Participatory Knowledge of Motion: Ezhianishinaabebimaadiziyaang mii sa ezhianishinaabeaadisokeyaang. The way in which we live, that is the way we write stories.

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Abstract

This is a dissertation based upon the *Customary Ways Dataset*, which is comprised of 50 interviews given by Elders from Walpole Island First Nation, in 2010. The over-arching, community-designed research question that guided this dissertation was: *How do the Elders of Walpole Island describe their relationship to the land?* To answer this question, I co-designed a mixed-methods analysis that included traditional methods from the Social Sciences, including Grounded Theory, to establish emergent themes, and some simple statistical analysis using Chi-square and crosstab analysis. I also utilized methods closely related to the Humanities, deploying Story Mapping, Close Reading and a Digital Humanities technique of using Natural Language Processing.

The main contributions of this dissertation are:

1) These are 305 Indigenous Stories, and not 50 interviews. This dissertation demonstrates that Elders were *telling* stories, and not giving interview answers, as the means by which they describe the ways they engage *in a relationship with* the land, and how they describe the ethical boundaries of this relationship.

2) Intergenerational knowledge can be shown to be statistically relevant to the complexity of the stories told by Elders within the *Customary Ways Dataset*.

3) A local description of Indigenous Knowledge emerges: Indigenous Knowledge at Walpole Island is not conceptual, but rather is a *participatory knowledge of motion* that occurs both through listening to the motion of the land and the act of *telling* about this motion through stories. Thus, we must begin to recognize stories are both the *form of*, and the *subjects of* Indigenous Knowledge.

4) A new definition of listening emerges wherein listening is a process that occurs through land-based participatory activities. This thesis demonstrates that hunting *is* listening; basket making *is* listening; gathering medicine *is* listening; fishing *is* listening. What is common across all of these forms of listening, is that this type of listening informs the Elder’s relationship *with* the land, and the stories they tell. Thus, storytelling *is* listening to the land, which allows the Elders of Walpole Island to practice *Ezhi-anishinaabebeimaadiziyaang mii sa ezhanishinaabeaadisokeyaang*


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1 The way in which we live, that is the way we write (make) stories. I learned this concept from the work of Margaret Noodin, in her work *Megwa Baabaamiaayayaaayaaang Dibaajomoyaang* (Anishinaabe Literature as Memory in Motion, p.183, 2014).
Summary for Lay Audience

This is a dissertation about what it means to listen to the land under one’s feet and what it means to tell stories about that listening, within a corpus of 50 interviews given by Elders of Walpole Island First Nation. This research demonstrates that it is through the connected activity of listening to the land and telling stories that a very special type of knowledge emerges. What emerges through this research is that the knowledge shared by the Walpole Island Elders, through the stories they tell, is best described as a participatory knowledge of motion. What becomes clear is that this participatory knowledge of motion is the connection between the practice of listening to the land, and the telling of stories about what was heard. Ultimately, at Walpole Island, this participatory knowledge of motion has created a complex network of living stories that are shared within the community, and across generations. This research uncovers that no story contained in the interview dataset exists in isolation, but instead each story lives in a network of interrelated stories: it is the networked nature of these stories that is a critical feature of both their resiliency and efficacy. That is, the participatory knowledge of motion practiced at Walpole Island maintains the system of ethics and practical knowledge that has literally created an Anishinaabe world. That is, the Elders live their ethics through the stories they learned to tell, from the practice of listening to the land. Through deep observation and recognition of the fact they are deeply part of the cooperative balance of creation, the Elders tell stories that allow them to collectively create an Anishinaabe world; a world that is constructed with the reciprocity and participation of the plants, animals, rocks and waters. And, it is through these stories that the Elders literally give life to their political and social systems. The Elders demonstrate that by living through stories, they demonstrate that the telling of stories guides the practice of collectively imagining and creating the very communities and worldviews that they inhabit.
Acknowledgements

If you had told me 7 years ago, that I would be writing the acknowledgements of my dissertation as the person that I have become today, I would have laughed! I started my PhD at a time in my life where my path was unclear. I was a recently divorced single mum to two very small children. I was feeling both exhilarated by the newness of my life, and terrified by what it all meant; where it was all heading. So, I started a PhD; at the time I thought that if I could finish a PhD, work full time, and be a single mum, I would create a record of what I was able to accomplish. What I could do.

Well, I have lived a lot of life in the seven years between then and now. And I have come to realize that what my dissertation is a record of, not what I can accomplish, but instead, what I was able to learn. This dissertation is a record of learning to listen and learning to find my voice as a storyteller. And, through this process I have learned that to sing your song is not an easy path; there are many struggles and missteps; the path is anything but linear, the path is sometimes unclear and scary; but, what I have learned is that if you get to know the earth beneath your feet, if you learn to listen to its motion, your voice will sing its songs, because you will fall deeply in love. In love with that motion that is both in your own heart and in the earth. You will, if you listen closely enough, learn to sing a love song of the earth.

I could never have walked this path without the encouragement, support and friendship of Clint Jacobs. Clint, I hope that this dissertation, and the story I have learned to tell is a way to begin to thank you. To demonstrate my gratitude to you. I hope that these stories we have shared are the beginning of a path we will continue to walk together, as we learn to tell new stories together.

