioritized?
- 3) How does my story intersect with climate justice and how can I clearly represent those intersections?

- 4) Am I being honest about the scientific consensus and predictions about the issue I'm focusing on?
- 5) Have I looked for opportunities to include transformative solutions or new systems that could improve this problem?
- 6) Have I provided opportunities for my audience to emotionally connect with the subjects of my story?
- 7) Does my story respect the education level of the audience and create opportunities for them to learn?
- 8) Is my story presented in an accessible format for my audience to engage with?

Accessibility of Storytelling

A key consideration that was brought up in my conversations with storytellers is the accessibility of climate storytelling in Canada. The storytellers I interviewed generally felt that there was not enough storytelling work happening in Canada or that it wasn't being funded or viewed enough. The storytellers discussed accessibility in terms of language, climate literacy, and location/platform. English was mentioned as a common default for environmental communications that can be exclusionary. As well, stories on climate or environment can often use scientific terms or reference United Nations agreements that the audience is not familiar with which can make the story confusing or disengaging. Additionally, the interviewees shared examples of climate stories that they are inspired by but with the caveat that they are not well funded or available on popular platforms across Canada limiting their viewership. I added in the last eighth question to prompt storytellers to consider if the story they are telling on climate has

the ability to reach their audiences. While this may not always be in the storyteller's control, I hope it prompts the consideration of how more and more people can be spoken to in a way that feels inviting and engaging on climate. I think this is especially important in a time of overwhelming media that is driven on shock, awe, and baited images that exhaust viewer's capacity to engage. In some of the interviews, I asked the storytellers to share where they find climate storytelling that inspires them with specific examples of outlets or pieces of work that stand out to them. I have collated these in appendix C as a resource and reference point for others looking for examples of climate storytelling.

Concluding Reflections

I have titled this next section as concluding reflections rather than conclusion because I don't see this thesis as the conclusion of this work. I have always seen this research as a jumping off point for myself and other storytellers that have committed to a lifelong journey alongside their own story and the stories of others. These reflections are the wrap up for this chapter of the story, but it will continue on as my work and journey evolve.

Contribution

My research was guided by the literature that I was looking for myself on climate-change storytelling in Canada but was unable to find. When I search "Climate Storytelling" + "Canada" on google scholar, only a scant 51 results are produced. While there is the potential for additional results and relevant papers with varied search terms, I use this as an example for the lack of focus this topic has been given in scholarship to date. As I discussed earlier, there is a growing

recognition of the benefits of using storytelling practices in environmental communication but there is a clear lack of primary research that works with storytellers themselves to hear how they think this field can grow and improve. Specifically, I struggled to find scholarship that had worked with storytellers from Canada. My study started out with the goal to fill a gap in the literature about how climate-change storytelling is happening in Canada and produce a set of recommendations on what kind of climate-change storytelling is needed in Canada right now to catalyze a socially and ecologically just future. I also hoped to build work in Canada that uses climate justice and intersectionality framing to address the lack of climate-change research using those epistemologies.

This research makes a small contribution towards addressing a variety of the gaps I have noted as well as creating a jumping off point for future scholars to continue this work. As my research evolved, I focused less on how storytelling is happening in Canada and instead worked with my interviewees on the gaps they see and how climate storytelling can evolve in Canada. Therefore, I don't believe this study contributes to the gap on how climate-change storytelling has happened in Canada so far. However, I do think that this research provides a catalogue of key insights from a variety of storytellers in Canada that can help guide others working on climate storytelling. The data from this thesis can be used as a reference point for further understanding what intersectional climate storytelling is and the key themes that should be present in those works. I also believe my data helps to articulate why intersectional storytelling is important within climate justice work. Others can use this data to identify further gaps or directions for research on intersectional climate storytelling in Canada. Outside of academia, I

hope this work may be a jumping off point to inspire events or workshops to engage students or communities with intersectional climate storytelling. In the next section, I look at what research can be continued from the work I have begun.

