Exploring Plant-Human Relationships Among Indigenous University Students Using a Circle Method

by

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ABSTRACT

EXPLORING PLANT-HUMAN RELATIONSHIPS AMONG INDIGENOUS UNIVERSITY STUDENTS USING A CIRCLE METHOD

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Objectified in mainstream society, plants are often undervalued for their essential roles in ecological and human health, undermining efforts to protect their habitat. Traditionally, many Turtle Island Indigenous cultures have views of plants as autonomous beings that are as worthy of respect as any human. Colonialism and climate change have threatened this relationship. What do plant and human relationships look like today amongst Indigenous students at the University of Guelph? A modified sharing circle method was devised for specific, professional use in landscape architecture. This was used to collect stories from participants. Nineteen questions were asked of participants and resulted in a key finding that connection to the land is an essential factor in Indigenous people reclaiming their identity and culture. Plants act as a doorway for this to occur, providing a sense of safety and vital physical, social, emotional, and spiritual health benefits.

DEDICATION

For my late grandmother, Joyce Bellerose, who has unknowingly always been the key connection to my homeland and the riches found within that connection.

And for my late roommate, Susan Ellig, who welcomed me into her family home and offered me a place of safety and comfort while I worked and studied in Guelph.

See you both among the stars.

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Somehow, relationship has become a central learning in my life over the past few years, academically, but personally also. As such, I have to acknowledge the community around me that has brought this research to life. It does not feel like ‘mine.’ Rather, it feels like a team effort that is only one thread in a large fabric of work aimed at making things better here on Earth. I have found nothing but support during this degree program. This includes support from humans and more-than-humans that have all taught me valuable lessons along the way.

With gratitude, I want to acknowledge my advisors, Professor Sean Kelly and Dr. Karen Landman, for their patience, work, and support of this research. I have to thank Dr. Martin Holland for mentioning ecological grief in class. That brief comment, and several conversations we had, opened a door to a whole new world for me. Further, there are so many to thank within the community of the University of Guelph, the local Indigenous communities who have supported my (unexpected) cultural awakening with such care, as well as Carizon, Jennifer Ball and Deborah Carson for my circle keeper training. Thank you for the support and abundance I have enjoyed while living and learning on your lands.

LAND ACKNOWLEDGEMENTS

I want to acknowledge the Earth, Water, Sun and Wind who all emerged first, provide the basis for life on this planet, and still cradle all of us in our daily lives. Next, I want to acknowledge the flora and fungi that, over billions of years, consistently did their work, transforming Earth in many ways for other life to grow and thrive. Next, I want to acknowledge the fauna that came before humans, for their work, wisdom and collaborations with flora and fungi to create a world that allowed humans to thrive. Next, I would like to acknowledge the First Peoples of this land who, for thousands of years, stewarded the land with wisdom, care, and humility. These people include the Anishinaabe, Mississaugas of the Credit, Haudenosaunee, the Neutrals, and the Metis people. It is with thanks to them that I, as a guest to these lands, have been able to work, learn, play and live with great abundance. Maarsi, and may I give back to you in equal reciprocity what you have given me.

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1 Introduction

Generally speaking, plants are objectified beings that are undervalued for what they offer humans in many places around the world. It is normal to refer to them as ‘it’ and, in professions like landscape architecture, they are often called plant ‘material.’ These point to what characterizes the current relationship between plants and humans in those situations. This, however, has not always been true and is not true everywhere. Indigenous peoples around the world, and those who work closely with the land, often hold the view that plants are persons, have agency, intelligence, discretion, and wisdom which humans can learn from. Tied to this is a recognition of what I will be referring to as *Earth emotions*, a term I am borrowing from Glenn Albrecht. As an emerging realm of research, Earth emotions are largely unrecognized by the general population. However, with the increased presence of climate change, research about this is beginning to gain traction and awareness in a variety of fields. In the realm of landscape architecture, it is still mostly unacknowledged. Some of the challenges of why this is will be explained in this work. Regarding climate change, Indigenous people are often some of the most affected by climate change and the resulting Earth emotions. Tying all these points together, a research project emerged.

In this thesis I will be exploring what plant and human relations are like for a group of Indigenous people at the University of Guelph. During this work I will be referring to Indigenous people frequently, and when I do, I am referring to the Inuit, First Nations and Metis people of Turtle Island. The aim of this exploration was to uncover what more-than-human relations look like for a small group of Indigenous people, what Earth emotions are present, or not, and what other factors contribute to those dynamics. That Indigenous people were chosen for this means that political issues are inherently involved in the exploration. Colonization and reconciliation factor heavily in this research, both of which are intricately tangled within the relations of Indigenous peoples and plants.

The method used for the data collection was a specific form of sharing circle. The significance of this is explained below. This method was crucial to the structure of the research and the resulting data that was collected. Different in origins from interviews or focus groups, the circle method was also used in an exploratory way to determine how it is best suited to use in the profession of landscape architecture. Ideally, this method would be used in the community engagement stage of the design process. However, I would hope that anyone trained and interested in using this method would look for opportunities to utilize it wherever possible, even between landscape architects and allied professions.

This thesis will begin with a statement of positionality, and some initial disclaimers that acknowledge the entanglement of politics and activism that is part of this research. These are followed by Chapter 2 Literature review on topics that relate to plant-human relationships, Chapter 3 Methods used, Chapter 4 Results and Analysis and, finally, Chapter 5 Discussion and the Conclusion.

1.1 Positionality

My name is Tiffany. I was born and raised in Amiskwaciy Waskahikan/Beaver Hills House/Edmonton, Alberta, on Treaty 6 territory. My mother is of Ukrainian and Metis (French and Cree) heritage with her European ancestors arriving on Turtle Island in the 1700’s. My father is of Scottish and English heritage, and his ancestors arrived in British Columbia in the early 1800’s. Both of my parents come from humble backgrounds and worked hard in their lives to give my sister and I a good start, with a strong and healthy foundation in our family.

I am a Metis woman. Growing up, I always knew my heritage, but was never encouraged to embrace my Indigenous side. In fact, I was taught to suppress it, ignore it, and only ever heard negative things about being native. I was taught unconsciously that to be Indigenous was shameful, painful, and frankly, dangerous. If people asked what my ethnicity was I simply told them I am French and Scottish. I was raised cut off from family and traditions that are mine to claim and often felt ‘cultureless’ compared to

my peers who have newer roots in the country, or a clear and strong heritage, or were immigrants. How can I, someone who has deep heritage here, feel like I do not belong?

I was 30 years old when I realized the answer was colonialism.

Only when I found enough courage in myself to embrace all of who I am did I begin to unravel pieces of myself and my family that never made any sense before or laid hidden away in our hearts. Embracing my Metis heritage has been simultaneously terrifying and empowering. I was lucky to decide to embark on this journey at likely the safest moment in Canadian history to do so. The discovery of unmarked children's graves in a Kamloops residential school in 2021 sent off a wave of awakening across the country to the horrifying truths of the residential schools and other colonial legacies in Canada. Since then, there has been a swift growth in sensitivity to, and reception of, the traumas that Indigenous peoples have endured and still endure. This, totally unplanned on my part, coincided with the year in my life that I decided to actively embrace my Metis heritage. After having discussions about this with others who have a similar story to me, it has become clear to me that our Ancestors have spoken; it is time we stop hiding and stand tall in who we truly are.

This is easier said than done. I have been actively taking steps to learn about my culture, First Nations and Inuit culture, the legacy of colonization in North America and other countries in the world, and what this means for Indigenous people today. To say the least, it has been incredibly perplexing and inspirational for me.

I have been so fortunate to have found myself in some very safe company, with people and organizations who are open to listening to these challenges, with those who are on a journey similar to mine, and those who want to be an ally to Indigenous people. With utmost gratitude to these people, I have been able to begin to come to terms with how colonization has affected me. Being safe enough to feel, for the first time, the danger, fear, shame, guilt and confusion about my Indigenous heritage has been cathartic and eye-opening. It took a high level of safety for me to realize, feel and know

in my bones how deeply colonized Canada is, how colonized those who call Canada home are, and how negatively absolutely everyone on this land is affected by this legacy. It took a high level of safety to feel the pain that I carry, that I was taught to ignore and suppress, to be ashamed of. This pain is only one instance of intergenerational trauma. I carry the pain of my mother, my grandmother, all of my ancestors who experienced racism, poverty and violence beyond what I could imagine.

I come to this work keenly aware of my position and how little I really understand about Canada's history or my own history. It is confusing to realize that colonization has taken away part of yourself, has caused so much harm to my family, and irreversibly impeded the flourishing of many of my family members.

Yet, I write this with more hope than I imagined possible in my lifetime. I have hope for reconciliation, for two-eyed seeing, for broken relations to be mended, for healing and safety. It will be a long journey to that end, but it is in sight for us. I hope that this thesis is merely the first step on my own journey in participating in this evolution.

1.2 Politics

This work has come about in a political climate in Canada that is, as of 2023, very sensitive to the historical strife between settler-colonial and Indigenous relations to a degree that has not, historically, been felt before in such an open, receptive, and public manner. With the discovery of 215 children's remains in a Kamloops residential school graveyard in spring 2021, the country has experienced a sweeping surge of activism and advocacy for the struggles and traumas that Indigenous people have endured at the hand of colonization. This has opened the door for many Indigenous people to step forward and claim their identity, their history, their pain and strength at a level of safety that, though delicate, has never been felt in the country before.

With this in mind, I want to situate this thesis and the intent behind this work. As an Indigenous person of Canada, I have put tremendous thought and care into how to

undergo this project in a way that, at the least, does not cause further harm to any Indigenous community or person and, at best, is a small contribution to the healing that is needed in this country. I have written this work with trepidation, understanding that I do not know the whole story, that there is deep pain, shame, anger, and perplexing mixes of emotion that can easily arise when discussing such a sensitive and contested situation. I write with trepidation also because I am personally intertwined with this situation. I also experience the fear, shame, and perplexity of emotion when considering where I stand in the bigger picture, where my family stands, and am continually unfolding what it means for me to be a white-presenting, Indigenous woman who grew up cut off from her heritage. It is shocking to suddenly realize, at my age, how deeply colonized Canada and Canadians still are, how detrimental this is to everyone who calls Canada home, and what the repercussions of this system are causing. So, I write knowing that I do not know very much, I have so much more to understand and learn and I recognize that there is so much that I will never understand about what many Indigenous people on Turtle Island have endured. However, I choose to write and to use my voice. I choose to reclaim my heritage and my identity. I choose to offer my skills and time to help in healing the broken relationships in this country for all people who call Turtle Island home to thrive as peacefully as possible.

1.3 Activism

Given the nature of the methods used in this project, specifically the talking circles, it is appropriate to situate this work in the realm of activism. Many ‘alternative’ types of research are branded as being boundary-pushing and on the edge of what is considered acceptable and valid research. Talking circles rely on embodied knowledge and storytelling as the primary forms of data production. Both elicit knowledges that are difficult to distill into clean, coded, and categorized data that can fall into established research frameworks or systems. Also, being Indigenous focused, politics are inherently intertwined with this work and this must be clearly noted and acknowledged. As someone new to research, and still learning about many foundational aspects to

academia and research practices, I want to make it clear that this work is not intended to take up a specific political or activist position. I recognize that I carry my own biases and worldviews into this project. However, I am not seeking to claim any position that risks siding with one position over another. This work is intended to be exploratory only, an investigation into the current fabric of the topics and structures that are part of the project and broader research. I want it to be known that I see how easy it can be to side with this or that position, to claim to be an activist, or to be pushing established research boundaries, but this is not my intent. This thesis is primarily about learning and developing the skills and resources needed to give back to the communities that enriched my life so deeply.

1.4 Justification For This Research

At the heart of my work, what I am hoping to chip away at over the course of my career, is to begin to change our relationships with everything that is not human. The characteristics that constitute the Western worldview is severely out of balance. It is still tangled in the mechanical worldview of the Industrial Revolution, of colonization and capitalism, and other factors that have cut us up into pieces and fragmented us in myriads of ways. This worldview is hurting everyone. I alone can do so very little in this life. However, I can be one capillary in a root system that is slowly changing the dynamics of the human species into a heathier version of itself. One where humans are no longer seen as separate or dominant to other species, or to nature as a whole, but intricately integrated into life and responsible for maintaining the health of the world. My work is to stand up for all nonhuman life and give them their voices, their dignity, their homes, health and lives back, bit by bit.

There are several key research gaps that this thesis can be situated in. One of the primary gaps is the relationship between, and understanding of, plants and humans. As will be explained below, plants, more than other more-than-human life forms, are still viewed by many as objects, treated and understood as objects, researched as if they are senseless machines operating to a code that they have no agency in acting in

divergence to. There is a growing body of literature in Western academic spheres that is challenging this and taking up alternative views of plants, many of which are inspired from Indigenous cultures.

Another significant gap that this work dabbles in is the growing need for a place, space and vocabulary to express the wide range of Earth emotions that humans are dealing with at an increasing level of breadth and severity. With the devasting extent of development, industrialization, and the ongoing, growing effects of climate change, there is a swiftly growing need to help people cope with, understand, overcome and find inspiration with these emotions and experiences. It will also be necessary to connect those who have had similar experiences and help build community or communal support systems in these situations. Like other mental health challenges, the feelings of isolation can be devastating to an individual's health which has ramifications to the community that the individual lives in.

A third gap that this research is situated in is the complex place of Indigenous reclamation, reconciliation, and the intersection of these with the profession of landscape architecture. This is inherently a political position, but this thesis does not seek to engage in an overt political stance. The focus here, rather, is on what professionals in the field of landscape architecture can do to support Indigenous reclamation, reconciliation and decolonize as many design practices as is possible with each new project that practitioners undertake. As a land-based profession, it cannot be stressed strongly enough that the leadership role that these professionals have must be taken with utmost seriousness in their work on reconciliation and decolonization. Their roles as leaders in society is paramount to affecting change in a robust, holistic way that paves a path for others to follow suit, to take up and utilize in their own work. This position of leadership is an incredible opportunity as much as it can be a heavy burden. However, where there is a significant challenge there exists it a potent opportunity. In this case, I firmly believe in the potential of talking circles as one means to affect this type of change in the profession.