My dissertation has been a journey walked with many people: it started with a conversation with Dr Joy Parr, on the shores of Naadowewi-gichigami, thank you for your guidance, Joy. I hope this work keeps you pleasantly surprised at the ways in which people tell their stories with their whole selves. Dr. Jerry White taught me how to think rigorously, with a kind heart; how to ask questions that lead to conversations, and how to walk in a way that honours the people you listen to as a researcher. Dr. Chantelle Richmond asked deep questions of this work and encouraged me to ask questions with integrity and with purpose. Dr. Isaac Luginaah taught me that in simplicity there is great elegance and clarity.

Dissertations are not written in isolation- I could never have accomplished this feat without the support of my parents. Mum, thank you for believing in me and for the countless hours of time you have given me to think by caring for the boys. Dad, thank you for being my example of who I aspire to be as an academic; your generosity of spirit and curiosity continues to be a shining example. Thank you for reading this story as it grew from an idea, even before these thoughts were fully formed, to its final version. Thank you for believing that I could do this work; thank you for asking me hard questions and giving me the space to find the answers. To my sister, Kate, thank you for your encouragement; your humour; the many days of care you provided the boys so that I could think and write. And thank you for always being right beside me, through this life we live.

Thank you to Dr. Juan Luis Suarez and the CulturePlex Lab: Antoino and Ana, with your abundant patience, you took a person who can barely use her phone, let alone a computer, and taught her to see that there are computational techniques that allow us to make-sense of the stories
people tell by understanding the patterns that these stories leave behind. That these patterns are the beautiful traces of the storytellers who voiced their stories.

To Kate Schieman, how could ever thank you enough for the time and energy you generously gave to me, as we talked through quantifying this crazy idea I had that you could “measure” stories. Your friendship will always be a truly remarkable gift in my life.

Eamon and Gabriel: thank you my loves. Thank you for teaching me about how to live a life full of curiosity and with an open heart. Every time you were delighted by the way a snowflake feels on your nose; or the countless times you stopped on a walk to sit on the sidewalk to watch with earnestness the ant processions; or each time you squealed with pure abandon as you greeted our dear Beaver friend in the spring, you taught me to listen. Your delight taught me to listen to the stories that are held deeply in the land beneath my feet, and to tell about it. With delight.

And, most importantly, to the 50 Elders of Walpole Island, whose voices were my guides and teachers over the last 7 years. Your stories, enlivened through your voices, have taught me that you live your lives through stories, and that you create an Anishinaabe world by doing so. *K’gah baugwaushkaugameetchigaemin beenish mukwaenimimikohing/We will stir the waters until one remembers*².

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² From Basil Johnston’s Ojibway Ceremonies: Call of the *maemaegwishuk* (1990)
For both the people and the land of Bkejwanong, which I have learned are one and the same: may you find your stories here, and may you continue to tell them.
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Community Partner Preface

Clinton Roy Jacobs
Supervisor, Nin.Da.Waab.Jig/Walpole Island Heritage Center

In 2010, I led a small team at Nin.Da.Waab.Jig/Walpole Island Heritage Centre on a project that asked Bkejwanong Elders and community members how to bring ways to care for the Land from the past to help us care for the habitats, species, and All Our Relations at Bkejwanong in the present. Through this ‘Customary Ways for Caring for the Land’ project, nearly 100 interviews captured numerous lessons and ways that our people cared for the Land. Some of the interviews were analyzed, but the project ran out of funds to fully complete the initiative.

A couple of years later, I was introduced to Erin Huner who was about to undertake her doctoral research at Western University. I brought forward the idea of helping to analyze the Customary Ways project interviews and bring us closer to reaching our goal of completing that project. Erin agreed.

The research was approved by Nin.Da.Waab.Jig/Walpole Island Heritage Centre’s Advisory Committee and was steered through our Centre’s ethics processes. The Advisory Committee instructed me to work with Erin to move forward with analyzing the Customary Ways interviews to ensure the voices were heard. Our Advisory Committee had input into the research’s formation and design; reviewed outlines and drafts of the research as it was being planned; and provided input and advice through the various stages of its development. Together we embarked upon a journey of exploration, continuous dialogue, deep listening, reflection, and growth.
As our First Nation community moves to continue to protect the habitats and species that we live with at Bkejwanong, governments have and continue to push and impose their approaches to conservation and protection upon us. When for millennia, First Nations people have protected the Land based upon our approaches, which is why the majority of the biodiversity hotspots in the country are areas protected by First Nations people. The Customary Ways interviews reaffirmed that the values and sound practices applied by our people continue to work. We need governments, conservation organizations, land trusts, and others to recognize, respect, honour, fund, and support our approaches going forward.

Erin stated that the stories shared through Customary Ways project “changed her life”. I heard others say the same thing. I trust that those stories can change the lives of others too. This doctoral dissertation encapsulates this journey and brings light to the voices and stories shared by our First Nation community. Miigwech (Thank you) Erin for seeing this work through.
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INTRODUCTION:

This is a dissertation about listening; but this is also a *story* about learning to listen to stories of the land as told by a group of 50 Elders from Walpole Island First Nation. And, as a story and a dissertation about learning to listen, this is also in many ways, a story about becoming a listener and learner. I become a listener and a learner by working through a process of decolonizing my thinking as a white settler researcher, and thereby recognizing the methods I could use and develop in order to listen to the Elder’s, my research partner and eventually, the land. But this is also a story about my research partner learning to listen to me, to who I am, through the stories I learned to tell him, through the process of becoming a learner, and eventually a listener. Through the combination of both academic writing and storytelling, it is my hope that I am able to take readers on a journey of how, as settler geographers and academics, we might learn to listen to the *stories* of Indigenous Elders, and, also use storytelling as a method of telling the stories about who we are; and about how the research we engage in transforms us. How can we use storytelling as a means of becoming learners, and through that process, unsettling our colonial viewpoints, leaving room to imagine decolonial practices, and processes of listening?