Recommendations for Future Research

Similar to my discussion on how we need *all* types of intersectional climate storytelling in Canada, I also think that we need *all* types of intersectional climate storytelling research in Canada. However, I will draw attention to three key research directions I think could be taken on this topic. Firstly, I think a comprehensive analysis of the stories that are being told on climate change in Canada with a critical analysis to what areas of the country and which demographics are being represented is necessary. That is an original direction I had planned for this research before deciding that it was out of scope for the constraints I had around my master's thesis. I think this research could help provide empirical evidence that would allow governments and funding bodies to recognize where more attention and resources are needed on climate storytelling in Canada. Secondly, I think similar work that I have conducted here is needed that can capture the thoughts and ideas of a more diverse set of storytellers from across Canada. My study had a majority of participants from British Columbia because that is where I am based but missed out on representatives from other provinces and all of the territories which is a major gap to be addressed. I believe that gathering thoughts and ideas from more storytellers across the country would be able to add, confirm, and challenge my analysis to make it stronger and more robust. Thirdly, I see a gap in the work on storytelling on climate change in educational spaces

and how that could be integrated with curricula across Canada. These three ideas can provide initial direction for interested researchers to consider within their academic interests.

Arts-Based Methods

At the beginning of each chapter, I included a poem that was based on one of my interview questions. I used the method of research poetry that bases the poems on the interview data. In this process, I also drew heavily on my own personal experience and wrote the poems from my own perspective. The poems were intended to reflect my understanding of the study scope and result in an artistic articulation rather than academic prose. In this section, I share reflections on how this process helped me answer my research question and intentions for this study.

Each method of a thesis is intended to answer some facet the research question. The poems in this thesis are meant to be an example of how intersectional storytelling on climate change can be expressed, as well as connect to visions of socially and ecologically just future. I do not think I could have done this question justice without the inclusion of some form of original storytelling and artmaking within the thesis. As assumption on which I base this thesis is that there needs to be more climate storytelling. Therefore, I believe that I achieved that goal by including these poems. That said, I did not attempt to, nor did I actually, answer the question of this study through my poetry. It was not intended to offer answers, rather it served the purpose of articulating the importance of sharing examples of climate storytelling and research poetry. I still feel that arts-based research is critical to conduct when studying arts-based topics, however due

to its open interpretations, there are pros and cons to its inclusion in academic study. I share my thoughts on how I would improve my pursuit of this methodology in the following paragraph.

Upon reflection, I have some thoughts for ways I would connect this process differently in the future. I don't feel that the placement of my poems throughout the study necessarily resulted in a clear and congruent experience for the reader. I present three poems before the reader arrives at the results of the study data in chapter three. Without the context of what the poems are based on, I wonder if they may be at best misplaced or at worst distracting and confusing for the reader. In future iterations of this work, I would like to place the work that is based upon the results after the data is presented, perhaps in their own chapter or as a conclusion to the thesis. I also feel that I left too long between the time of conducting my research interviews and writing the poems. While I used my transcripts as reference and inspiration, I think that they could have been more clearly connected if I had coupled these processes. I conducted my interviews in February and March 2024 but wrote the poems in April and May 2024 as I concluded the drafting of my thesis. I also think that because I wrote the poems in first person with some personal anecdotes, they may not appear to be as directly linked to the research data as I intended them to be. I did not want to exactly borrow the words on my interviewees and fell into first person writing as a personal preference. Therefore, I do not know if they are as clearly in reference to the study data as they could be. With that being said, I felt that this methodology reflects my focus on more diverse ways to approach climate storytelling and is well worth including in my research. I hope it encourages other researchers to be creative and explore alternative expressions of data in their research.

Limitations

Due to the scope and design of my study, I have a variety of limitations to note. My study only interviewed eleven storytellers across Canada that represented British Columbia, Alberta, Ontario, and Nova Scotia. This small number of people and minority of provinces and territories in the country that are represented limits the transferability of my study results within Canada. As well, this sample limits the transferability of my results to other countries since I only spoke to people that are living in Canada who are focusing the majority of their work on the country. With those limitations, I also did the majority of my research for interview subjects online which excludes storytellers that may be publishing their work on other platforms that I failed to review such as print-only magazines, radio shows, or podcasts that do not have an online presence. My research is also limited by the relatively small scope of previous literature on the topic that restricts the scholarship that I have to learn from and base my work off of. For example, I created a working definition of intersectional storytelling that I used for this research and to identify my study subjects but there is not a widely established definition of intersectional storytelling that I could use as a reference. That being said, I did reference an organization that has provided their own definition. Without a standard definition, this could create oversights or missteps based on my limited experience as a young academic. Despite taking measures such as intracoder reliability and member checking, I am limited in my research by working on this project individually without the opportunity to have my results coded by other researchers. As well, in my study design I chose to use a theory-informed methodology that is informed by ecofeminism and intersectionality. These theories limited my way of seeing the research and alternative

frames such as ecocriticism or narrative theory could create different outcomes. Finally, I chose to not include a discussion on the power of storytelling to spread misinformation on climate change. This side of the conversation on climate storytelling is critical to advance in future work but did not fall within the scope of my current study. These limitations are related to the scopes, design, reference research available, and my individual approach.