This may sound underwhelming. Talking circles? How does sharing our feelings create meaningful change in society and institutions? When was the last time you felt safe enough to share exactly what was in your heart, however you were feeling that day, without judgement, and to be heard fully, deeply and received in such a way? I would make a guess that you cannot remember a time, you were too small to remember it in any significant way, or it was only a fleeting moment in your life. Now, imagine a room of professionals, leaders of society, able to speak from this place in themselves, able to be vulnerable, emotionally intelligent enough to hold space for those that they seek to help. The intent is not to be a therapist. If circle training has taught me anything it has taught me how rarely we are ever allowed to show up as a whole person, mind, body, heart and soul, and how detrimental this is to our relationships in every part of life. These relationships include our more-than-human kin. Think for a moment how terrified we are to be vulnerable with a new acquaintance, with our siblings or parents, with our partners. If we do not even feel able to connect to ourselves fully, how are we expected to connect with our partners or close friends in this way? How are we supposed to build relationships founded on the best characteristics of being human?

Far from solving any of these problems, this thesis simply brings further attention to these matters, but through the lens of landscape architecture, and aims to offer possible routes of further investigation on these topics.

1.5 Research Goal

The research goal of this work is: exploring plant-human relationships among Indigenous students at the University of Guelph using a circle method.

The focus of the investigation was to determine what characterizes these relationships today, in the group selected. This includes how these relations may impact the participants culturally, environmentally, and personally. Essential to this was assessing what Earth emotions were present and how these emotions may be impacting their lives.

The second goal was to establish a circle method and methodology that landscape architects can use in practice, specifically for community engagement. The intent behind this is to improve practitioners' ability to help the communities they are serving in ways that are not currently standard practice.

Together, these objectives could be used to create planting plans and design solutions that can better serve the communities that practitioners are working with, with particular focus on Indigenous communities, reconciliation, reclamation and decolonization.

This study has been approved by the University of Guelph Research Ethics Board, with certificate number REB# 22-10-005.

2 Literature Review

2.1 More-than-human

The Anthropocene is a term that has gained great popularity to describe the times we are all living in. Rightly so, this term is characterized by the undeniably destructive and far-reaching impacts humanity has had on the entire planet (Albrecht, 2019, Ch 3). The root of this destruction is up for debate, but it is largely understood to be caused by the dominance of the Western worldview that spread with colonization across the globe over the past several centuries (Albrecht, 2019; Smith, 2021). This influence emerged over time with several main factors contributing to its rise. One of the earliest influences is from early Christian teachings. These teachings described nature as a gift from God to humankind, to be used by humanity as they desired. The natural world was understood to be of lesser value than humanity and over time it was treated as such (Franklin, 2017). Plants, in many instances, are not commonly acknowledged by the masses as worthy of respect and care because of this, though many people do, and historically have, recognized them as such. The same can be said in other major religions (Manusco & Viola, 2015, Ch 1). By the Renaissance, a philosophy called Humanism had developed that left a significant imprint on the Western worldview. Humanism is a philosophy that centres humans as the most highly valued and superior life form, the worthiest of attention, care and protection (Franklin, 2017). This world view informed much of the advances that were being made in Europe at this time and in the early modern period. Simultaneously, as is suggested in various pieces of literature, Christian religions have informed Western science to a significant degree, with science taking up a strict, materialist view of existence and its exploration. This was a noteworthy factor in the emergence of this understanding and has perpetuated a humancentric worldview prominently in Western societies and beyond (Albrecht, 2019; Manusco & Viola, 2015, Ch1; Franklin, 2017).

Then came the Industrial Revolution. This revolution caused a significant shift in Western worldviews, one that is still felt and lived out today. The Industrial Revolution is

defined by attitudes of materialism, individualism, mechanization, and commodification of natural resources and other life forms. This resulted in the widespread disrespect for life, including the lower human social classes and people considered 'other' (Albrecht, 2019, Ch 3). These influences merged into a worldview that objectified, commodified, and 'othered' all nonhuman life and all natural resources, as well as peoples who lived in ways far outside what was considered cultured and advanced in European societies.

This worldview persists today and has characterized the way that Western societies have developed infrastructure, advanced technology and society, and has informed the popular opinion on how to relate with more-than-human life. This world view is binary in its understanding of how humanity fits within existence. It is a view that is fixed and singular, where what is created by humans, including urban centres and culture, is exclusive from all else in nature (Franklin, 2017; Albrecht, 2019; O'Gormon, 2020). Common manifestations of this include narratives in popular culture that pit man against nature in a quest for dominance and control over the natural world. Today people still see nature as somewhere to visit, gawk at the beauty of it like a spectacle, and then return home to a what is understood as a primarily human and urban setting, somehow separate from nature. This reflects the binary understanding of 'us' and 'other' (Franklin, 2017; O'Gormon & Gaynor, 2020). Some of the ramifications of this will be explored throughout this thesis.

The consequences of this dominating worldview are unmistakable today. Pollution of many kinds has reached even the most remote and uninhabitable places of Earth. The loss of and risk to biodiversity over the past 60 years has been devasting, with one million species of flora and fauna currently at risk (Cunsolo et al., 2020; Intergovernmental Panel on Climate Change [IPCC], 2022). Climate change, and the extreme weather it brings with it, has been felt globally with the global south, those at the bottom of the social strata, and Indigenous peoples often the most severely impacted (Cunsolo et al., 2013; IPCC, 2022). Some experts even propose that climate change should be framed as "the biggest global health threat of the 21st century" (Cunsolo et al., 2013). Many researchers also assert that we are currently in the Earth's

sixth mass extinction, a dire situation that has been solely caused by thoughtless human activity (Cunsolo & Ellis, 2018). Development of urban centres and human infrastructure crisscrossing the globe in the forms of roads, railways, shipping and air routes, and internet cables have destroyed or fragmented most ecosystems on the planet, to the detriment of both humanity and all other life forms. Many other dire consequences exist that are challenging the health and balance of everything on the planet.

Such a domineering worldview makes it exceedingly difficult to find and construct a different way of living in, relating to, and understanding the Earth and all her inhabitants. However, there are many people who are doing just this type of work.

Some inspiring developments are arising globally that aim to fundamentally change humanity's relationship to the rest of life and with this planet. Many of these initiatives are led by people who, in some form, care deeply for life and the systems that support it. Often these people have grown up with, or live or work in, close connection to the land and sea and are some of the first to feel the impacts of climate change and the Anthropocene (Barnett, 2021; Cunsolo & Landman, 2017; Cunsolo et al., 2013). Something that defines the work these people are engaged in is an understanding and valuing of what is more-than-human, a term first created by David Abram (O'Gorman & Gaynor, 2020).

Increasingly, people from diverse disciplines, and all walks of life, are beginning to connect or reconnect with the understanding that humanity *is* nature; we are not a separate, alien species, and that we depend entirely on all other life forms on the planet. Such a binary view is, after all, fairly new in human history. This includes increasing scientific evidence that every creature and plant and fungus has its role to play in maintaining a healthily functioning ecosystem and climate, from the micro to the macro (Albrecht, 2019; O'Gorman & Gaynor, 2020; Franklin, 2017; Barnett, 2021; Hall, 2022). More researchers are toying with concepts like *entanglement* to explain how interconnected and interdependent the vast diversity of species is, including humanity

(Panelli, 2010; Franklin, 2017). It is not difficult to imagine how, for example, that without the existence of trees alone how devasted our societies would be and how devastated many ecosystems would be. The impacts would be colossal.

As more research is put into more-than-human perspectives an abundance of evidence emerges to support the significance of this type of worldview over a binary, hierarchical and humanist one (Albrecht, 2019; Franklin, 2017). A common thread through much of this literature is that relationships and cooperation are a dominant force in the more-than-human world understanding (Albrecht, 2019; Franklin, 2017; O'Gormon & Gaynor, 2020; Hall, 2022). Rivaling the scientific status quo that evolution is a fierce competition of survival, this evidence supports an ontology that life is based far more on cooperation and teamwork than on competition (Albrecht, 2019; Manusco & Viola, 2015). Tree-fungus relationships is an example of some of the most compelling current research about these cooperative strategies (Simard, 2009).

The significance of this understanding is its foundation in *relationship*. Without long-standing and carefully nurtured relationships between species many of their survival successes would be impossible (Albrecht, 2019; Manusco & Viola, 2015). Furthermore, this understanding is something that most Indigenous societies still hold in their worldviews today and are often foundational to their way of life and culture (Brown & Strega, 2015, p 30). Increasingly, people are turning to traditional Indigenous teachings and wisdom, conservation and harvesting practices, as well the enormous knowledge still held, sometimes only by a thread, in these groups. Unfortunately, colonization and industrialization has disturbingly extinguished, or nearly extinguished, these knowledges, traditions, and worldviews. More about Indigenous concerns will be explained below.

What is essential to recovering life during the Anthropocene is finding solutions and changes that will help to reverse or heal the wrongs that humanity has inflicted and regain a balanced, cooperative relationship to our more-than-human siblings. This work involves a reimagining of humanity's place on earth, a revaluing of more-than-human

life, and reconsidering how we describe and document history (Albrecht, 2019; Cunsolo & Landman, 2017; O'Gormon & Gaynor, 2020; Panelli, 2010; Hall, 2022; Manusco & Viola, 2015; Cunsolo & Ellis, 2018; Cunsolo et al, 2013). This also encourages a leap of faith, or as Barnett explains, "…to trust in processes older and wiser than the ones humans have developed" (O'Gormon & Gaynor, 2020). When we do so, we begin to see how entangled and interdependent we are with all life on Earth.

An impediment to this work is language itself. Language is understood to be a framework that supports specific worldviews (Albrecht, 2019; Cunsolo et al., 2020; Cunsolo & Landman, 2017; Brown & Strega, 2015, Ch 1). With colonization and globalization, English has become a dominating language on the planet, along with several other languages. English lacks a lexicon for describing emotions outside of human-human interaction and is largely industrial in its vocabulary, which upholds the binary worldviews that are so prevalent in Western cultures (Cunsolo et al., 2020; Albrecht, 2019; Craps, 2020). There has been a loss of hundreds of languages, and an endangerment to hundreds more, across the planet as globalization has taken hold in nearly every part of the world. With these losses includes the loss of knowledge, tradition, diversity and worldviews that all carry an array of wisdom and solutions that could be beneficial to regaining the health of the planet as a whole (United Nations, 2022). This includes how we feel about more-than-human life and our ability to describe, or not, those feelings and emotions. As Albrecht states, "Along with the death of languages that describe the Earth comes the death of the earthly yet largely anonymous emotions that go with them" (Albrecht, 2019, Ch 3). Some work is being done to address this issue, however, and to help people describe more accurately their emotions and feelings about everything more-than-human.

Glenn Albrecht and Robert McFarlane have been at the fore front of reclaiming and establishing a lexicon to support the structuring of a new world view in western societies, uplifting those with these types of worldviews, and to assist people in navigating, understanding, and expressing the emotions that come with this and with the consequences of the Anthropocene. Broadly, these can be called Earth emotions, a

term I am borrowing from the title of a book by Albrecht (2019). In this book Albrecht describes and explains how each word has been developed, as well as its significance in the broader context of the Anthropocene. Many of these terms describe negative Earth emotions, like *toponesia*, *ecoagnosy*, *mermerosity*, and *environmental generational amnesia*. Others are positive, such as *endemophilia*, *topophilia* or *eutierria* (Albrecht, 2019, Ch 3-4). Significant to the positive emotions is Albrecht's idea of what he believes we ought to be moving towards, the Symbiocene (Albrecht, 2019, Ch 5). In the Symbiocene, cooperative living is characterized by a careful structuring of human life and civilization in a way that mimics and protects all relations of the planet in life-affirming ways. This, as science increasingly proves, is a far more successful structure than our current philosophies of individualism, patriarchy, reductionism, atomism and industrialization (Albrecht, 2019, Ch 4). Albrecht argues that this can extend to every sphere of human civilization, including politics, justice, economics, and education. Many of these ideas and discoveries have occurred in the past, but as they were female lead, their uptake was repressed in scientific societies.

2.2 Plant-Human Relations

The most common understanding of plants in Western societies is that they are more like objects than a living entity (Manusco & Viola, 2015, p 8). Although science has established that plants are alive, it remains in dominant thought that plants are not capable of feeling, emoting or communicating and simply live mechanistically by genetic code. This is changing swiftly, however, as more researchers and scientists find that this view of plants deeply flawed. Although theories in Western science and inquiry have been created over many centuries about plant life and intelligence, it has taken science until the twenty-first century to begin to seriously and openly consider that plants, of all kinds, are actually complex beings, capable of communicating with other species of flora and fauna, and with those of their own species (Manusco & Viola, 2015; Simard, 2009). Misunderstanding, or a stiff societal worldview, it seems, is still a barrier in our general understanding of plants and this has direct consequences to our relationships with them (Manusco & Viola, 2015; Hall, 2022). The objectification of plants is largely

perpetuated by a zoocentric understanding of what constitutes sentient life. This means that any being without a central nervous system, motor abilities visible to the human eye, and without distinct limbs, organs and body parts with specialized functions, are outside what we consider sentient (Hall, 2022). As a result, plants have been commodified to a degree that has devastated many ecosystems, cultures, and is consequently harming us human as well. This goes hand in hand with the dominant worldview, explained above, that does not yet value more-than-human life, especially that life which is very 'other' than a what a human is.

Science is proving that this view of plants is erroneous. In the world of Western science, we can look back to a few figures who tried to assert that plants are more alike us than we initially believed possible. Charles Darwin is one of these figures (Manusco & Viola, 2015). If you were to take a critical examination of the history of life, of evolution, and of how life split from the initial cells where life began billions of years ago, it becomes obvious that our current understanding of plants is not only grossly skewed but also enormously oblivious to the incredible capabilities and history of plants on Earth (Manusco & Viola, 2015; Hall, 2022, Simard, 2009).

Perhaps one of the easiest ways to understand this is that without plants, fauna life would not be possible as it is today. Plants emerged on earth millions of years ago. They were pioneers on a young planet that transformed the atmosphere, producing oxygen, soils and establishing ecosystems that made mammalian, and all other non-plant life, possible (Manusco & Viola, 2015).

Humanity, by contrast, did not emerge until only about 200 000 years ago, with civilization emerging only about 5000 years ago (Manusco & Viola, 2015). Most of what humanity depends upon for survival, health and to thrive in our own ways, is with thanks to plants. Plants are not machines; they are living beings.