That is, by telling my own story about learning to listen, through my research relationship with Clint Jacobs, and the Elders of Walpole Island First Nation, I hope to demonstrate that the many ways in which settler geographers have tried to listen to the words of Indigenous Elders have actually obfuscated the stories Elders were trying to tell. I also hope that by telling my own stories of becoming a listener and learner, as a means of decolonizing the lens through which I came to know and be in the world, I am able to
demonstrate the process that Clint Jacobs and I undertook to learn to listen to one another, through the stories we told, over the course of this research project. And that these shared stories were both foundational as a method of decolonial listening, and a tangible research outcome, that centers decolonization as a process of learning to listen differently, as the process of being an intentional and reflective learner.

As I demonstrate in the literature review of this dissertation, geographers and other academics have spent a great deal of time listening for the concepts or ideas that the academy has used to create definitions of Indigenous knowledge. But, this dissertation asks: what if we recognized that Elders were telling us stories? How then might we begin to approach learning to hear what parts of Indigenous knowledge are captured in the stories Elders tell?

What if we recognized that the very structures used to tell these stories needed to be learned, and were a necessary and required part of how we get at learning to recognize distinct parts of Indigenous Knowledge? That is, what if by recognizing we were listening to stories, we also recognized that our current definitions of Indigenous Knowledge failed to capture a description of storytelling that requires one to both listen, and tell stories? What if we began to understand that Elders, through their storytelling, are describing their ability to listen to the motion of life that they hear, sense, feel and observe by being in relationship with the land, and as a result, they must use a medium or form that has the capacity to enliven this motion: and that structure or form is storytelling (both the listening and the telling). That is, what if we recognized that stories hold, carry and functionally breathe life as a significant part of the complex practice of Indigenous Knowledge, and as a result, as geographers, we would need to learn to listen, and develop
methods that allowed us to listen to these stories, in order to learn and understand the knowledge they carry?

What I have learned about storytelling and the power and practice of *listening* is its connection to what I describe as the *telling*, (that moment when you take all that you have come to know and understand through deep listening, and *tell* about it, through a story), can only be demonstrated through a combination of academic writing and storytelling. In order to demonstrate that my capacity, as a Settler woman, to listen had changed, and in order to demonstrate that I was beginning to understand who I was (and am) in relationship to the Indigenous stories I was listening to, with the guidance of Clint Jacobs, I needed to learn to communicate with Clint and the Elders of Walpole Island, through stories. That is, I needed to decolonize the ways and means by which I would communicate who I am as a researcher; I needed to work on developing a practice of my own telling, that demonstrated my role as a researcher was really that of a learner. I needed to unsettle the privilege and power that colonial practices of knowledge production hold, and challenge these power structures that I was a product of, and participant of, by moving out of the role of research “expert” and move through a process of embodying the space and process of a *learner*. Over the last 6 years, Clint and I have used storytelling as a method of examining our own standpoints and articulating them through the practice of telling one another stories about who we are; the lives we live, the concepts we collectively thought about, and in doing so, by learning to tell stories about myself and being reflective of my own shifting thinking, I was able to take up space in this research project and relationship as a learner.

Thus, when you read this work you are reading both a dissertation and a story; you will find both academic writing and stories woven together, because without learning to
listen, and then *telling* about it, through stories of my own, I would not have been able to demonstrate to Clint and the Elders of Walpole Island that I had come to understand myself: first, as a settler woman, and the privileges that this positionality holds; and in becoming a learner and telling stories as a testimony to that learning, I would not have been able to demonstrate the shifting positionality I held over the course of this research project, as a learner. I also needed to tell stories, as a means of demonstrating that I had learned to begin to listen to the land beneath my feet in order to be prepared to begin the task of learning to listen to the stories that the Elders had shared in the Customary Ways interviews. Clint has shared with me that learning to listen, and documenting that journey of learning to listening, was an essential teaching of this research project, because it maps the journey of coming to understand what I eventually heard in, and learned from the Customary Ways interviews. Had I not included the stories that I shared with Clint over the last 6 years of this project, I would have ignored one of the main findings of this research: that stories are both the means, *(or form)*, and the subject of Indigenous knowledge.

In following my own story about learning to listen to the Anishinaabe Elder’s stories that form the basis of this dissertation, it is my hope that readers will learn to listen to the stories that surround them; and, that by learning to listen to the stories that are in the world that surrounds them, and telling about these stories, they too might develop a capacity to listen to their research partners differently. That they might in fact recognize their research partners have been telling them stories all along, and that listening to, and telling stories requires new methods and approaches to make-sense of what is told and heard and learned throughout the research process.
Story no.1: Connecting me to you

I would like to tell you a story, a story I have learned to tell, by learning to listen to the land beneath my feet, and by learning to listen to the stories of the Elders of Bkejwanong First Nation. If you listen to this story that I am about to tell, I ask only one thing: that you make this story your own; that you take what you heard and what you understood and make it into a new story. That you connect me to you, by retelling this story. That we tell a story together. Because the truth about stories is that once you have heard a story, you can never be the same again, because once you tell a story “it cannot be called back,” once you tell a story, be it good or bad, we become forever connected, because the other “truth about stories is that that’s all we are” (King, 2003, p. 153). And, what I have learned is that “all stories have something to teach us,” but to learn, you need to first learn to listen, not simply hear (Thomas, 2005, p. 241).