I also want to make a note about the accessibility of this research. Due to the guidelines of a thesis, this research is written at a post-secondary reading level with a litany of references to research terms and knowledge that I found perplexing and difficult to comprehend only two years ago at the beginning of my masters. I want to improve the accessibility of academia and ensure that this research is understandable to readers without needing to spend two years studying this topic. In that vein, I intend to create distilled versions of the knowledge captured here and my results after the thesis has been published to increase its opportunity for reach and impact. I do not have concrete plans for this yet, but I can imagine either blog or social media posts that are dispersed through my personal website and channels. I would also love to curate an anthology of climate-change storytelling that uses the principles I have studied here to expand the available library of Canadian climate stories available in the zeitgeist. I will do my best to follow my own storytelling recommendations to practice what I have suggested. With that being said, I will still be sharing my work in English as that is my only language of written proficiency. I hope that this note inspires other academics to make similar considerations for the accessibility of their research beyond academic communities.

Final Thoughts

We are always telling stories. They shift, evolve, and transform as we do. Stories shape the possibilities we see for ourselves. The possibilities we see for each other. If the world is a good place or bad. Nature can be a sanctuary or stockade. Stories create our beginning and end. Stories can let us begin again on climate. We are all storytellers. And I can't wait to see what stories we tell next.

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Appendix A: Interview Guide

Introduction

1. Greetings and Gratitude

- a. Ensure the participant is comfortable and any accessibility needs are met (i.e. seating, having a drink/snack, any other needs)
- b. Remind the participant that the interview can be stopped at any time
- c. Introduce myself and an overview of why I am doing this research
- d. Provide an overview of my research project
- e. Share gratitude for their participation and presence

2. Interview Procedure

- a. Clarify the length of the interview (likely 60 to 90 minutes)
- b. Clarify how the collected data will be used and protected
- c. Gather declared consent from the interviewee that the interview may be audio-recorded and the collected data may be used

3. Interview Questions

- a. Getting to know the participant
 - i. Tell me about your storytelling practice
 - ii. What stories have you been called to tell in the past? What stories are you called to tell now?
- b. Learning their perspective

- i. What is your perspective on the use of storytelling in environmental communication?
 - ii. What is your perception of how effective storytelling on climate change has been in Canada to date and why?
 - c. Looking to the future
 - i. How do you want to see environmental communication evolve in Canada?
 - ii. What do you envision for the future of your storytelling practice in an era of evolving climate change?
 - iii. How do you think storytelling on climate change in Canada can be improved?
4. Thank You and Next Steps
 - a. Thank the interviewee for participating
 - b. Clarify what follow-up communication will be sent
 - c. Ask if they would like to be sent a copy of the transcript for any clarification or editing they may wish to do

Appendix B: Information Letter

Royal Roads University

[Insert Date]

Dear *[Insert Participant Name]*:

This letter is an invitation to consider participating in a research study I am conducting as part of my Master of Arts in Environmental Education and Communication (MAEEC) degree requirements in the School of Environment and Sustainability at the Royal Roads University. My study is titled '*Heating Up The Conversation on Climate Change Storytelling in Canada*'. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

My study is in response to the simultaneous crises of the climate emergency and environmental communication in Canada. As environmental issues have grown over the years, the responding communication has failed to be inclusive nor effective in galvanizing action from the public. As a communicator and researcher, I am seeking to explore the power of storytelling as an environmental communicator's strategy within the context of making environmental action in Canada more inclusive and welcoming. The purpose of my study is to investigate how storytellers in Canada are practicing intersectional storytelling with the goal to provide suggestions for what kind of climate change storytelling is needed in Canada right now to catalyze a socially and ecologically just future.

[Insert section on why that person has been invited to participate]

Participation in this study is voluntary. It will involve an in person interview of approximately 60 to 90 minutes in length to take place in a mutually agreed upon location or conversely over Zoom. You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this study and you will have up to two months after your interview date without penalty by advising the researcher of your wishes. With that being said, at any time up to publication of the study, you can decide to be identified or anonymous. With your permission, the interview will be audio-recorded to facilitate the collection of information, and later transcribed for analysis. Shortly after the interview has been completed, if you wish, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points. The total time for all communication, the interview, and follow-up review required for your participation will be three hours.