Building off this, it seems reasonable to grant plants personhood (Hall, 2011, Ch 5). This may sound ridiculous to people who do not have much experience or

knowledge of plants, and especially to those with *environmental generational amnesia, nature deficit disorder*, extreme urbanites, or materialist worldviews. However, it is not a new way to view plants. As will be repeated throughout this thesis, Indigenous people have held a view of plants quite different to dominant Western views. This involves the perception and understanding of entanglement with more-than-human beings, including plants, as part of the foundational recognition of relationship between life forms. This sense of kinship is based on a recognition that plants and humans are more alike than different, including the very material substance we are made of (Hall, 2011, Ch 5). This view can be labelled as 'new animism,' which is more than a simplistic view that everything is alive. New animism sees the world as full of sentient persons, and most of those persons are not human, they are the entire community of flora and fauna that is not human. These persons all live in relation to each other, and of course, in relation to humans. This is a "…way of both being in the world and of knowing the world…" (Hall, 2011, Ch 5). In Hall's book, Plants as Persons (2011), he quotes Graham Harvey:

> Persons are those with whom other persons interact with varying degrees of reciprocity. Persons may be spoken with. Objects, by contrast, are usually spoken about. Persons are volitional, relational, cultural and social beings. They demonstrate agency and autonomy with varying degrees of autonomy and freedom (p 105).

This new animism allows humans, especially those of us living in the Western mindset, to listen to other species and learn from them and their lives. Without this humility to slow down, kneel down, and truly get to know others around us that do their work and support us, we will never understand relationship in any meaningful and useful way. As Hall (2011) says:

> The lack of such humility and the failure to harmonize the needs of all types of persons is prevalent in contemporary Western society and has relevance for the current anthropogenic environmental crisis (p 111).

Indigenous cultures the world over often view all more-than-human life as some form of person. I do not want to generalize in a way that lumps all Indigenous peoples together, however; this would be insensitive and harmful to the diversity of cultures and traditions of Indigenous communities that exist. The emphasis on relationships, though, is dominant in Indigenous societies, and many do view plants as persons. In the Anishinaabe nation, in northeast North America, for example, trees are described as people, 'the standing people' (Kimmerer, 2020, p 168). Often plants are treated with immense respect, seen as having great intelligence, wisdom, and autonomy and some plants are also held as sacred and spiritually significant. In part, this has resulted in a powerful sense of stewardship for the land, a deep responsibility to take care of the land and everything that supports a thriving ecosystem so that all life may flourish in a symbiotic way (Baumflek et al., 2021).

Increasingly, scientists are taking note of this. Although unethical actions have occurred where Indigenous knowledge was extracted without any reciprocity, more attention is being given to these traditional practices (Smith, 2021). There remains, however, some major barriers to this, including racism, colonist institutions and structures, lack of research funding and a slow uptake of Indigenous research in academia. More about this will be explained below.

Some significant research gaps exist in the exploration of plant-human relationships today. This is true in various contexts but is noteworthy in a contemporary Indigenous context (Turner, 2020). A deeper understanding of these relationships can aid not only in ecological concerns, like shifting narratives that might help mitigate climate change, but can also aid in reconciliation and decolonization efforts.

2.3 Indigenous

2.3.1 Reconciliation

Reconciliation is a word that, in Canada, is wrought with confusion, fear, anger, determination, hope, and a mix of many other emotions. The Indigenous people of

North America, otherwise known as Turtle Island, have suffered immense wrongs, losses and abuses of many kinds over the past two to three centuries at the hands of European settlers. This clash of cultures, of worldviews, and power led to one of Canada's darkest legacies – deep and persistent colonization. The Canadian government, and the government existing before the founding of Canada, in conjunction with the British Crown, Catholic Church, and other religions, sought to systematically destroy anything Aboriginal and to absorb Aboriginal people into the dominating European society that was rapidly growing. This fierce colonization and the legacy of the residential school system resulted in atrocious actions by settlers and settler institutions against Indigenous peoples. Children were stolen from their families, abused, starved, and many left to die from disease or malnourishment. In general society many Indigenous people faced constant racism, were looked down on as the filth of the Earth, low-lifes, and unintelligent. Intergenerational trauma, poverty and a government that sought to destroy these people and their culture left them vulnerable to substance abuse, prostitution, violence, and other harmful habits that are still felt in many of these communities today (Truth and Reconciliation, 2015).

Truth, however, has a way of making itself known, sooner or later. Despite such a horrific past, and continued racism and suppression, the Aboriginal peoples of Turtle Island survived. Many languages, cultures, and traditions survived, often hanging by a very thin thread. But this thread is enough to follow to back to their roots, their lands, back to their identities, and to a source of strength and community. Reconciliation is essential for any justice or healing to truly occur for these people. It is the responsibility of the Canadian government, all settlers living in Canada, all immigrants, as well as the Indigenous peoples, to work together towards this aim. The pain and the terrors of the past cannot be undone; the future is not yet determined. How we choose to reconcile such opposing worldviews is the work that needs to be done today. We have a choice to create a society and a nation that is truly equitable and just, or not. In this vein, reconciliation is not simply an event, a one-time apology, or a matter of learning

historical facts. It is a process (Lamalle, 2015). It must occur in every part of our lives, at every level of society, in every corner of the country for reconciliation to succeed.

What is needed now is space. Space for those affected by this legacy to be wholly themselves (Lamalle, 2015). This includes the wholeness of their culture, their hopes, their lands as well as their pains, fears and losses. Space is needed for conversation, for sharing stories, for connection to be built and for ‘otherness’ to be overcome as a result (Cunsolo et al., 2013). It is a tall order. It will not be easy. But we all have the capacity to contribute in some way, no matter how small.

2.3.2 Ecological Grief

As climate change continues to worsen and the Anthropocene unleashes its devastation around the world, Indigenous people are often the first and most dramatically affected by it. Many Indigenous communities the world over are experiencing significant disruptions to their traditional lifestyles, cultures and ways of knowing the land, water, and seasons. There has been a great deal of research on the physical aspects of these consequences, but less so on the emotive, spiritual, and psychological (Cunsolo et al, 2013). Many negative emotions about such uncontrollable changes from climate change and the Anthropocene can be summed up in the term *ecological grief* (Cunsolo & Landman, 2017, prologue). Ecological grief is a swiftly growing mental health concern, not just for Indigenous people, but for anyone who has experienced some form of negative disruption to a landscape that they know and cherish (Cunsolo & Landman, 2017, prologue). This can take the form of something like the death of a beloved tree in a backyard, to the loss of entire ecosystems compromised by mining or forestry, for example. A critical issue with ecological grief and other Earth emotions is that there are currently no systems, guidelines, or other to strategies to help people cope with ecological losses in a constructive way (Craps, 2020).

Ecological grief can be grouped into three broad categories. One is grief over physical loss, another over loss of land-based knowledge (especially traditional

knowledge), and the third is an anticipatory loss, or anxiety of what losses are to come (Cunsolo & Ellis, 2018).

For Indigenous people, the disruption in place-attachment can psychologically break a person and a community. This disruption can dismantle the foundation for an individual's identity, sense of belonging, and strength, and the same can occur to entire communities (Middleton et al, 2020). When many instances of this type of disruption occur over time, it culminates into serious mental health issues such as suicide, depression, anxiety and substance abuse. Often entire communities become affected in this way, where significant land and climate changes inhibits the practice of traditional hunting, harvesting and cultural activities that compromise the well-being of the community (Middleton et al., 2020). This also creates a generational gap as many traditions, skills and knowledges cannot be passed along to youth (Cunsolo et al., 2020). It is a terrible cycle.

Grief, however, also points to where genuine love is present. In this case, ecological grief, and other Earth emotions, reveal a care and love for our more-than-human kin, including landscapes and waters, points to our dependence on these beings, as well as our responsibility to them (Cunsolo et al., 2020). Often this grief is a "disenfranchised grief," meaning that it is misunderstood, not discussed explicitly and usually has no end, as the consequences of the Anthropocene continue into the foreseeable future (Cunsolo et al., 2020). Barnett wisely points out that it may be appropriate for us to dwell in this grief, which he summarizes in the term, *gelassenheit*. Barnett speaks primarily as a scientist, from a Western worldview. He posits that allowing gelassenheit, allowing ourselves to dwell in this grief, shifts us into ecologically based thinking. This, in turn, "… can motivate us to transform our relation to the earth" (Barnett, 2021). Or, as Cunsolo explains, the positives that can emerge from understanding more about Earth emotions rooted in ecological losses and struggles include beginning to "…discover and work towards other approaches to understanding, interacting, and connecting with other-than-human bodies" (Cunsolo et al., 2013). This re-evaluation of our relationships to more-than-human life is central to this thesis.

What is needed to aid those suffering from these or similar experiences are spaces to express their emotions, connect with others who have similar experiences, build support networks, connection, and strength in community (Cunsolo et al., 2020; Cunsolo & Landman, 2017). This needs to occur both on and 'off' the land. It is a way to invert something overwhelmingly negative into a source of strength, hope and constructive action (Cunsolo et al., 2013). In doing so we are "[recognizing] that emotions are often what leads people to act" (Cunsolo et al., 2020)

2.3.3 Reclamation

An important aspect of reconciliation is the reclamation of Indigenous land, culture, language and tradition. When Europeans arrived on Turtle Island and began settling the continent, several political documents from the British Crown and Catholic Pope were created that had terrible effects on Indigenous peoples. Two of these documents, created in the 1400's and 1600's respectively, include the Doctrine of Discovery, "terra nullius," and "vacuum domicilium" (Turner, 2020). What these documents did was give Europeans an unwavering sense of agency to claim lands that were without ownership, that seemed wild and untouched by human hands, and begin to settle them and harvest resources as they wished… at least this was the case in the European perspective. What settlers failed to see was that Indigenous people simply had a different way of relating to, interacting with, and managing the land than they did. This had serious, long-lasting effects that are very much alive to this day (Turner, 2020).

What was mistaken was the immense effect that Indigenous peoples had on the land. Unlike European agriculture, gardening, and settlement styles, the Indigenous employed highly sophisticated systems of harvesting, hunting and managing the land. This appeared, to Europeans, to be wild but only because these systems often resulted in a much healthier, holistically managed and flourishing ecosystems than without their intervention (Turner, 2020). Much of this system revolved around the relationship with and knowledge of plants. With the loss of traditional lands many Indigenous groups lost their connection to plants and lost the knowledge, tradition, language and culture that

goes along with those plants (Joseph, 2020). A vital component of reclamation is returning land back to Indigenous people. The recovery of the land will result in the recovery of culture and strength and lead to significant healing. Plants are a vital link in this work.

2.3.4 Decolonization

Along with reclamation, decolonization of many things in dominant society will be an important aid to reconciliation. For the argument in this research, this primarily involves challenging dominant, Western worldviews, and academic and institutional structures. I will use ethnobotany as an example. This field of research took some fighting to emerge as a 'legitimate' study in academic institutions because of its assumption that any work revolving around plants was inherently women's work only and thus considered a lesser or illegitimate path of study (Turner, 2020). Plants, in Western societies, are viewed more like objects, resources to be taken advantage of and used as needed or desired. This attitude inhibited any significant understanding or research of plants to emerge and placed work like ethnobotany in an undervalued position (Turner, 2020).

When ethnobotany did manage to become recognized as a legitimate field of study, it was founded on colonized structures that perpetuated racist, demeaning, and harmful worldviews, knowledge and practices (Joseph, 2020). Contrary to what was understood by ethnobotanists when the field emerged, Indigenous plant knowledge was highly sophisticated, robust, and included incredibly healthy practices for land, flora, and fauna to thrive symbiotically. Something often missed by settlers was even recognizing the importance of plant-human relationships among Indigenous people (Turner, 2020). More about this and Indigenous methodologies will be described below.

2.4 Circle Theory

2.4.1 The Need for Emotional Space

As researchers become more aware of the growing and deep impacts of the Anthropocene on humanity and more-than-human life, there has been a growing recognition of the need for safe spaces to explore the related emotions, connect with others about it, and find ways to move forward in strength and community.

There is a need, Cunsolo points out, to "discuss, honour, celebrate, and ritualize non-human losses… to support psychological health and robustness" (Cunsolo et al., 2020). Spaces and opportunities are needed for people to connect over shared concerns, feelings, experiences and find support, strength and community in these challenges (Cunsolo et al., 2013). This can lead people to realizing that there are multiple ways of relating to and knowing more-than-human life (Cunsolo et al., 2013). This expansion of emotional and moral capacity can aid in flipping a very negative situation, like the Anthropocene or colonization, into a source of inspiration, born out of an awakened love for all our more-than-human kin (Att. Toward. Rec, Starzyk et al., 2021).

Likewise, Lamalle (2015) notes that spaces are needed to address issues of colonization where people are allowed to express any emotion, get 'messy,' grow, change and heal together. A space is needed for people to show up as a whole person, wounds, hopes, fears and courage all rolled into one. As one of the Truth and Reconciliation Commission calls to action, a hybrid approach to sharing circles could be used where people are able to "witness, support, promote and facilitate truth and reconciliation events at national and community levels" (Truth and Reconciliation, 2015; Lamalle, 2015).

In exploring the creation of a circle methodology for landscape architects, I needed to investigate both the roots of the circle and where in academic research methodologies the circle currently sits. Circles belong to a completely different paradigm

than most accepted and widely used methods and methodologies in dominant institutional structures (Ball et al, 2009). This situates the circle in the margins of research methodologies, it is an 'alternative' option that begins to make space for an emerging old and new ontological and epistemological foundation to research structures (Brown & Strega, 2015). I could never claim to have any power in changing the structures that are in place. However, this choice of method works in conjunction with an effervescence of methods by a diverse array of researchers who recognize that traditional and dominant academic structures need to open up, ease in rigidity, and allow for different ways of knowing and sharing knowledge to emerge and be recognized as valid (Brown & Strega, 2015).

Circles are foremost an Indigenous method and I want to delve into what this means for this thesis in this chapter. Indigenous research is a reclamation of ways of knowing, learning, and exploring that is situated upon a very different structure than Western structures of research. Often, the two worlds are at odds with each other and harmonizing them is a consistent challenge (Brown & Strega, 2015). It is important to note that any act of reclaiming Indigenous traditions, culture, knowledge, etc, is inherently a political act. This is because of the oppression of Indigenous people and their entire way of living under colonization – an act that is political in nature (Brown & Strega, 2015, p 20). With this in mind, I will turn to other important characteristics of Indigenous research. There are several, broad traits that underly many Indigenous research methodologies that distinguish them from Western-based methodologies, which I will explain next.

Arguably, the most important part of Indigenous research is its basis in relationship. This is a stark contrast to the detached, singular, logical, and objective stance that most Western research traditionally takes up as best practice. Relationality means that the researcher and the participants are intimately intertwined, connected in a meaningful way, and that the researcher has genuine interest or concern in the research he or she is undertaking (Brown & Strega, 2015). This personal bent, as Absolon and Willett say, has been frowned upon in many Western academic spheres

and has called for a “rehumanizing research” to be allowed to emerge (Brown & Strega, 2015, p 106). In the Indigenous view, however, it is seen that research done in and with community will strengthen the research results and this can be reciprocated by providing something useful or important back to the community that helped create it (Brown & Strega, 2015).