The story of this dissertation begins in 2010, when my research partner, and the very best storyteller I know, Clint Jacobs, embarked on his own journey of listening and storytelling, which eventually, through a series of events, actions, and motions guided by the land, led us to tell each other many stories over the last 6 years, and eventually, to tell a story together, and has led me to telling this story.

And so, when you read this story, you are also reading a dissertation, but for me, they are one in the same. Throughout this dissertation you will see the font change from regular font to italic. I have done this intentionally- to help guide you as a reader. The regular Times New Roman font signals more traditional writing, following a far more traditional academic format and is enumerated throughout the text and the table of contents. The italic Calibri Light font represents the stories I have written as a result of learning to listen, and engaging in a practice of decolonization. These different forms of writing create a continuous narrative that carries knowledge in different, but I think equally important ways. As I learned to listen, I came to understand that stories hold knowledge, just as academic writing does. But, how you listen to this story is for you to decide; just as, when you are done, what story you decide you will tell, is.

The telling of stories, I have come to understand, is one of the most important parts of listening. That is, I have come to understand that when we learn to really listen, when we learn to take in the stories we hear, feel, taste, smell and sense, and are able to
sit with them, and have these stories become a part of us, we then become ready to imagine, create and tell new stories.

The listening and the telling are always interconnected; and it is through the act of telling stories that we remain intimately connected to all of those people that told stories before us, and all of the listening we have done, and that was done before us, too. Through the telling of stories, we take the cumulative voices that came before us, and reconstitute those voices with our own, and make new stories. And, in so doing, we are able to both imagine and create new futures. Our imaginations are wonderfully primed to allow us to create futures based on the ethics and values we hold most dear, and if we practice observing the world around us, we will find it is full of an innate balance and set of ethical principles we can tell about, through the stories we tell and share; the stories that form the basis of who we are as a community; the stories that breathe life and animate our communities.

What this dissertation will demonstrate is that you can’t learn to really listen without also learning to tell stories, and you can’t tell stories without really learning to listen. That is, listening and storytelling are so interdependent, that one simply cannot exist without the other. What I have uncovered, through the process of writing and telling this story, is that it is the activity of listening that activates the telling and that interconnection is a powerful and generative practice.

Many academics and fields of study would argue that dissertations are not stories and even more so that dissertations should not be considered stories. Lee Maracle has confronted this belief in her work and her writing and has argued that “there is a story in every line of theory,” and LeAnne Howe has argued that within an Indigenous context, there isn’t the need for the distinction between story, theory, or history because, for
Howe, “the difference in their usage is artificially constructed to privilege writing over speaking” (Howe, 2002, p. 236, Maracle, 1994 p. 236).

As Mallory Whiteduck argues, and demonstrates in her work “But it’s our story. Read it”: Stories my grandfather told me and writing for continuance” she has made an ethical choice to tell a “story about stories”, and in so doing, she contests the notion that academic writing cannot be both about stories, while at the same time being a story (Whiteduck, 2013 p.73). These Indigenous storytellers, all contest the notion that storytelling is “subjective and therefore biased” (Thomas, 2005, p. 245) and doesn’t contribute to objective knowledge.

The belief that stories can only be understood to carry subjective knowledge might be true if the only goal of doing academic work is to produce objective and conceptual knowledge, but what if that isn’t the only goal? What if understanding a kind of participatory knowledge expressed through stories is the goal? And, what if another goal is to understand how that participatory knowledge is interconnected to the motion of land? How then, do we get understanding and capturing at that kind of knowledge? I will argue that it is through a combination of listening to, and telling stories, in combination with understanding and learning from formal academic scholarship that we might begin to form an understanding of the process of engaging in participatory knowledge.

I am not convinced that storytelling and academic thinking are incongruent, or mutually exclusive practices. As a White, settler academic in the field of Indigenous Geography, I think it is even more important to understand how storytelling and academic thinking and writing can be mutually beneficial because of the deeply held practices of storytelling that form the basis of Indigenous Knowledge (Archibald, 2009, Batiste & Youngblood Henderson, 2000, Geniusz, 2015, Kovach, 2005, Kovach, 2009, Maracle L.,
If one of the broad goals of social geography, of which Indigenous Geography would be considered a sub-discipline, is to understand the intersection of people and the landscapes that they find themselves within, then understanding the ways in which people describe their experiences, as stories built from their lives lived in these spaces is essential. Julie Cruikshank argues that stories “take seriously what people say about their lives rather than treating their words simply as an illustration of some other process” (Cruikshank 1990, p.1). Thus, when we begin to think about the process of how, we as settler scholars, intersect and understand Indigenous Elder knowledge, we must be incredibly mindful that we open space to understand the stories, in and of themselves, not trying to impose or shoehorn these stories into being representations of externalized processes or theories. Because, when settler scholars engage with stories in this way, they lose the power that they hold: listening to and recognizing that what many Elders share are stories, demands of the settler scholar that first, the Elder, or storyteller, “is in control of the story, and the researcher becomes the listener or the facilitator” (Thomas, 2005, p. 245).