At your preference, your identity may be identified or remain confidential. If your identity is confidential, a vague description of your storytelling work will be provided to qualify your participation in my study. You will be given the opportunity to review and approve this anonymous description of your work. If you prefer to be anonymous, you will be assigned a pseudonym and your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. If you consent to be identified, your name will be included in the final, publicly published thesis materials.

Data collected during this study will be retained for at least 5 years in secure digital files on a password protected computer stored in a secure home office space. I will use the RRU student zoom license that ensures data is only stored in Canada. As the only researcher associated with this project, I am the only one that will have access. There are no known or anticipated risks to you as a participant in this study.

Please note that participation in this study is in no way related to any economic or work opportunities or obligations. Your participation in this study is strictly related to my academic pursuits and does not create any obligation outside of the researcher-participant relationship.

For all other questions or if you would like additional information to assist you in reaching a decision about participation, please contact me by email at teghan.acres@royalroads.ca.

I hope that the results of my study will be of benefit to the environmental storytelling community across Canada and beyond, as well as the broader research community. As a token of gratitude for your participation in the study, you would receive a \$50.00 honorarium.

I very much look forward to speaking with you and thank you in advance for considering to provide your assistance in this project.

Yours sincerely,

Teghan Acres

CONSENT FORM

By signing this consent form, you are not waiving your legal rights nor releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities. Please note that you can indicate consent through email if you do not have a printer or electronic signature software.

I have read the information presented in the **information letter** about a study being conducted by Teghan Acres of the School of Environment and Sustainability at Royal Roads University. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio-recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research, with the understanding that the quotations will be identified or anonymous at my discretion.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

I am aware that by consenting to participate in this research, I am not waiving my legal rights in the event of any research-related harm.

This study has been reviewed and received ethics clearance through a Royal Roads University Research Ethics Board. If you have ethics questions contact the Office of Research Ethics, at **ethicalreview@royalroads.ca**. You may also contact my supervisor, Dr. Geo Takach at geo.takach@royalroads.ca or the MAEEC Program Head, Dr. Hilary Leighton, at hilary.leighton@royalroads.ca.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

- YES
- NO

I agree to have my interview audio recorded.

- YES
- NO

I agree to the use of identified quotations in any thesis or publication that comes of this research.

- YES
- NO

I agree to the use of anonymous quotations in any thesis or publication that comes of this research.

- YES
- NO

Participant Name: _____ (Please print)

Participant Signature: _____

Date: _____

Appendix C: Examples of Climate Change Storytelling

Pieces, platforms, and storytellers of intersectional and climate change stories were referenced throughout the research interviews and are provided here as a reference list for others looking to explore works on this topic.

- [Atmos Magazine](#)
- Betasamosake Simpson, Leanne and Maynard, Robin: [*Rehearsals for Living*](#)
- Bleck, Nancy, Dodds, Katherine, and Chief Williams, Bill: [*Picturing Transformation: Nexw-Ayanstut*](#)
- [Climate in Colour](#)
- Denny, Angela, Denny, Shelley, Garden, Emma, and Paul, Tyson: [*The Oyster Garden: Kiju' Tells Her Story*](#)
- [Earthrise Studio](#)
- Johnson, Ayana Elizabeth and Wilkinson, Katharine: [*All We Can Save*](#)
- [For the Wild Podcast](#)
- George, Ruben: [*It Stops Here*](#)
- Gosh, Amitov: [*The Great Derangement*](#)
- Gosh, Amitov: [*The Nutmeg's Curse*](#)
- Klein, Naomi: [*This Changes Everything*](#)
- [Laboucan-Massimo, Melina](#)
- Liboiron, Max: [*Pollution is Colonialism*](#)
- Miracle, Lee: [*My Conversations With Canadians*](#)

- [Morin, Brandi](#)
- Nadine, Spence: [*Honouring Our Grandmothers Healing Journey*](#)
- [Narwhal Magazine](#)
- [Our Grandmother the Inlet Film](#)
- [People of a Feather Documentary](#)
- Saul, Graham: [*What are environmentalists fighting for?*](#)
- [Slow Factory](#)
- [Sterritt, Angela](#)
- [Todd, Zoe](#)
- [Ukai Projects](#)
- Wray, Britt: [*Generation Dread: Finding purpose in an age of eco-anxiety*](#)