To get to these results, various methods are used that also sit on the fringes of research. A first step for every researcher utilizing Indigenous methods is to state where, physically, he or she is from. This is more than simply getting to know the researcher. By stating one’s roots, relations and locations, the readers of the research will have a better understanding of what factors contribute to the researcher’s worldview, outlooks, and interests. It situates the person in a rich context that allows for a better comprehension of the research as a result. Further, acknowledging where you are from simultaneously acknowledges the many relations that surround you. It acknowledges the relationship to land, ecology, more-than-human kin, community, ancestors, economics, politics, spirituality, tradition, culture and other factors (Brown & Strega, 2015).

Despite such sweeping statements about Indigenous research, it is vital to note that every individual can only speak for themselves. Just because, for example, one Indigenous researcher states a set of claims or examples does not mean it holds true for all Indigenous people or communities. Related to this, it is also crucial to acknowledge the complexity of situations that Indigenous people face with reclaiming their traditions and identities. Absolon and Willett astutely state:

> Many Aboriginal peoples experience internal chaos, conflict, and confusion about who they really are. It is as if they are being torn in two. A critical turning point in healing and recovering our truth is the moment you recognize that today there many truths and that within the collective Indigenous experience there are many individual diversities. Recovering, accepting, and becoming proud of who we are as we tell and retell our individual stories is a difficult challenge. Yet location is

> essential to the recovery of our individual and collective experiences and identities as Indigenous peoples because it honours individual diversity and recovery of self from internalized colonialism, racism, and oppression (Brown & Strega, 2015).

To build off this, Strega points out the basic principles that have, more often than not, informed what becomes widely accepted in Western academic fields. These include an outlook that a fact is somewhere external to be found, is singular in nature, can be explained with rationality and logic, and remain generalizable and true everywhere. This mindset and system are largely a hangover from Enlightenment thinking that favoured and was created by affluent, white men. It was understood that objectivity was possible and preferable. Strega argues that this has a fundamental error to it. 'Truth', as it were, is not singular. It is plural. Anything factual can come to be known through a variety of ways and is always subject to change. It is not just known statically through logic and rationality. This is important when considering how Indigenous research has often been received in the academy – usually with suspicion about its validity. That Indigenous researchers have to strive to fit a system that is fundamentally opposed to its own structures and ways of knowing is, in essence, a struggle against colonization and oppression (Brown & Strega, 2015). This is true not just for Indigenous research, but for research from people of colour, different-abled bodies, non-binary identifying people, and from women also (Brown & Strega, 2015).

It is not a stretch to see how this emphasis on objectivity and a singular fact can be easily questioned. Objectivity by any human is not possible. Everyone carries with them a worldview constructed from their environment, culture, genetics, and many other factors, that colours their outlooks in a particular way (Brown & Strega, 2015). Because of this, it becomes quite logical to see that a plurality of 'truths,' or facts, can exist or co-exist, depending on who is experiencing what. As Strega states, "… the world is not about facts but about the meaning attached to facts, and people negotiate and create meaning" (Brown & Strega, 2015). Reality, in this perspective, is dependent on the context of the perceiver.

So, how does some of this knowledge come to be known? I will be touching on only a few possibilities here. One of those is of embodied knowing. This is a knowledge that comes through direct experience of living life, through the body, emotion and sensation, as well as how others respond to or react to your presence. This type of knowledge can be especially helpful for researchers who are working with a group of participants and collecting their stories, experiences, or perceptions about the topic of research, as their knowledge is embodied. This is also an excellent way to explore otherwise hidden biases, beliefs, and assumptions in a research context, including for the researcher (Brown & Strega, 2015, Ch 3).

2.4.2 Story

Another vital part of Indigenous research is story telling. Stories are part of being human. We all tell stories to each other every day and use them to great effect in persuasion, in bonding with each other, in understanding other points of view, and in learning, among other uses. For many Indigenous communities, storytelling, and oral traditions, are foundational to their spirituality, teachings, lifestyles, and other facets of their culture. Many Indigenous cultures are oriented around their creation story. These can be long, complex and contain countless lessons and teachings within it, as a Cree Elder from Alberta once told me regarding the Cree creation story. In this case, I was told that the telling of the Cree creation story would takes years and that today only a few individuals are alive who know the entire story. Like many aspects of Indigenous life, the traditions of storytelling were stolen away and suppressed by colonization. Asserting them and using them in research contexts is another way for Indigenous communities and individuals to reclaim part of their heritage. Stories are one way of knowing and one way of exploring existence. If a story is written down it changes in essence; it then becomes a historical document of the emotions and experiences of specific people in a specific location at one point in time (Tolstoy & Maude, 2013; Brown & Strega, 2015, Ch 9). When a story is left to oral tradition it remains alive, changing, and evolving as each person who tells it adds and deletes or evolves parts of it according to the needs of the situation and those receiving it. This makes stories a

process (Brown & Strega, 2015, Ch 9). As a process, there is emphasis on relationship, which ties back to previous discussions about the importance of relationship in Indigenous research and culture.

These are only a couple examples of what Indigenous and marginal research can offer, but they come also with their flaws and limits. Being so personally engaged in these methodologies calls for extra care to be taken with self-reflexivity. The researcher carries tremendous responsibility to self-check constantly in these processes to ensure that the power dynamics between them and the participants is not out of balance or in any way inhibiting the research results (Brown & Strega, 2015, Ch 3). Tied into this self-reflexivity is the constant need to listen deeply to participants, and to relisten to them (using audio recordings) as often as needed to ensure that what is being shared is being represented in the data accurately. This requires collaboration between the researcher and participants. This teamwork makes it clear how vital a strong, sincere relationship between researcher and participants becomes to the research results (Brown & Strega, 2015, Ch 9). The researcher must also be aware that what participants share, and even how they share it, can have emotionally taxing consequences on him or her in unexpected ways. This can make it challenging to carry out the research effectively and there ought to be resources available and in place to keep the researcher safe and healthy also (Brown & Strega, 2015). Interestingly, this can be an opportunity for the researcher to utilize his or her own embodied knowing, gathered as a result of the research process, as way of exposing previously unnoticed aspects of the research that may not have been obvious had these methodologies not been used (Brown & Strega, 2015, Ch 3).

3 Methods

This chapter will discuss the circle method. I will briefly explain the origins of circles, why they were chosen for this project, essential parts of circles and why they are needed for successful use of this method. Following this is a short discussion on gaps and constraints in Indigenous research methods and, finally, I will breakdown the events of the two circles that were held.

3.1 Circle Work Overview and Explanation

A growing strategy of dealing with an array of difficult, complex or emotionally charged situations is to use a form of group support and decision-making based on something that is quite intuitive to humans, a circle. In almost every culture some form of circle has been used at some point in time for community decision making and support purposes. Think of some of the earliest humans sitting around a campfire deciding on something that could impact their survival, Indigenous sharing circles and ceremonies, friends gathered to socialize, workplace meetings, support groups like Alcoholics Anonymous, and so many other instances of this basic formation (Baldwin & Linnea, 2010, Ch 1). What I will be focusing on here is a specific method of circle that is based on North American Indigenous sharing circles.

So, what makes this method so profound? Despite its simplicity, the circle has tremendous power to unite people and spark creative solution-making while nourishing meaningful connections among people. Circles are, first, a very successful form of democracy. Because the circle neutralizes any hierarchical structures in a group of people, it allows everyone to be heard equally and to share equally, in a way that is appropriate to the topic and to the participants and their experiences (Ball et al., 2009).

Circles are designed to be a safe space where vulnerability is encouraged in whatever capacity a person is comfortable with. Storytelling is usually how people communicate their ideas, thoughts and experiences. Stories allow people to speak from the heart, from emotion and lived experiences, things that are true to them. This is vital

in a society where spaces to do so in a safe, open and supportive atmosphere are tough to find and where rigid rationality and logic is still so highly valued over the wisdom of emotion (Ball et al., 2009; Hart, 2002)

Another important aspect to the circle is that only the person whose turn it is to speak is allowed to speak. Everyone else must remain silent. This encourages deep listening and withholds others from making snap judgements or assumptions. It also allows listeners time to reflect on what is being said and to understand, in full, what someone wants to express. In a culture that is fast-paced, where business can be competitive, where time is money, being asked to slow down and remain silent to simply listen seems counter-productive. In fact, the way a circle functions is a total paradigm shift from standard business and academic frameworks for focus groups, conflict resolution or community engagement (Ball et al., 2009).

There are six key aspects to circles that contribute to a successful circle outcome, which is explained below. Everyone in the circle is a part of the overall success or failure of the circle and participation, even just by active listening, is important to its success. Provided that the circle keeper does his or her job well, it is up to the rest of the group to take responsibility to ensure that all the values and guidelines decided upon at the beginning are upheld. If this happens, a synergy can emerge and grow within the group. This synergy can produce some incredible results that would be impossible for any one individual to achieve alone. Breakthroughs can occur, connections and understandings can be developed, and creative problem-solving at its finest can be sparked. This is the potential of circles (Baldwin & Linnea, 2002).

The six main components of circles are described below (Ball et al., 2009, pp 37-40):

Ceremony: Every circle begins with some form of ceremony. Do not confuse this with Indigenous spiritual ceremony – these are two very different things that serve different functions. In a secular circle, ceremonies establish a grounding in the moment, a step away from the hustle and bustle of daily life and responsibilities into a focused,

purposeful space. The first thing to happen in a circle is that the group will establish values and guidelines to follow throughout the entire process. This is led by the keeper. Once everyone agrees on these, the keeper will then open the circle with whatever is appropriate to the group and purpose for meeting. This can be reading out a poem, telling a story, lighting a candle, ringing a bell, or anything else that is appropriate.

When a circle ends, it is the responsibility of the keeper to close the circle. Similar to the opening, this can take any form, according to what is best for the group. Sometimes it is appropriate for the keeper to reflect back to the group on the progress or decisions that were made that day.

Talking piece: The talking piece is a small, handheld item that signifies that only the person holding it is allowed to speak. This item can also be anything that is appropriate to the group, such as a stone, a photo, even a small toy. Importantly, whoever is holding this has full autonomy to speak whenever, or however long, he or she chooses to. There is no impetus to jump into speaking and there is also no impetus to speak at all. It is perfectly allowable for someone to simply pass the talking piece along to the next person without saying anything. Likewise, sitting in silence while holding the talking piece is also appropriate. Whoever holds the talking piece is allowed to take up space and time in whatever way is right for them in that moment, without structure or expectation. This has tremendous healing potential.

Guidelines: Guidelines and group values, are established at the beginning of the circle. These guidelines are meant to keep everyone accountable to respectful, confidential actions, both in and outside the circle. Although no one can control the behaviour of people after the circle, it is the responsibility of everyone in the group to collaboratively ensure that these are being followed appropriately. Also, each guideline is established only if every single person in the circle agrees to it. If there is no consensus, then no decision will be made. Everyone must agree in some capacity.

Story telling: A distinguishing feature of circle work is that the telling of stories is encouraged. Stories are an intuitive communication style for humans; we tell stories all the time. Communicating in this way allows for a holistic response that can flesh out great complexities in a way that others are readily able to not only understand but also relate to. This encourages connections between people to grow. This becomes crucial when circles are occurring with very diverse people involved, diverse in opinion, age, experience, worldview, culture, etc.

Keeper: The keeper can be a make-or-break asset to a circle. The keeper is someone who helps establish the general atmosphere of the circle, keeps the group on track, sets an example for behaviour, and aids in resolving any issues that arise. The keeper, however, still participates fully in the circle work, often leading the discussions and setting an example of vulnerability for the rest of the group to follow. If the keeper is disrespectful or rude, this will break the feeling of safety and vulnerability among the group and will significantly compromise the effectiveness of the circle. In a research context, it compromises the research results as well.

Consensus/Decision-making: If some form of decision-making is one purpose for a circle being held then there are some important benefits to doing so in circle. Because all decisions made in a circle have to be agreed upon by every participant, there are a couple of advantages to this. One is that everyone is capable of living with the decision made. Often these decisions have merged various points of view that take into account important factors from those different viewpoints. Secondly, because everyone agrees to the decision it is less likely that anyone will try to undermine that decision, and any resulting actions taken. This leads to a more successful outcome for whatever the initial challenge was.

3.2 Indigenous Research Gaps and Challenges

There is literature specifically about Indigenous quantitative analysis processes (Walter & Andersen, 2013). These are crucial resources for statistical research that is done with Indigenous communities. More often than not, quantitative and statistical

research has been detrimental to Indigenous communities and has perpetuated derogatory or harmful stereotypes. It has been common for data extracted from these communities to not be properly cited or attributed to those who contributed to it and often was used to the researcher's own gain without any benefit to that community. Such practice is not only harmful, but also goes against the structures of Indigenous research and culture of reciprocity (Joseph, 2021; Smith, 2012; Brown & Strega, 2015).

One of the biggest gaps in Indigenous research that I have seen is in the data analysis of qualitative-like research. I say 'qualitative-like' because Indigenous research is not to be categorized wholly into qualitative research as Western academics understand it. However, qualitative methods can certainly be used inside Indigenous research methodologies (Lavallee, 2009). Despite there being a growing number of Indigenous research methods, often the data produced from these is assessed using Western analysis procedures (Yunkaporta, 2021). This incompatibility of epistemological approaches used within one project raises many questions about the integrity of the results from this data analysis when these instances occur (Lavallee, 2009). It also undermines all efforts to lift up and validate Indigenous research if it is ultimately being assessed in a Western structure at the end.

Any analysis processes that do occur usually take considerable time to complete and struggle to be seen as valid forms of knowledge production by Western standards. What might be more fruitful, at this time, is to develop hybrid approaches to data analyses that can simultaneously offer generalizable results suitable to academic spheres while also contributing to the Indigenous communities that were involved with the research (Yunkaporta, 2021). Perhaps one of the best recommendations for this approach is offered up by Mi'kmaw Elder Dr. Albert Marshall. He recommended the broad framework of 'two-eyed seeing.' This metaphor entails using one eye to see with all the strengths that Western knowledge has to offer and using the other eye to see with all the strengths of Indigenous knowledge. Learning to use both in conjunction with each other will strengthen the research being undertaken and the resulting knowledge produced (Bartlett et al., 2012).

3.3 Data Collection Using the Circle Method

I would like to break down the key parts of the data collection days. This will provide a better understanding of what occurred each day and why every decision was made. Everything that was prepared for this was carefully and intentionally planned so that participants had as little external interference from me as possible and were able to bring forward their unique stories and perspectives.