Thomas, building upon Cruikshank’s 1998 work, notes that working in this way, the “researcher does not enter the relationship with any preconceived directions that the research will take,” and by learning to really listen, the researcher, as Cruikshank argues, opens the research up to the open-ended possibilities that stories contain as a means of describing living a life and the relationship that this life has to place (Cruikshank, 1998, p.72, Thomas, 2005, p. 245).
In many ways, I think about the cumulative knowledge I have gained by reading other scholars, in the same way I think about listening to Elder stories. I have read the words of the scholars that have come before me, and the ways in which their work has contributed to a larger interconnected body of work. None of the literature that supports this story has occurred in isolation or is disconnected: at some point all of the academic research that has built the foundation of my academic knowledge is interconnected. And, it was through the writing of this dissertation I needed to confront how, and in what ways I would use these interconnections to support the ways in which I have learned to listen and to tell stories. The theoretical work that underpins my research allowed me to recognize that this is both a dissertation and a story about learning to listen theoretically, metaphorically, and practically as a means of unsettling my colonial positionality, and in so doing, creating decolonial spaces for listening and learning.

I) Research Context:

i) A brief description of Bkejwanong Island

The knowledge that forms the basis of the qualitative data that has informed this dissertation is a collection of 50 interviews given by Elders from Walpole Island First Nation, in 2010. Walpole Island First Nation, or Bkejwanong, is an Anishinaabe community located in South Western Ontario near Wallaceburg Ontario, at the mouth of the St. Clare River. Walpole Island FN is a collection of six islands, that have been the traditional lands of the Anishinaabe peoples for thousands of years. The Anishinaabe peoples that are the ancestors of the current community of Walpole Island are the nations of the Three Fires Confederacy: the Ojibwe, Potawami and Ottawa peoples.
Important to the identity and social and political structures of the Walpole Island community is that the islands that comprise the community were never set apart as a reserve, rendering Walpole Island as unceded territory. Currently, the Walpole Island community membership is 4860 people, with 2371 people living on the island.

The land is of vital importance to the identity of the Bkejwanong community. The islands are distinguished as having the most diverse wetlands, oak savannas and tall grass prairies of the Great Lakes region. The maintenance of these diverse and Indigenous ecosystems has been a priority of the community for many generations and remains a current priority of the Walpole Island Natural Heritage centre.

ii) The Customary Ways Project: The Data that supports this dissertation

a) Overview of the Customary Ways Project

In 2010 Clint Jacobs, the Natural Heritage Coordinator of Walpole Island FN. Heritage Centre, along with community members Dave White, Rick Fehr and Darr Sands began collecting what they described in their research methodology as interviews, with Walpole Island Elders. Over the course of a year, they worked together to collect the 50 interviews that form the basis for this dissertation. The goal of the Customary Ways Project was to talk to Elders about what they defined as the customary or traditional ways that Walpole Island Elders cared for, and lived on the land and within the community. The Customary Ways Project was focused on understanding what Elders valued; and how these values translated into how they lived and cared for the land, and for one another.
b) A Brief description of the Heritage Centre:

The *Customary Ways Project* was conducted through the *Nin.Da.Waab.Jig*\(^3\) which has increasingly expanded its mandate over the last 30 years.

Originally, the work of the *Nin.Da.Waab.Jig* was concerned primarily with land claims and historical research that would serve the community of Walpole Island FN. In 2019, the *Nin.Da.Waab.Jig* is considered a “multi-functional facility which houses Natural Heritage Program[s], Environmental Program[s], a Research Department, External Projects Program[s] and archival building for land claims, and research\(^4\).”

The goals and objectives of the *Nin.Da.Waab.Jig*, “support the efforts of Walpole Island’s Band Council and Community\(^5\),” by actively participating in research and work that:

- *preserves and restores Walpole Island First Nation’s natural and cultural heritage.*
- *restores the rights and improves the capacity to manage and govern the Walpole Island First Nation and its traditional homelands, fairly, effectively, and efficiently.*
- *promotes the sustainable development of Walpole Island into the next century\(^6\)*

The work that Clint Jacobs, Dave White, Rick Fehr and Darr Sands embarked upon in 2010 was aligned with the mission and broader goals of the Heritage Centre to preserve and restore both the natural and cultural heritage of the community.

c) Original goals of the Customary Ways Project:

The project Clint Jacobs originally designed was about Indigenous Knowledge and Indigenous Resurgence, with particular attention paid to trying to understand the ways in which Walpole Island Elders described their traditional knowledge; how they had

\(^3\) In Anishinaabemowin means “those who seek to find,” and in English is called the Heritage Center.
\(^4\) [https://walpoleislandfirstnation.ca/heritage-centre/](https://walpoleislandfirstnation.ca/heritage-centre/)
\(^5\) [https://walpoleislandfirstnation.ca/heritage-centre/](https://walpoleislandfirstnation.ca/heritage-centre/)
\(^6\) [https://walpoleislandfirstnation.ca/heritage-centre/](https://walpoleislandfirstnation.ca/heritage-centre/)
come to acquire this knowledge; what Elders valued, and how these values were connected to the ways in which they lived and cared for the land. The timing of the project was critical, and representative of similar situations widely documented throughout Indigenous Communities across Canada, and Internationally: Many community members were worried that the traditional teachings of their ancestors were rapidly being lost, because in 2010 the Elder population of Walpole Island was quickly aging, and with this aging emerged a growing precarity in the transmission of Indigenous Knowledge to the next generation. There was also the compounded issue of fewer and fewer younger community members engaged in traditional practice or traditional knowledge within the community, which heightened the need for the Customary Ways project to capture and preserve traditional knowledge in order for the next generation to become knowledge keepers and to continue their ability to practice the customary knowledge of their ancestors.