Two-day event: This duration was chosen to allow for enough time for participants to get comfortable with each other and the circle process to go deeper into the topic at hand. Having time to flesh out ideas, think things through, and hear each other's thoughts allowed for a richer exploration of the research topic.

Nine participants: Eight students were recruited, split evenly by chance between male and female, with myself being the ninth participant that tipped the balance to female. The call for participants was done on a first-come, first-served basis. The Indigenous Student Centre assisted me in disseminating the call for participants via email and interested students then responded to me. I had also invited Indigenous faculty members to participate, however, none were able to attend on these days.

I, the researcher, was also a participant. This was key to the method as I was also the circle keeper and it was my responsibility to model behaviour in the circle, such as how deep one could go in one's responses, as well as modelling respect for what others shared. I was aware that I shared only what was appropriate to the topic, including personal information as needed, and ensured that I influenced what others shared as little as possible. It required a delicate balance to ensure that I did not dominate the discussion but also 'gave permission' for others to share deeply, if they so chose.

Each participant received a $200/day, for attending. Food, beverages, and snacks were also provided to make everyone comfortable. Part of the reason for this is simple reciprocity. I asked for a whole weekend from these people to help me with my

research. To reciprocate for their time is only logical and is in keeping with Indigenous research and cultural practices.

Centre Piece: The centre piece I chose for both circles were four small containers that symbolized the four main elements of life. A small bowl of water, an empty white bowl for air, a small jar of soil, and small candle for fire. They were all placed on a pink piece of fabric, to hold space for the format of the circles.

I wanted to ensure that nothing explicitly about plants was included in the centre piece, or anywhere else in the room, during the circles. This was so that there was as little influence as possible on what participants shared. I was attentive to these details, from which talking piece I chose (a hacky sack), to the pattern on the tissue box I brought.

DAY 1

Day 1 Toy Toss: This is an important step to begin the circle. This activity involved each of us calling out the name of someone across from us and tossing a toy to them. I slowly increased the number of toys being tossed to five, so that it became a busy activity which required that you stay very aware of who was calling you and when, while ensuring you passed along the toy. This was meant to do several things. First, it helps participants learn each other's names. Second, it allows us to drop from our minds into our bodies. It is playful and eases our nerves, and, crucially, notifies the group that we are about to step into a space that is outside our daily living.

Day 1 Opening Ceremony, Draw a Picture: This furthered the previous activity and began to build relationships among participants. I asked everyone to draw a picture together, passing a marker along after completing their turn. This also established a flow of what the circle process would be like, got everyone out of their minds more, and helped to relax everyone.

I started this activity by specifically drawing a wavy line on landscape orientation about 1/3 the way up the sheet of paper. This was intended to suggest a horizon line

that is typically seen at about this point in landscape imagery in visual culture. I ensured it did not touch the edges of the paper, however, leaving room for freedom of interpretation. The group ended up drawing a landscape image together, which, unexpectedly, ended up mirroring much of what was discussed in the circles. Please see the appendix where this drawing has been included.

Day 1 Check-in Round, Quote Interpretation: In this activity I asked participants to randomly draw a quote from a container, take a minute to read it and develop an interpretation of it. All quotes I chose were about plants in some way. I was careful not to include anything overtly Indigenous, being aware of the complexity of connection/disconnection present in Indigenous people today. Then we all took our turn sharing our interpretation, using the talking piece.

This was intended to get everyone focused explicitly on the research topic and it allowed me a general assessment of what people thought about plants initially, what knowledge level they may have of plants, how willing they are to share, and other useful characteristics for me to be aware of. It also helped the group adjust to the circle process.

Day 1 Introductions: I asked everyone to share their name, their connection to the University, such as what department they are in, and anything else they felt comfortable sharing. This was simply to acquaint each other better before moving on.

Day 1 Values and Guidelines: Next, I asked everyone to think about a time that they helped someone in their life going through an exceptionally challenging time. I asked them to write down, on paper plates, one or two key characteristics they exhibited when helping this person. This was to get them aware of their best selves and I invited them to remember these traits as we began the question rounds.

Everyone had the opportunity to share what they chose and why. This was key to get everyone on the same page about what behaviour was expected in the circle, to keep each other accountable, and to develop a sense of emotional safety amongst each

other. The plates were placed around the centre piece to remain a visual reminder throughout both days of the circles.

The guidelines were established next. I brought three for starters. One was confidentiality. What was shared in the circle was to remain in the circle. Second was respect for what was shared and working together to keep the circle a safe space. Third was that any emotion was allowed in the circle. This includes anger, fear, crying, laughter, etc. Participants then added an additional guideline of notifying the group of any potentially triggering topics that would be raised, if anyone needed to leave the room for that sharing.

On Day Two I invited participants to remind themselves of their values and to add to the guidelines, if needed. No modifications were required.

Next were the question rounds. I will discuss the questions chosen in detail below.

<u>Day 1 Closing Thoughts:</u> Once the question rounds were complete, I asked participants for feedback on how they felt the circle went, how they were feeling, and anything else they wanted to share. This helped me to ensure that everyone was emotionally stable and gave me insight into how I was doing, as a keeper, if I needed to include or exclude anything the next day, etc.

<u>Day 1 Closing Ceremony:</u> I read a children's book called 'The Giving Tree.' The main intent behind this was to signify that everyone was now leaving the circle space and transitioning back into daily life. It also gave them food for thought for the next day, in an indirect way.

DAY 2

<u>Day 2 Opening, Tell a Story:</u> For the opening on Day Two I invited participants to work together to tell a story, similar to how I asked them to draw a picture together the previous day. They were only allowed to write 1-3 words at a time. I chose this ceremony as we were all university students and it made sense to use an activity that

was more cerebral. However, I found this was too cerebral and participants struggled to find a flow in playing and creating as they did with the drawing the previous day. It would have been better to do something based in the body, like the toy toss. Regardless, this activity was successful, and participants ended up having fun writing a story together over the course of about 40 minutes.

<u>Day 2 Check-in, Rose, Bud, Thorn:</u> For this activity I asked the group to share one positive thing in their life that day (rose), one thing they were excited about (bud), and something that was a challenge at that time (thorn). This allowed to me assess how everyone was doing that day, emotionally, and modify my plan or questions as needed, on the spot.

Please see below for discussion about the questions asked on Day Two.

<u>Day 2 Closing Thoughts:</u> For this I did a two-part closing. First, I asked for general feedback about the two days, the circle process, and if they felt differently about plants after the circles. Everyone had positive feedback. I credit the circle method for allowing a space to open up, and for connections to be made, new ideas to shared, and personal insights to be told that seemed to have helped everyone present.

Second, I invited everyone to choose one colour that represented how they were feeling at the end of both days. They were welcome to share why they chose that colour. This gave a quick idea of how everyone was doing and if I needed to do anything else before the closing ceremony.

<u>Day 2 Closing Ceremony, Dream Riddle:</u> For the final closing I wanted to share a piece of writing that came to me vividly in a dream I had about one month prior to holding the circles. In this dream I clearly saw the form of the riddle, three paragraphs, the start of each paragraph, which was 'I am,' and the final words, 'I am the land.' When I awoke, I knew this needed to end the event. Oddly, what was in this riddle reflected some of the key research results. I will credit both Creator and all our Indigenous ancestors for gifting me this riddle to share with the group and I chose to include it as a small way of

acknowledging Indigenous cultures and research practices. This is also included in the appendix, below.

3.4 Data Analysis Method

The Grounded Theory Method (Williams & Moser, 2019; Bryant, 2019) is the primary data analysis strategy that was used to assess the results of both sharing circles. These circles were audio recorded, transcribed using Otter.ai and analyzed for themes based on what participants described as most important in response to the questions asked.

Specifically, I listened to each recording twice, noting on paper each time key words were spoken or that summarized the essence of what was being shared. Once completed, I cut out the words or phrases and rearranged them into broader groupings that created the codes. This was done question by question, for a total of 19 sets of codes. I then rearranged the codes, per question, according to what made most sense and created the theme(s) from those.

Once each question was complete, I gathered all the codes together in one group and all themes together in another group. From here, I re-sorted the codes into groupings, looking for a flow and connections that summarized what participants shared. I did the same for the group of themes. From this, I summarized my research results in two written statements.

The statement made from the codes involves more detailed explanation of what was shared. The statement from the themes resulted in a broader conclusion of what was shared. Both were used in the assessment of results, in conjunction with the key words, phrases, or topics that were repeated most often in the circles.

4 Results and Analysis

The following is a summary of what was discussed during the circles, presented question by question. Questions have also been grouped together according to the flow of conversation that occurred. On Day One, I asked questions that were previously prepared and that fit the flow of conversation that was occurring. On Day Two I had to prepare a new set of questions, drawing from what was shared the previous day, as what I had prepared was either not relevant or I simply ran out of questions to ask. In some instances, I asked questions spontaneously, based on what was being shared, and to draw out and go deeper into what was arising.

Following this is a summary of the findings and the key results that emerged from the data collection.

4.1 Conversations From the Questions Asked

Day 1

Day 1, Question 1:

1. What is your earliest memory of plants? Consider where you were, who you were with, what you were doing and any emotions you felt.

This question had been emailed out to participants one week prior to the circle event. The purpose of this question was to get participants thinking about their relationships with plants, broadly.

The resulting theme for this question was that cultivating or harvesting plants for food was a common early memory and usually family members were involved. Gardens were most commonly noted, but a few participants also discussed living on or visiting a family farm. One participant stated, “I had a hard time choosing which one [memory] to talk about, because some of my earliest memories are on my grandfather's farm in southern Manitoba.”

Participants' mothers or grandparents were the most commonly noted family members in these memories. They were either there to help teach them about the world, or they were given freshly picked flowers as a gift. For example, one participant said, "I've always kind of grown up around plants. My mother has always had a green thumb, plants everywhere, always around the house." As noted by another participant, "…So my earliest memory of plants would be in my mom's garden that was at our house…"

Often, these were happy memories, where participants remember playing, having fun, and/or learning about the world around them through interactions with plants. There was a notable embodiment that was key to these memories too, where taste, smell and touch were involved. The visuals of plants were the most dominant sense activated, which inspired feelings of wonder, comfort, and joy that were typically part of these early memories. For example, one participant explained, "…we planted, like, a row of sunflowers. And they grow, they grow so tall, they were, like, eight feet tall. And when they finally bloomed, we had so many butterflies that were just always on them… which is just, like, a really good memory."

Day 1, Question 2 and 3:

2. Are there any moments in your life when you were significantly impacted by plants, the absence of plants, etc. What impacted you the most?

3. What value do plants bring to your life?

These questions were intentionally open-ended to encourage participants to bring forward how they view plants before the discussions of the circles might alter their thoughts.

The main themes that resulted were the impact the presence of plants has on humans and the varied health benefits plants bring to us, respectively. Travel and exploration were overwhelmingly noted as connected to plants. Often, participants

expressed that being somewhere new, or the desire to go somewhere new, was to look at a different landscape than they know at home, of which plants characterize those landscapes heavily.

The mere presence of plants was also discussed and was said to bring great comfort to participants. This was noted in various ways, from taking a break from work or school, to finding comfort during the lockdowns of the COVID-19 pandemic, to finding a sense of sacredness, safety and sanctity where they could attend to their inner world more acutely and honestly. Many participants said that the mental health benefits were strongly connected to the presence of plants. This was explored more on Day Two. As one participant shared:

> "But I just remember, like, going into my room and just feeling immense happiness looking at them, like they, just like, throughout COVID, they were just like something that, like, well, we weren't really, like, allowed to go outside or anything, or like go anywhere. And so having, like, having nature inside was just, like, so comforting and like reassuring."

Related to the presence and comfort of plants, the joy and deeper sense of connection that participants felt while interacting with or caring for plants was frequently pointed out. There was a consistent expression of how much joy and happiness participants felt when seeing a plant, or community of plants, thrive. In some instances, this also provided a greater sense of purpose to their lives, as they were able to care for more-than-human life, develop new skills, provide food for others, and gain confidence through these processes. For example, one person said,

> "So I think I learned a lot about, like, intuition and listening and observing… And it was to feed people to actually feed people that I didn't know but still it was going toward this, like, FoodShare program… and also me, like, believing in myself and the ability of, like, plants to communicate to me what they need."

The health benefits of plants were seen to come primarily through mental health benefits, as mentioned above. Participants stressed how much their sense of connection to the world around them was deepened and the benefits this had in their lives. Also, plants provided a sense of companionship when there was no one else around. This boosted mental health, a sense of comfort, support, and feelings of kinship. The presence of plants also influenced major life decisions, such as which university to attend. Several participants said that they chose the University of Guelph because the campus has many green spaces, with the arboretum being especially attractive. As one participant noted, “But, I think that growing up being around nature and stuff, I think that that influenced my decision to come to Guelph.”

Medicinal healing for physical ailments was also noted by many participants, which was connected to a sense of spirituality or sacredness. This sacredness was then connected to the previously noted benefits. Overall, this resulted in a conclusive agreement that humans rely heavily on plants in daily life and for some of our greatest health needs, including our spiritual needs. Many participants agreed that plants provided a sense of protection and non-judgmental companionship and were important teachers on things such as living with reciprocity, recognizing kinship with more-than-human life, generosity, and our responsibility to others. As explained by one person:

> “In a lot of Indigenous worldviews, like, our plants have sprits, like, they’re our ancestors and our kin and I think that’s the reason that, like, that a lot of us, like, have that connection to the plants. Like, we go out there and immediately you just feel better because it’s, like, you’re with your family.”

Day 1, Question 4:

4. How does climate change make you feel about its effects on the environment?

After getting to know the participants a little better I made the decision to go into the deep and difficult conversation about climate change. I was attentive to the flow of the conversation and prepared to end the discussion and take a break if that was

needed. By the end of the conversation one participant expressed explicitly how difficult the topic was and that she wanted it to end. So, I ended it, for the safety of the group's mental health. As she stated, "…this conversation is just so hard to have, that I'm, like, just trying to get this question to be over."

That said, there were some great insights and conversation offered that aligns with the current literature about climate anxiety, ecological grief, and related issues. Also, the fact that participants organically found reasons for hope, built connections with each other over this topic, and learned of various ways that action can be taken, points to the success of the circle method in building a strong sense of connection and community with each other.

The theme of Question 4 was the clash of Western and Indigenous worldviews and the sheer complexity of humanity. Both had some positive and negative discussion.

Common emotions that were expressed included dread, anger, fear, loss, and frustration. These melded together in the conversations and were experienced in various ways by the group.

For the negative side of the discussions, participants repeatedly spoke to the extensive level of ignorance that humans harbour over, not just climatic changes, but of the interconnectedness of natural systems, of diverse more-than-human life, non-Western worldviews, and the impacts of short-sighted and selfish actions on future generations. As explained by one person, "…is this how we repay everything that has been given to us? You know, like, it's, we've been given so many gifts from the land around us, for generations… we just kind of, like, took that with, with like, no regard for, like, any future planning." Participants saw systemic issues as a major component of this. Capitalism, oppression, industrialization, resource extraction, politics, and media were all seen as inhibiting factors for the general public being able to make positive changes to heal the planet. They also noted that these systems oppressed Indigenous

culture, knowledge, and worldviews, but which could be utilized and uplifted to create solutions to our current climatic challenges.

There was also a lot of discussion about who to blame for climate change, or who ought to be accountable for implementing the greatest remedies for it. For example:

> "…I got a lot of frustration and anger on the topic largely because I think the people responsible for it oftentimes are not the ones held accountable for it, gets placed all the blame on like smaller individuals rather than like the big corporations who are just endlessly polluting or endlessly destroying the environment."

This is where discussion about Western and Indigenous worldview clashes were explored and how systems of colonization, like capitalism, have resulted in harmful consequences globally. A characteristic of this system, and of the Western worldview, included a selfish individualism that is positioned in opposition to Indigenous worldviews. This individualism, which capitalist corporations are thought to function in, exacerbates issues like resource extraction and climate change.

As stated by a participant, "…it's unfair, in the way that us young, Indigenous people have to be thinking in this way, when our ancestors and ourselves have already survived so much…." She also noted a story from social media where an influencer had not "really spoken to many other Indigenous people about, like, not wanting to have children in the future, because they've already survived the apocalypse."

On the upside, resilience, cooperation and hope were frequently threaded throughout the conversations. Hope was most prevalent among these, where participants expressed assurance that both more-than-human life, as well as the human spirit, were resilient and wise enough to endure whatever climatic upheavals await us all. As stated, "And then how you said, you have faith in humanity. I agree with that, too."

Cooperation was also repeatedly mentioned as a foundation to any solutions that could be acted upon, regarding climate change. This means that, as a universal issue, until all of humanity is willing to work together, no real progress can be achieved in healing the planet. One participant said, "…I think a lot of the problem with that is that climate change is sort of made into a political issue when it should be a humanity issue." This tied into discussion about responsibility; participants agreed that this was on all of us to take seriously. This perspective was supported by the fact that the majority of participants were in fields of study that are directly oriented to healing the earth in some way, from mechanical engineering, environmental science, to anthropology and family systems. As mentioned, "…in order to, like, sustain our climate, everyone has to be involved in, like, a roundtable discussion, essentially. So, that includes industry, that includes, like, everyday people, that includes specific special interest groups. And like, how do we make a system that everyone can benefit from?"

Day 1, Questions 5-8:

5. *If you were a plant, what would you be and why?*

6. *As this plant, how would you ideally interact with humans?*

7. *As this plant, how would you communicate with plants?*

8. *As this plant, how would climate change make you feel?*

These questions have been grouped together because they follow the common thread of exploring certain inquiries through the imaginary lens of embodying life as a plant. The intent behind these questions was to explore more deeply how participants viewed plants and their abilities by imagining to be one. It was intended that these questions also brought attention to how we typically interact with plants and what that means about our relationships to them.

After this discussion, it became apparent that most of the group had their eyes opened to several things. One was how little acknowledgement we give plants in daily life. Another was how physically similar they might be to us humans and other fauna. Third, there seemed to be an unspoken realization that plants are quite similar to us behaviorally in their desire for a healthy, happy and peaceful life and to live with purpose. One person had said they would choose a “Fruit bush… [it] gives me a recurring purpose in a way… it’d be cool for someone to depend on me for some kind of fruit. And I worry less about getting cut down because they don't want to lose the fruit.”

Along with this was realizing how unsavoury humans are to deal with, since they were seen as disrespectful, hurtful, and inconsiderate. However, it was interesting to note how often the desire to give gifts to humans simply to sprout joy in them was expressed. For example, one person chose “maybe like a fruit tree or something, to know that, like, people are getting something, so, but, like, I'm not getting torn down or anything.” Someone else chose a “Fruit tree…You get to provide things for people. And they're cool. Or I would be a rose. Because everyone likes roses and it's the look on people's faces when they pick you, even though you're not here for a long time, there for a good time.”

There was a consistent desire to be protected from humans. Many participants said they would prefer to live in the wild, in a protected region like a national park, or simply have minimal interaction with humans. For example, “And I also like the idea of all those old growth forests are protected, for the most part, so I wouldn't have to worry about being cut down or removed or anything else and I could just be a cool, tall tree all the time.”

If they did express wanting human interaction, it was stressed that they would ideally want that interaction to be respectful, where humans were mindful of what they needed to flourish, did not take more than they could offer, and generally enjoyed reciprocity with them. As stated, “I wouldn't mind interaction as long as it's, like, respectful.” They also said that they would enjoy giving gifts to humans, primarily in the

form of fruit to eat, but also in their beauty in the form of flowers, and generally in their health and ability to thrive. As one person put it:

> "…ideally interact? Oh, I would hopefully provide joy and happiness to people. Obviously, nutrition as well, with apples. I feel like if I'm there, I might as well be of some use rather than an obvious use, too. Because I enjoy seeing people happy and I enjoy making people happy."

Other participants said that they would want "…no interaction. I'd like to be stuck right in the middle of a forest were no one could reach me and I could just live with my tree buddies… and just be cool and free and feed animals and not humans."

Communication was seen to occur primarily through physical changes. This would occur in colour or stature change, or not producing any fruit, or only low-quality fruit. One person said, "I feel like the best way to do that [communicate] is through physical change." Or as someone else explained, "You know, if I needed, like, more space that I would just, like, try to grow outside of my bed, or something. And then people would know that they have to, you know, like, cut me off and move me somewhere else."

If interactions from humans were negative or harmful, all participants expressed a desire to somehow communicate this. This was mainly through retracting their gifts, not flourishing, in some way growing in an unfriendly manner, or dropping a limb on their head! For example, if, "I was a raspberry bush getting very disrespected, I'd grow all these nice, beautiful berries right in the middle of, like, where you have to reach for them. And then you're coming out scratched and, you might get a fruit, but it'll hurt."

In regard to climate change, the group was consistent in expressing how resilience and the desire to preserve the life of their species would ultimately be taken up by plants. This came in various forms, from producing more seeds to disperse, to growing towards new locations where better resources were available. As one participant explained about a tree species:

> "So, they were like, we need to survive [this crisis]. So, they, like, gave off all these seeds. And so, they'd have to say, I feel like we all have the same questions as plants being like, how are we going to survive and how are the next generations after that going to survive? Like, what does this mean for all of us? So yeah, I don't know, I don't know if there would be, like, actually that much variation in between what we're questioning and what they are."

It was also interesting to note that at this stage many participants said that their feelings, as a plant, was the same about climate change as it is as a human, only it would be to a greater degree because they could do so little about it. One person expressed they would "probably [be] frustrated, considering, how much can you actually do about it, right? Which connects back to right now as a person, how much can you do about it? So yeah, definitely just frustrated angry, all those." Someone else shared that, "I guess the feeling for me, it would sort of swap from the anger that we feel as humans, almost to a sense of offense as plants that we weren't respected or regarded enough to actually put in the work to keep us around, even after being used by humans."

Day 2

Day 2, Question 1:

1. *What about plants improves your mental health?*

The previous day, participants had all expressed the benefits that plants brought to their mental health. I wanted to explore this further with them and see what else might be part of these benefits.

The theme for this question is that physical connections with plants are foundational to all other benefits that plants provide, including mental, social and spiritual. This came largely through the visual sense, where the beauty and vitality of plants provided comfort, companionship, stress relief, and a deeper sense of connection to the world around them. There was also acknowledgement of how other senses were

intricately involved during experiences among plants. For example, one person had said, “people can always tell that a plant is alive, whether it's growing. So, I feel like that, sort of, almost unconscious sense of being surrounded by life, sort of, brings the life out of us in a way that makes us feel better psychologically.” And another expressed, “I think it's also, like, a reminder of, like, beauty on earth.”

More interesting, the participants agreed that there is something innate or unconscious about a human’s connection to plants that provided an overall sense of well-being when time was spent among them. As one participant stated, “there's … something innate that makes us feel a certain way about plants.” There was no clear answer as to why, however, some participants hypothesized that it could be how humans evolved, intricately dependent on and protected by plants. One participant noted, “I don't know if we were ever meant to be inside people,” which acknowledges our ancient roots being tied up with plants.

The group also acknowledged that plants, as social beings who cannot speak human languages, provided a non-judgmental emotional space where they are free to express any emotion or thought. As one person shared about plants, they are “like, non-judgement things going on because, I mean, like, you're still among friends when you're outside, but I don't know, just feels different. Like you're, like, accepted for no matter what place you are. They'll just, you know, welcome me with open arms….” This is in stark contrast to how cautious the majority of us are to ‘keep face’ constantly throughout our days among other humans, even around those closest to us. Also worth noting is a repetition of how much joy, comfort, support and connection plants provide.

Day 2, Questions 2-6:

2. *We tend to objectify plants; what does this say about humans?*

3*. Where did our human-centric worldview come from?*

4*. How does this disconnect impact our relationships with plants?*

5*. What have we lost from this disconnection?*

6*. How is this disconnection intertwined with your heritage?*

These questions started with my wanting to probe into the objectification of plants. Broadly, this occurs in many cultures in the world, but this conversation focused specifically on Western culture. I followed the conversation as it unfolded, going deeper with each round, and guiding the conversation to how participants' Indigenous heritage was impacted by what they were sharing. Again, I would not have raised these topics if participants were not already headed in that direction.

Ignorance was a primary factor in the objectification of plants. This, participants suggested, was in part because humans can never really know what a plant is experiencing, if they have thoughts, and what their intelligence is like. Communication inhibitions between species was also considered to contribute to the objectification, despite stating previously that they could see, via physical changes, what state of health a plant was in and decipher what it needs to thrive. One participant had explained, "Leroy Little Bear saying, we're like a radio station dial where there's different frequencies. And we just can't hear the other radio stations, we can only hear humans, but everything is also putting out its own things, if we just sit and listen and observe."

They also stated that the Western worldview and materialism was a major factor in objectifying plants. For them, this is a very humancentric outlook that effects all relations with more-than-human life. For example, "I would say it's definitely [a] very Western point of view that we have here just because of materialistic world and everything." This discussion led to Question three.

Where, then, did the humancentric worldview come from? In short, the group agreed that colonization was the primary source. Due to how power structures evolved between nations throughout history, the Western worldview and individualism took over most of the world, which has cut many people off from their traditional relationships with

more-than-human life. Indigenous people are some of the most impacted by this, is what was expressed. One person had explained:

> "Like, I think a lot of it was Western expansion. …colonization brought in a lot of different belief systems. And one was that, like, no one living here needed things to survive and they could just take it all and bring it back to Europe, which stayed ingrained in the people who stayed here from Europe. They could just keep taking and taking and those philosophies ended up intermingling into our philosophies, at times, and the way we interact with our environments and, like, in not a positive way."

From this, Question four and five arose; how does such a disconnect impact human-plant relationships and what have we lost as a result? The discussion here turned to outcomes of the spread of colonization and the mechanistic and individualistic outlook that came with it. Through the loss of Indigenous culture, the imposed, fragmentary outlooks created a commodification of life forms, especially plants. In turn, this fragmentation resulted in the foundation for healthy plant-human relationships to be lost or obscured.

There was also a great deal of discussion about convenience, a product of modern life. As one participant put it, "…I think convenience is where a lot of our relationships die." Participants discussed how modern life, the result of colonization and industrialization, ties in with oppression, technological advances, and globalization which has taken away or greatly obscured connections to traditional culture, to family, other humans around us, and, important to this study, to our more-than-human relations. Another participant has said, "But the thing is, when you cut out those steps, you also cut out the connection that you have with the people that make that step possible. So, … the convenience of things is also killing the connection to the thing that you're doing."

How does this intertwine with the participants' Indigenous heritage? Most interesting to me is that they indirectly pointed to the fact that land itself holds the truth for what Indigenous identity is. The results of colonization are manifold, but what was key to this conversation was the fragmentation of relationship. This came in various forms, such as urbanization, physical distance between family members, or from their traditional homeland, for reasons such as education or employment opportunities, and modernization of traditional lifestyles. As two participants shared:

> "I didn't know I was Metis until grade six… there was no community … to connect to. Your parents can only know so much when they grew up trying to hide who they were because of residential schools and everything else."

> "I think that Indigenous cultures, like, they have a big connection to the land and to animals. I mean, growing up, I remember my uncle used to always take me, in certain seasons we'd go looking for morels or, like, different mushrooms or plants or fiddleheads… And then, as I grew up, I feel like, … that just became less. Same as, like, harvesting, we used to go hunting and fishing together all the time… overall that became less. …I feel like one of the main reasons for that is just because … everything is … right there, so if it's there, why would we take the effort to go and get it ourselves?"

It was difficult, as the researcher, to listen to the entire group express the challenges they faced about their Indigenous heritage. Racial imposter syndrome was unanimously seen as one of the biggest struggles, which I have come to recognize as internalized colonization. Other challenges that participants faced were lost relationships with traditional homelands and communities due to the 1960's Scoop and residential schools or growing up in a distant community or urban setting. Physical distance from traditional homelands or family members with greater knowledge of and connection to traditions was also a prominent issue. One participant shared the following:

> "My mother was part of the 60's Scoop… Growing up, I definitely didn't have any connection to my culture… I would definitely like to learn more. That imposter syndrome, definitely a thing."

What emerged as a source of hope and resilience was how much comfort and connection was found through the land. Regardless of the severity of disconnection from their Indigenous heritage, participants said that the land was always there to turn to and connect with, which re-established, or established, a greater sense of Indigenous identity. It became evident that the land was recognized as central to their Indigenous identity and that the land, by extension, may hold the truth of who they are. Three participants explained the following:

> "Well, I think a big part of Indigenous, like, culture and heritage is just connection to the land and, like, having respect for it."

> "It's hard not to feel disconnected when we lose these practices of, like, you know, weeding together and growing things and sharing different foods and cultural, kind of, teachings within the food. …Something that makes me feel quite emotional, honestly, because it's just such a loss and feeling that loss, I don't know, it doesn't sit right with me when I think about it."

> "To be Indigenous is to be inherently connected to the land."