Within the Customary Ways Project, Elders were interviewed by a community-led team of interviewers (Dave White, Darr Sands, Rick Fehr and Clint Jacobs) and asked to speak about their connections to the land, traditional land-based practices, and asked to recount traditional teachings and practices focused on caring for the land, and the community. In particular, Elders were asked to recount knowledge and teachings they were told as they grew-up in the community and on the land, and about living and caring for the land. These interviews were originally collected with the aim of cataloguing the different types of Indigenous knowledge described by the Elders, but also, Clint Jacobs and his team hoped to use this knowledge to develop an environmental revitalization plan that would be used to protect the biodiversity that was an essential feature of Walpole
Island, using the values, ethics and practices learned from the Elders through the interview process.

d) Methodology of Customary Ways Project:

The Heritage Centre, through its newsletter, solicited community participation in the Customary Ways project. Through connections with community members and community Elders, the Heritage Centre research team was able to gather 90 participants, who shared their knowledge through individual, and sometimes group interviews.

An interview panel was created for the Customary Ways project, but it should be noted for the purpose of this dissertation and analysis, that we did not have access to this original interview guide. As a means of trying to understand the original Customary Ways Interview panel, I listened to the interviews to try to reconstruct this panel. Upon listening to the interviews that comprise the Customary Ways dataset, it was clear that each interviewer approached how they asked participants about the Customary knowledge they held, in very different ways. Despite the fact that all of the interviewers had the same goal of documenting Elder knowledge, the ways in which the interviewers approached the interview process was quite different, and thus we could not use the original interview guide questions as a point of analysis for this project, as we could not establish that a standard use of the original guide questions were used in the Customary Ways project.

The Customary Ways dataset did not have any identifiable information about the participants. The Customary Ways dataset uses a key of pseudonyms for each participant, with the original names in a key that is kept by the Heritage Center. The dataset did not log demographic information about participant’s (age, gender, sex, marital status). Thus, for the purposes of this dissertation we could not engage in an analysis of the Customary
Ways dataset by using demographic variables such as age, sex, gender or marital status. Doing so would have required that the original research team to re-interviewed each participant about these demographic variables, and gain consent to disclose this demographic information, which was not part of the original ethics protocol and consent process. Post-hoc consent processes do not follow best practices for ethical engagement in research process, and would have been difficult, as some of the participants who originally participated in the Customary Ways project, have since passed onto the Spirit World, and thus would not have been able to self-identify for the purposes of identifying this demographic information across the dataset.

The identification of Elder status was given to the participants by the original research team, and the Customary Ways dataset is defined as containing customary or traditional knowledge about caring for, and living on the land, given through interviews by Walpole Island Elders, and this is why I refer to the participants of the Customary Ways dataset as being Elders, as this is the means by which the original research team identified participants.

Of the 90 interviews conducted, 50 were transcribed. The interviews were transcribed into transcripts by a Walpole Island youth, who was hired for the summer, by Clint to work at the Heritage Centre, and transcribe the interviews.

After the interviews were collected and transcribed there were attempts made to analyse the data, but these attempts didn’t fully come to fruition for a number of reasons, most important to note, the analysis was stalled because of a lack of sustained resources to support this labour-intensive work.

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This lack of resource speaks to the precarity of most of the wholly grant funded programming that occurs at the Heritage Centre and is a stark reminder of the instability that the Indian Act imposes on Indigenous communities and organizations. Many, if not most Indigenous organizations and communities face unsustainable budget models because their annual budgets are dependent on year-over-year grant funding, which rarely if ever, covers the entire costs related to supporting the planning, project development, execution, and analysis of research projects. For this reason, many projects suffer from a lack of sustained resources.

After the completion of the Customary Ways interviews, other projects were begun, through new funding sources that required the participation of Elders from the community to share their knowledge. Some of the Elders from the Customary Ways interviews became distressed when they were asked to participate in research once again, because they felt that they had already shared their knowledge and teachings, and that they had not been listened to. As a result, this group of Elders said they would not participate in any further research until they were sure that their knowledge had been listened to, and utilized by the Heritage centre.

e) A community-based research project is begun

In 2012, I began my PhD studies. At the time, I was unsure about what my dissertation would eventually become, but in order to write this introduction I uncovered my entrance statement of research interest. In 2012 I wrote that I was intent on researching what community planning might look like in an Indigenous context, and how we might think about Indigenizing practices of urban and community-based planning. And, this is how Clint and I first met. Through a mutual colleague, we were introduced to
one another because this colleague thought we had a lot in common with respect to our
similar thinking about systems of planning and how we might begin to incorporate
Indigenous Knowledge into the process of land-use planning and land-use designation
within reserve- and- traditional territory.