This is a crucial point to recognize. Many Indigenous people struggle with inner conflicts about what it means to be Indigenous in a modern, capitalist world and struggle with feeling 'not Indigenous enough.' What is 'Indigenous enough' in today's world? How can you be 'Indigenous enough' in a country like Canada? The conversation had on these two days points to the possibility that the land itself holds that truth, and I can imagine several reasons as to why this could be so. One participant summed up this issue well:

> “But it's like, I don't know, it's like Indigenous nations. And it's like Indigenous languages. And it's like Indigenous seed varieties. They're all the same. They're all intimately connected. And we're just, like, they're dropping like flies. And it's, yeah, it's disheartening sometimes to think about.”

Day 2, Question 7:

7. *How does human spirituality connect with plants?*

This question was asked because the participants had already been mentioning spirituality in relation to plants in previous discussions. It was an intriguing topic that was not originally in the research plan.

The main result and theme from this question was that plants provided a multi-faceted support to humans. Spiritually, plants were seen as one of the greatest aids to personal journeys and was first noted for their use in an array of religions and spiritual practices, globally, in the forms of incense, smudging and other ceremonies, and as medicine.

I had mentioned that it was curious how, all over the world, you find that those who are most dedicated to their spiritual journey typically retreat into nature to focus better. As one person said, “If you're looking to, like, reflect or connect that you often turn to nature, because it's, it's calming, it's healing and offers so many different things that I think are beneficial to us.” This led to conversation about how plants deepen our connection to the Earth, help to teach us about all our relations and the gifts humans have been given, as well as recognizing the ancient connections humans have with plants. One participant explained a story “along the lines of, we were given our bodies from mother earth so that our spirits could fully experience the entire world through, like, our senses and everything.”

Rightfully, the participants also questioned what spirituality is or how to define it. It is a ‘big’ word but the direction the conversation took was indicative of what was

important to them. For example, “I think that, as Indigenous people, we definitely have a little deeper connection to nature, to plants, than most, but I feel like even, like, anyone in general is able to find the connection between human life and plants just by looking outside. Like, you can just go outside and be grateful for everything that the earth is providing for us.”

Day 2, Questions 8 and 9:

8. *Would you ever consider plants worthy of the same ethical standing as humans?*

9. *Do you consider plants intelligent? How does this affect their ethical considerations?*

Question 8 came directly from the literature review and some interesting discussion raised there. I simply wanted to see what the group thought about this topic. I followed up with the question about intelligence as it fit with what they responded with and tied back to some previous conversations as well, where plant intelligence was indirectly acknowledged.

For this, the group almost unanimously decided that, yes, plants should have a higher ethical standing than they currently do. However, they said that the biggest challenge to this was likely the uptake of a differing worldview by the majority of society. Plants simply are not understood in this lens. As several participants explained:

> “The first being like, like, obviously, I want these things to be possible. But I even just look at the way that people like speak about plants. And I think that it's problematic. And it's because, for a lot of people to say, to, like, acknowledge the agency, and the spirit and life that is in plants is to speak in a, like, a technically, like, non-grammatical way.”
>
> “And I don't think it would be, I don't think it would be taken so seriously.”
>
> “Isn't that Indigenous teachings, they think that, that all spiritual beings, plants, animals, us, I don't think it's too far off to think that… So I think definitely, but for

> us to have that mindset now, probably not realistic. Could it have been a mindset if the world around us were different? Yeah, totally. I think so."

That it is unlikely plants will reach this level of recognition in our lifetime, they suggested that the level of respect and protection for plants ought to increase significantly, at the least. This was tied to the sheer amount of support we have from plants in our daily lives. One participant shared great optimism, noting instances where more-than-human life has been granted legal personhood. A river in Quebec was an example used, where it was stated that "…I don't think that's a far stretch. And it was the case in Canada, was the first time in the globe that it was recognized by Indigenous people and a settler community at the same time."

One person astutely pointed out that the question was also humancentric, stating, "But like, you're asking if they should be based on the same level as humans. But that's, that's like starting from the same place that humans are the center. So maybe we go beyond that. Are they awarded even more ethical consideration?"

As for plant intelligence, the decision between yes and no, and how to even define intelligence, bounced around the circle for a while. One person said, "intelligence is not, like, sort of perfect word, because nobody can really 100% define what intelligence is." In the end, it was clear that the group agreed that because plants have the agency to adapt to change, and have a will to live, that is enough to prove a basic intelligence. As one person said, "Because obviously, they're just not a machine, they are living and they are able to make their own decisions, and that their number one decision is just to grow and survive. And if they have the choice of life or death, they're gonna choose life."

This participant explained how plant intelligence was understood and how it was similar to human intelligence and adaptability:

> "I think plants are really intelligent, the way they naturally will make themselves more, whether that's through vining and planting themselves in soil or whether

> that's growing underneath the ground and popping up somewhere else. I think, or producing seeds, I think they have their own survival instincts and that makes them naturally intelligent. We have our own survival instincts and that's what we view as our intelligence a lot of the time."

Beyond that, several participants also noted that plants are a lot like humans after all; we both consist of chemical reactions and the desire to thrive and reproduce with the ability to adapt, as needed. That said, they also noted that there are different types of intelligence that should be acknowledged, and that their intelligence was "Not necessarily less than but even different…" based on their needs and evolutionary history.

What was seen as inhibitory to the broader uptake of this perspective in society was that there is a sensory limitation to being human that limits what we are able to perceive and know about the world around us. We can never truly understand the world of plants. On top of this is the humancentric worldview that has been threaded through most of these conversations. In a society that values humans, above all else, why would plant intelligence matter? For example, someone had said:

> "who's to say that plants aren't intelligent... because we don't know, we aren't plants, we aren't. We're just humans. And we can only think in one way, there's so many ways, and there's no way to, like, get inside a plant and experience what they're experiencing… Like, I would say that they're just as intelligent as any other animal."

Day 2, Questions 10 and 11:

10. *Imagine you were walking through a lovely forest path, only to realize something was not quite right. It was too silent, there were no forest smells. Under closer inspection you realize everything around you is made of plastic. How would you react?*

11. *If you grew up in a plastic/fake forest, how would experiencing a real one make you react?*

I decided to ask these two questions at the end for several reasons. One, it was the end of the day and everyone was tired from discussing some deep and personal topics. I wanted to use the remaining time on something a bit lighter and more imaginative to begin closing the circles. Second, thinking about the possibility of living in a fake forest would potentially bring forward insights that other questions did not.

For Question 10, most people expressed curiosity and wanted to ask a lot of questions and investigate this imaginary, plastic forest. Where did it end? Who made it? Why was it made? As one person said, “I would just start asking questions like, who did this and why?” Or as another asked, “…the only thing that I could think about is like, why is it plastic?” They also related it to several stories, including *The Lorax, The Truman Show* and *Black Mirror.* The idea of a simulation was also discussed. Along with this was a sense of being perturbed. For something that is usually so familiar and a source of comfort, to see a totally fake forest was disturbing. This made participants realize how much they value every part of a forest, from the smell of soil to the sound of birds and insects that forests are home to. As one participant said about finishing a hike in this fake forest, “…it helps to gain an appreciation for the life that's actually around you when you go into actual nature.” Another person had said about this, “that would be a really good change of perspective and would make you realize how much you take for granted.”

As the talking piece was going around, one participant brought up the next question without my prompting. What if you grew up in a fake forest and suddenly experienced the real thing? The consensus was that it would be parallel to the previous question, only more overwhelming due to the sensory overload.

What was interesting was the discussion that arose about what Glenn Albrecht calls *environmental generational amnesia.* An example of a dome covering a school in

Beijing was explained, as a means to protect children from severe air pollution at recess time. This made everyone take note of how much children love the outdoors and how, as children themselves, they were often forced to stay outside for recess or when at home. Imagining the opposite did not seem too far off when considering climate change and instances like what was described in Beijing. As was explained:

> “And their recess is just like in this dome. Like, they don't go outside for recess because of the heavy smog. And I don't know why it just made me think that because they don't get, they, like, don’t get to experience being outdoors for their, like, recess time. And I felt that that was so weird to me. Because I grew up literally, like, I remember going to middle school, and they were, like, you can't come inside at recess time! They were like, you stay out there!”

This was a compelling note to end on, as it ties back to the discussions about how modernization and urbanization have fragmented Indigenous peoples from their heritage, and how it has obscured many relations, both with human and more-than-humans. Based on previous research in the literature review, it was apparent to me that this reflected an increasing amount of environmental generational amnesia that is already occurring but going largely unnoticed or unaddressed in any meaningful way. It reminds me of the threat of the slow violence of climate change and what we need to be more attentive to in order to prevent further losses than what has already been lost. One person had posited:

> “And like, could that be a potential for the future generations? Like if we continue on the path that we're on? Is it, like, possible that we're gonna end up with, like, the Lorax and have fake trees? And they would never know. And it would just, like, to us, it'd be like, this sucks, but to our future generations, that would just be normal. Which is really weird to think about.”

And to conclude with a final statement, “Yeah, I wouldn't want to live in a world where that's the reality.

4.2 Results Summary and Key Findings

The conversations had during the sharing circles were rich, sincere, and deep. This was a mature and candid group of participants who contributed some very personal and insightful answers to the questions I invited them to respond to and challenged my own thinking and knowledge gathered from this research journey.

For the participants, colonization and modernization are the main factors that caused an array of relational fragmentation or relational obscurity. This includes a disconnect to their family, Indigenous heritage and traditions, plants, and other more-than-human life. Increasingly, environmental generational amnesia is being experienced and is predicted to worsen as technological advances continue and convenience creeps into more areas of daily life. This was understood to cause even greater degrees of relational fragmentation or obscurity that directly opposes and threatens Indigenous traditions, way of life and worldviews. Connected to this are climate change challenges, which are a result of modernization. Many negative emotions were expressed about this, including anger, frustration and loss. Together, these challenges prevent consistent relationship development with plants, impacting their mental health and ability to connect to their Indigenous heritage and traditions, and causing more internal strife about their Indigenous identity.

The upside is that more-than-human life, specifically plants, play a significant positive role in helping manage or remedy disconnection, internal struggles, and finding purpose and hope for the future through action. Plants are overwhelmingly seen as positive relations for participants. This includes mental, physical, spiritual, and social benefits. The diverse and fundamental support that plants provide were seen as sufficient reason to advocate for greater respect for and protection of plants.

Often, the mere presence of a healthy, thriving plant or plant community, such as a forest, wild prairie or wetland, provided significant benefits to participants. Relationships with plants were also seen as universal to humans and our connections to them are

both innate and subconscious. This universality extends to the capacity for humans to establish, or re-establish, deeper connections with plants.

Many initial forms of bonding with plants came through food, family members, gardens and harvesting in the wild. These relationships transcended the physical as participants matured through life. Also worth noting is that plants were seen as selfless gift-givers and teachers, something participants thought was uncommon in dominant worldviews on Turtle Island.

Finally, the great amount of comfort and positivity that plant life provided points toward the Land being a keeper of the truth, a truth of Indigenous identity and the depth and breadth of what has been lost to colonization. In this light, plants can be seen as not only a tremendous source of comfort, companionship, wisdom, support, and aids to health, but also as a doorway for Indigenous people to begin connecting in a safe and sincere way to their heritage, family, and (almost) lost traditions. This is crucial to acknowledge when it is more common than not for Indigenous people to be grappling with racial imposter syndrome and other facets of internalized colonization. It is also additional justification to support various Land Back or land and water protection initiatives that directly impact Indigenous peoples. To protect plants is to protect Indigenous ways of life. This will be discussed further in the next chapter.

5 Discussion

In this chapter I will analyze how the research results compare to the literature review in Chapter 2, as well as to landscape architecture as whole. The effectiveness of the circle method will be evaluated for use in landscape architecture and limitations to this method will also be explained. Threaded throughout this discussion are suggestions for future research that could deepen any aspect that this project has engaged in.

5.1 Literature Comparison

When comparing the literature review and the research results, it is clear how many strong parallels can be drawn. Essentially, the results of the circles match what is in the literature quite well. I will summarize these into the categories that are found in the literature.

More-than-human

Regarding more-than-human literature, it was clear how adamant participants were on the effects the Western worldview and colonization has had on Indigenous people and the natural world. What was frequently repeated was how fragmented the land has become, which has resulted in a broad range of dire consequences. Included in these was observations of biodiversity loss, commodification of more-than-human life, knowledge loss, language loss, isolation, and, most related to this study, lost, broken or obscured relationships to plants, fauna, family and their Indigenous heritage.

They also repeated the need for humanity to cooperate, at various levels, in various ways, to overcome the ecological challenges we are facing today. This was also found in the literature, and it is a perspective that points towards the presence of hope for our future.

What landscape architects could take away from this is, to be very broad, to re-evaluate the foundational principles that underlie the practice. Although swiftly evolving, there remains an ingrained expectation of what a ‘good’ or ‘excellent’ landscape design

includes and how that landscape comes into existence. This is often a highly humancentric orientation to design and many of the issues addressed in this work are not considered frequently enough or substantially enough.

Landscape architects could easily step up to change the game, as it were, and begin to call for a practice that is founded on a different set of values and purposes so as to attend to today's most pressing challenges in the most effective ways possible. As many a practitioner would state, landscape architects are in a prime position to tackle many of the issues that climate change presents. This thesis can add to the call for change that is desperately needed around the globe.

Plant-Human Relations

At first, it was evident that participants held a very typical view of plants for a Western context. However, as the discussion progressed, they unveiled for themselves how much they actually rely on and value plants and what this means for their lives. Included in this was the physical likeness of plants to humans, the reliance we have on them for medicine, food, and other resources, and the great amount of comfort and wisdom found in the company and teachings of plants. This was all mostly unrecognized before the circles were held, but it arose naturally in the discussion. Overall, participants' views and stories matched the literature very well, both from the original outlook held and later through the recognition of the many abilities of plants.

One participant astutely noted that she thought plant roots could be likened to the human brain and nervous system both in function and form (considering the shape of neural pathways and cells). Surprisingly, this matches some scientific research that has discovered that that tips of roots do, in fact, have characteristics that are very similar to brain activity in fauna (Manuso & Viola, 2015). This was an incredible observation, in my opinion.

More importantly, the participants revealed that plants are a vital connection to the recovery of their Indigenous heritage, to the well-being of humanity, and to building healthier relations with other more-than-human life.

The significance of this cannot be understated. For societies that still largely objectify plants, this type of research should signal the need for a shift in how plants are being used and sustained, or in how they are being impeded from flourishing. This includes industry, agriculture, national and provincial parks, popular culture and trends in areas such as gardening and residential design, as well as the varied work landscape architects are involved in. Perhaps an important aspect of this is for landscape architects to be more acutely aware of political opportunities to contribute to the reclamation of Indigenous lands through the support of movements like Land Back. Although practitioners do not have much sway in politics, per se, they do frequently interact with those who do, at various levels, and as professionals they can offer consultation to those in power to make decisions that will support these ends.

In short, protecting plants and their habitats will aid in the health and healing of so many different things in the world. I do not think I need to stress this, but this type of research shows that, if we care for the land, the land will care for us. It is ancient knowledge that is still alive and especially so in many Indigenous cultures.

Ecological Grief

In terms of ecological grief and Earth emotions, all three categories of ecological grief were exhibited. This includes physical losses, such as the loss of traditional farmland or harvesting areas. It includes knowledge loss in the form of lost traditions, knowledge from older generations in the family, and general connectivity to Indigenous cultural practices. Third, they also expressed a great deal of climate anxiety, which is prevalent in youth more than older generations. There was substantial anger and frustration about the ecological state of the world and how they often felt disempowered to be able to do anything about it. To borrow from Glenn Albrecht, some emotions that

were shared, including positive emotions, include environmental generational amnesia, ecoanxiety, ecoparalysis, terrafurie, solastalgia, biophilia, ecophilia and others.

What was encouraging was that they still held on to their faith in humanity, in the resilience of the natural world, and of more-than-human life. As previously stated, where there is grief there is also love. I believe that these participants held love closer in their hearts than ecoanxiety or terrafurie, and this propels them forwards in their lives and careers.

Acknowledging this, it is appropriate to consider, or reconsider, how community engagement practices are carried out in the design process of landscape architecture and to be carefully attentive to these Earth emotions when in consultation or collaboration with Indigenous communities especially. It might be worth the time for practitioners to first acquaint themselves with their own experiences of Earth emotions and ecological grief and deepen their understanding of their own lived experiences. Though not therapists, landscape architects need to develop the soft skills of handing these emotions when they are present in a community or individuals they are working for. It may be possible that recognition of these Earth emotions, which are currently unrecognized by most people for what they are, could inform crucial design decisions that will impact those who live with or interact with the landscape most. I would not doubt the possibility that new information could be revealed in such a process that standard practice may overlook.

This type of situation is exactly where the circle method can be utilized to great effect. Allowing a group of people to sit with these Earth emotions in a circle context may be the first instance they have ever had time to do so. It also gives practitioners the opportunity to listen deeply and find design solutions from the process that will better suit the needs of the community. As climate change keeps rearing its head on us, this is knowledge and a tool that could potentially aid in new design solutions.

I also want to specifically acknowledge the presence of environmental generational amnesia. It became apparent to me in the conversations and in the data analysis how frequently this appeared. It is a subtle presence that, if you are unaware of this term, is easy to overlook. However, I find it alarming that all of us in the circles had some degree of this present in our lives and understood the various losses that are associated with it. This is part of the slow violence of climate change and, for me, it is like a silent alarm bell that, if left unchecked, could make inspiring action to protect the natural world ever more challenging. Landscape architects have the ability to help prevent this through design, wherever they find themselves working and teaching.

Indigenous Concerns

It can be concluded from this study that plants play a crucial role in connecting Indigenous people to everything that they have lost to colonization and modernization, as a generalization based on limited data. However, it does match the literature very well, as noted above. Plants act as a doorway into a world that has nearly been lost and to relationships that have been greatly obscured. With all of the positive benefits that participants discovered that they gain from plants, it became evident that if they took time to learn about plants and their habitat, and to connect with them, this could be one of the simplest and safest ways to begin connecting with their Indigenous identity.

Safety is a key word here. In Western countries that are still deeply colonized, safety remains a top priority for Indigenous people seeking to strengthen or reclaim their Indigenous identity. One of the biggest challenges I have seen is the inner struggle of racial imposter syndrome. Plants, as participants noted, create an emotionally safe space where people can explore both their environment and themselves in a deep and introspective way that can be of tremendous value on their journey of cultural awakening.

Finding opportunities for this to be nourished in landscape design can be a subtle but powerful way to contribute to reconciliation. I can imagine that a careful attention to

working with native species and mirroring native habitats of these plants could assist in such an inner journey. Simultaneously, this is an opportunity for landscape architects to build relations with Indigenous communities, Elders, and Knowledge Keepers, as there would need to be consultation with them about how to create such a design effectively. It would be interesting to see this approach in urban settings and places where this might not be expected and assess whether there is any impact on how it affects Indigenous people's mental health, how it could aid in growing knowledge, or how it could be used as a tool for teaching by Elders and Knowledge Keepers.

Similarly, these habitats are also of value and benefit to non-Indigenous people. It offers the same level of mental health benefits and could potentially contribute to knowledge dissemination of native species and Indigenous cultures the area. All of this contributes to reconciliation and reclamation efforts.

The Circle Method

The circle method used for this study was successful and performed as expected. A safe emotional space was established that allowed participants room to share and think through things that they would not otherwise have had a chance to. Several participants also acknowledged the circle for what it is, an Indigenous method intended to heal and connect people.

During breaks and after the circle each day it was encouraging, as the researcher, to see participants build connections with each other and provide support. One person was inspired to reconnect with the Indigenous Student Centre on campus after avoiding it from a previous bad experience there. All of us found comfort in hearing the degree of racial imposter syndrome that we were grappling with and what that meant for us, among other reasons to support and connect with each other. What was agreed upon by all of us is what was described previously; in an unspoken acknowledgement, we recognized how vital connecting to the land is for reclaiming our Indigenous identity, with plants being key to this work.

Story was, of course, utilized extensively. This provided rich data that was collected in a short amount of time and added to the depth of the results that were possible for such a small study.

I have already touched on this, but the circle method is an excellent method to use for community engagement purposes in the design process. What will be key for practitioners is to truly practice deep listening and self-reflexivity, and to be willing to show vulnerability themselves. This method will not fit into the current structure of landscape architecture practice, nor should it. It is a slow process, one that requires everyone to step outside their daily life and bring all of themselves to the conversation. These circles also cannot be held spontaneously. They need intentional and careful preparation to be successful and to ensure that harm is not created.

There is one aspect of the circle method that could turn on its head if careful preparation is not attended to. Because circles allow for people to share deeply, there is always the potential that things get heated. This could take the form of any intense emotion, from anger or rage to deep grief. If there is any disagreement among participants there is a danger that arguments or a tear in relations could result. This is the last thing that anyone would want to occur and practitioners need to know how to mitigate this or set up a circle so that this is prevented. No one can control circles entirely, but the keeper is responsible for doing their best to establish the values, guidelines, and emotional space with the group to be one of safety, above all and for all. Proper training as a keeper is required to ensure that this is the case.

5.2 Limitations

Time constraints were the biggest challenge to this study. This occurred in several ways. One was the Research Ethics Board process of approval. It simply takes time to move through this. The other main constraint was the length of the degree program. This study had only eight months to be completed from inception to completion. If more

time was available, such as in a doctoral program, then this exploration could be deepened and enriched substantially.

The other main time constraint was in the method itself, as discussed previously. The fact that circles are born of a different paradigm and allowing people to step into that paradigm is crucial to its success. However, it does not fit contemporary Western culture or the typical practice of landscape architecture. This method requires a substantial amount of time from both the keeper/landscape architect and from the community members. As a result, reciprocity for participants time becomes crucial to the success of this process. Without appropriate reciprocity there is no opportunity to repair relations between people, whatever groups those people are that are part of the process.

For this study I was fortunate that my advisors were able to secure funding that allowed me to feed the participants and offer them an honorarium for their time. If this did not occur, it would have been difficult to get as many people to volunteer a weekend of their time to me as I did. In practice it will likely be a consistent challenge to get enough participants that are willing to give up the time needed to move through this process successfully.

Convincing enough practitioners that this process is worth their time is another challenge to take heed of. As stated previously, this process is not meant to fit the current systems of work. Landscape architecture is a competitive profession where time can be a sensitive matter that affects whether or not a company wins projects or not. This is understood; everyone has bills to pay. However, I argue that if landscape architects do not begin implementing changes like this, processes and practices that make decolonization and reconciliation tangible and real, then as a society we will be too slow to see the uptake of this work. Any lack of change and action only perpetuates harm, not just for Indigenous people, not just for more-than-human life. It affects us all.

Another challenge with this work is that decolonizing any system in a colonized country is going to create deep discomfort, fear, anxiety, and in some cases retaliation against this change. This should be expected. Anyone raised in a Western culture has been raised with a colonizer's mindset. It is simply how it is, including for many Indigenous people, but certainly not all. The discomfort felt needs to be felt and addressed effectively by as many people as possible for change to begin. Landscape professionals ought to be leaders in this. It was pointed out to me in conversation that every trauma that Indigenous people have experienced is in some way is tied back to the land. What more needs to be said to inspire action on this front? If the profession takes its ethical obligations seriously then side-stepping or ignoring possibilities for reconciliation and decolonization is perpetuating harm – which directly opposes the ethical responsibility to society and to the land.

I also want to note that this thesis is not to be considered Indigenous research. This was a project completed utilizing Western academic processes and structures. Although the circle method was used, which is Indigenous in origins, and that I am Metis, this does not mean that suddenly the research is totally Indigenous. It is erroneous to jump to such a conclusion. Indigenous research practices would far exceed the eight-month timeline that I had to complete this thesis, among many other factors that would need to be considered.

6 Conclusion

This thesis sought to explore the relationship between plants and a group of Indigenous students at the University of Guelph. Building off a literature review of related topics, participants were invited to respond to questions and share their views about, and interactions with, plants both present and in their past. This was done in a sharing circle format which was intended to provide a safe emotional space for this sharing to occur.

What resulted from this exploration supports what is found in the literature review. Participants shared experiences about varying degrees of connection and disconnection to their Indigenous heritage, plants, and more-than-human life. This was largely attributed to colonization and the dominance of the Western worldview. Topics such as climate change, spirituality, mental health, and racial imposter syndrome were raised and explored during the circles. The key finding is that the land, and more-than-human life, is a safe and essential space in helping Indigenous people to reclaim their identities and heritage. Plants are central to this aim. Without the company and wisdom of plants, participants noted, the potential to nourish and generate healthy relations of many types is severely inhibited. This includes relations to fauna, family members, communities, and other humans we otherwise would not interact with in daily life.

These types of research results are essential for landscape professionals to consider. It is not a stretch to say that, from these results, reconciliation is also deeply tied to the land itself, where plants are a vital, though often undervalued, link between humans and between humans and the land. Reconciliation includes not only human relations; more-than-human relations and the natural world are intimately tied into this. Landscape architects, as professionals who deal with the land and plants daily, who have the ethical responsibility to cause no harm, have every reason to make reconciliation a priority in their work. The Canadian Society of Landscape Architects (CSLA) has laid out three pillars of reconciliation that is intended to guide provincial associations and practitioners towards these goals. These pillars include

Acknowledgement, Awareness and Action. Foundational to these goals is nurturing healthier and stronger relations between Indigenous peoples, the profession, settlers and immigrants, as well better incorporating Indigenous voices, knowledge, histories and values in design work. It is not acceptable to ignore the work that needs to be done. Ignoring this simply perpetuates harm.

On top of reconciliation are matters relating to climate change. With industrialization and modernization reaching almost every place on Earth, the relations that many people in the world have with more-than-human life has changed substantially. This is a result of the spread of the Western worldview and capitalism. These factors have, in some instances, severely disrupted humans' relations with more-than-human life. Earth emotions are a realm of research that is increasingly gaining attention as more severe and frequent impacts of climate change are felt in increasing numbers of places around the world. To effectively handle these scenarios, landscape professionals also ought to be aware of these topics, at the least. Climate change is a slow violence, in human eyes, and Earth emotions are not always easy to spot. Instances of environmental generational amnesia, for example, are alarming and potentially worsening in some areas and will only inhibit any fruitful changes needed to halt climate change as soon as possible.

There remain many related research gaps that could be pursued, in light of this line of research. Specifically, about plants, there is very little research about how plants and Indigenous people are connected or disconnected with regard to climate change, Earth emotions and especially ecological grief. Given this thesis' findings, it would be worthwhile to explore what this has meant for cultural reclamation or cultural loss, as well as traditional knowledge, language, or cases of environmental generational amnesia and other obscured relations.

It would also be of interest to investigate how new approaches to planting design could be used in a multi-faceted way to aid reconciliation, decolonization, teaching and

education, and even political movements like Land Back. Connecting with plants is, after all, universal.

There is also much to be explored in the realm of Earth emotions. It is not uncommon for landscape architects to tout how primed the profession is to handle climate change needs with skills in areas like nature-based solutions and green infrastructure, among others. However, climate change is not only a technical issue. It is also relational. Knowing how to navigate the soft skills needed to notice and handle Earth emotions effectively could be a tremendous asset to the design and community engagement work that practitioners undertake.

Overall, this thesis is a crumb in the wide world of research. However, it is now part of a body of literature that calls for change. It is my hope that, at the least, this research inspires one other person to undertake work about what is of value for them for Indigenous people and for our more-than-human relations.

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APPENDIX

Circle materials used:

- Zoom H1n Handy Recorder
- Laptop
- Notebook for the researcher
- Otter.ai transcription service
- Private room to hold the circles
- Circle centre piece:
    - Candle, bowl of soil, bowl of water, empty bowl. These four components are meant to symbolize the four elements: earth, air water and fire.
    - These were set out on a piece of pink fabric.
- Paper name tags.
- Talking piece: hacky sack
- Five small plush toys.
- A poster board and felt pen was used to write down the circle guidelines.
- Paper plates, felt pens, crayons and coloured pencils.
- Participants were also provided with a catered meals and a $200 stipend for each day of the circle.

Dream Riddle:

I am here, see me thrive! I am here, cunning, witty, with two feet conquering even the skies. I am here, looking, not seeing, walking but forgetting. I am mind, that tool so sly. I am here, alive, I thrive! Can you see me? I've gotten so high.

I am here. Simply here. I transform, I do my silent work, marked by time. I am the shadows behind you, the shade under the sun. I am here, palms ever open, giving but always self-sufficient, unflinching amongst the elements. I am standing and watching

and waiting. I am silent grief. You no longer hear when I call, no longer see what I give. I am waiting.

I am here. I am a spectacle. I, too, stand tall, but in heights that come not in wisdom. I am high, but in my height, I come crashing down. I am broken, spectre of the mind deceived. I have fallen, knees now in the bare earth. I am down here, now lost, now lonely. I look but have not seen. I hear but have not listened. I touch but have not felt. I am mistaken. I am on the Earth. I look and now I see. I see beside me the water. I feel around me the wind. I have above me the sun. I look and beside me I see you, silent, standing, waiting. I look and see that you are inside me. I look and I see that I am inside you. I am remembering of whence I came. I am here and I am the land.

Figure 1. Drawing created by all participants on day one of the circles as part of the opening ceremony.