It took Clint and me two years of getting to know one another, before I was
introduced to the Customary Ways dataset, and a further 3 years of working through a
process of coming to learn to listen, as a process of unsettling my settler positionality, and
working with Clint in a process of decolonizing myself as a researcher, before we began
the process of devising the methodology for how we would come to listen to, and analyse
the knowledge the Elders shared within the Customary Ways dataset.

f) Ethics process

The ethics process for me to work with the Customary Ways dataset, and to learn to listen
to this dataset occurred over a 3-year (from 2012-2015) period and involved multiple
pathways for obtaining different forms of ethics.

First, and most importantly, Clint and I worked together to build trust, and
reciprocity in our research relationship. We accomplished this by creating an ethical
space to engage in this project based on me, first and foremost, working to unsettle,
challenge and shift my colonial power, privilege and understanding of what constitutes
knowledge; how it is produced, and importantly, the forms that knowledge can take
(many of which I learned through working with Clint, were not initially perceptible to me,
as my colonial understanding of knowledge and its productive and discursive production
actually limited my capacity to listen, and therefore appreciate the many ways knowledge
can be created; accounted for; and expressed. In particular within an Anishinaabe context).

Second, Clint and I worked together to put together an ethics proposal that was brought before the Walpole Island Heritage Centre Committee. The council members were able to interrogate the project, asking important questions about how the project aligned (respect and relevance) with the original intent of the Customary Ways project and how the project would benefit the community; who was involved and their roles (responsibilities); how the work would be shared and how Walpole Island would be honoured and acknowledged in the work (reciprocity) and maybe most importantly, the committee were able to offer refusal (McGregor, Restoule, Johnston, 2018) to the project if they believed that the project would not be useful or relevant to the community and the goals of the Heritage Centre (Kirkness and Barnhardt, 1991, McGregor, Restoule, Johnston 2018). We obtained ethics approval to proceed with the project from the Walpole Island research and ethics council in April of 2013. Once we obtained initial approval, we worked together, over a 2-year period to produce a more detailed research plan that was shared with the committee across a number of meetings. Clint would update the committee to ensure the project was moving forward and that it was remaining

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8 For reference, the questions that were asked of the Heritage Centre Committee were the following:
1) Purpose of the proposed work;
2) Description of the proposed work- how and where the work will be carried out
3) Timeline of the proposed work;
4) Who will be directly involved in the work (names of individuals and agencies) also those indirectly involved;
5) What benefits with the Walpole Island First Nation community receive from the proposed work;
6) Who is funding the work and the reporting requirements;
7) What will the results of the work be (eg: report, hard copy/electronic report)
8) What opportunities are there for us to review any draft reports/publications/thesis reports- prior to finalizing the final completed work- to allow for comments/edits to be included;
9) Data sharing considerations (how and when) and who else will have access to the data;
10) Are there follow-up steps planned after the initial work is done;
11) How will Walpole Island first nation be recognized
aligned with the original intent of the project. In this way, the committee became essential in ensuring the project remained relevant, respectful, reciprocal, responsible, and that there was always room for refusal in this engaged ethics process (McGregor, Restoule, Johnston, 2018).

Third, once we had articulated the project goals and had begun to map our research relationship and research methodology over the two-year period between 2013-2015, we applied for Research Ethics approval at Western University through the Research Ethics Board. In 2015, we obtained REB approval from Western.

**Story no. 2: I learn I am excellent at asking questions, and terrible at listening.**

I remember the meeting very clearly to this day. At the time I had this deep feeling that Clint would become a very important part of my life and that something quite challenging and profound would occur through our collaboration. I remember being really scared, actually, because Clint was so honest and so sincere. The way he spoke to me made me feel a great responsibility to the work we were talking about embarking on, even though I was very unsure about what this work would become; what it could become, and what this work would require of us both!

He spoke very clearly about how the work connected him to his father, and grandfather as they were both important leaders in the community. But that the work’s importance was connected to his son, and to the future generations of Walpole Island. I remember that I had this distinct feeling that I needed to let go of the academic in myself and listen to Clint. Really listen to what he was sharing with me. That I couldn’t listen with academic questions; that I couldn’t and shouldn’t interrupt him and ask questions, as if we were in an interview, but that I needed to listen to, what I have now come to understand, was his story, uninterrupted, in its full telling.

This was very hard to do, because what I have come to learn, is I was a terrible listener in 2012. If you had asked me then, I would have told you I was a great listener! That it was one of my best qualities! But in reality, I only knew how to listen in the way I had been taught- and that was really only to listen in order to hear- not to come to know, and not to fundamentally challenge who I am, in relationship to the space and place I found myself in. I really only knew how to listen in service of asking more questions. I didn’t know how to listen in order to tell stories. And I certainly
had never been taught how to listen to stories as a way of coming to really know the world and my relationship to it!

I am quite sure that I failed miserably at listening on that day, and I am sure I interrupted Clint and asked too many questions- but I do have this memory of our meeting that is a sensory memory, because as I tell you this story now, almost 7 years later, I can feel that initial swell of emotional connection to Clint’s story to this day. I feel it in my heart, and in my skin, and on through the hairs on my neck that activate when I think about our first meeting.

After our first meeting, Clint and I began to correspond about different ideas and things we might research together. As our relationship began to grow, so did our trust, I think. We got to know one another as collaborators, and as researchers, but also as people, through the stories we began to tell one another. This of course takes time, and the relationship we have today was only made possible through time and a great deal of listening, and telling stories. I often wonder, if Clint and I built our relationship through the timescale of trust: the accumulated stories we have shared.

Clint and I spent the first 3 years of our relationship listening to one another and talking. This listening to one another hasn’t changed, but how and what we talk about has! At first, as we were trying to decide if we had a project we could work on together, we would meet once a month or so, and Clint would very patiently listen to me, all of my questions, and would always very gently ask me: “But Erin, what did you hear?” This question would always stop me in my tracks! Because at the time, I thought the best answer for what I had heard, was a series of questions and interrogations about what I had heard. I only understood listening as being in service of creating more and more questions. I really had no idea there could be other ways to listen, let alone that the result of listening may not be questions at all, but instead, the telling of stories!

At first, I would respond with a list of facts that I had learned about the subject we were talking about; or I would tell Clint some theoretical argument I had learned in one of my classes, or an article I had read. Clint, would most often tell me that was all very interesting, but he would always ask “But Erin, what did you hear?” We engaged in this dance between me describing facts and theories, and Clint asking me about what I had heard for some time. I started keeping a journal of my thinking over this time, as a way of trying to understand what I was hearing. And over time, as I started to learn to listen, I began to hear things, really hear things, and I started to realise that I was hearing things I had never heard before, both in the world around me, and in my own head and heart.
I began to literally hear things from places that had been quite silent. Well, that isn’t entirely true: I am quite sure there was a lot of motion in these spaces and places, but I had not learned to listen to this motion yet. And so, when I would enter these spaces, all I could hear was silence at first. But then, slowly and surely, something shifted. I remember the first thing that I heard was my own heartbeat; then the rustling of leaves; then, I began to hear stories in the songs that birds sing, and then, suddenly, the whole motion of the world began to swirl around me- and I could hear it, that motion, in absolutely everything that surrounded me.

The only way I could think of to make sense of what I was beginning to hear, was to write about it. To begin to tell the stories about what I was hearing. So, throughout this dissertation you will find the stories of my coming to learn to listen. This process of learning to listen was not linear, and is by no means complete. I am not sure if one can ever really fully claim to have learned to listen, because what I have come to know throughout this process, is that listening is a process that deepens and transforms both the listener and the motion being listened to, every single time one engages in the process. And that it is in the telling, that the listening is really activated; that it is in the telling we literally become connected to the motion we listened to.

II) Objective of this Dissertation:

Over the last 6 years, what became clear to me was that this was a story and a dissertation about listening. First this was a dissertation about the ways in which Elders describe their own listening to the land, and the connection this listening has to the knowledge they share, and the Anishinaabe world that these stories ultimately create. Second, this was a story about my own learning to listen to the stories that Clint and his team captured when they created the Customary Ways project, and the process of decolonization that I would have to engage in, as a learner. And in telling the story about my own learning to listen, my hope is that I might convince other settler geographers that we need to listen differently when we work with Elders so that we might honour and learn from the stories they tell us about the complex and interconnected ways in which they listen to the land beneath their feet.
Thus, based on the fact that the original intent of the *Customary Ways* project was to better understand how Elders care for the land of Walpole Island and the community, this dissertation asks: **How do the Elders of Walpole Island describe their relationship to the land?**

This dissertation will answer this question in five distinct ways, all co-developed with Clint Jacobs:

1) First, this dissertation will illustrate how Elder relationships to the land are created through a practice of listening to the land.

2) Second, this dissertation will seek to understand if there is a relationship between listening and storytelling within the Customary Ways dataset.

3) Third, this dissertation will demonstrate a methodological innovation through the use of storytelling as a means of building an ethical space from which Clint Jacobs and I approached this research.

4) Fourth, this research will illustrate how the use of Natural Language Processing can be used as a means of understanding if the stories Elders tell in the Customary Ways dataset are interconnected at the community level, and if they are, do they form a story network, rather than individual and isolated stories?

5) And fifth, this dissertation will propose that as researchers, we must recognize that when listening to stories, and the ways in which they carry knowledge, one must be mindful of the means (or form)- the shapes stories take on; the decisions of the storyteller in shaping the story- as much as the fact that we must be mindful of what knowledge is carried in that form (the story). Thus, we must begin to recognize stories are both the form of, and the subjects of Indigenous Knowledge.
II) Dissertation Outline:

The way this dissertation answers these five objectives will happen through the following chapters:

i) Overview of Chapter 1: Literature Review

Because the Customary Ways Interviews are about Indigenous Knowledge, my literature review is focused on trying to unpack the ways in which Indigenous Knowledge has been described in the literature across a number of fields in order to contextualize what is uncovered by listening to the Elder stories in the *Customary Ways* dataset. In this chapter I situate the ways in which Indigenous Knowledge is described and utilized in academic literature from the fields of Indigenous Geography, Indigenous Studies, Environmental Studies, Ecosystems Studies, and Environmental management. I also explore with the reader, the ways in which Indigenous Knowledge is described in Anishinaabe Creation stories, that are dependent upon and reflective of living in the geography of South Western Ontario, and in particular the traditional territory of the Anishinaabe, and the Three Fires Confederacy of Walpole Island First Nation.

Thus, the literature review of this dissertation takes seriously the situated knowledge that is contained within these Indigenous stories and utilizes them as a means of better understanding how to learn, understand and listen to the features of Indigenous Knowledge that are captured within these stories.

The literature review begins by taking the reader through a history of how Indigenous Knowledge has been defined and utilized by primarily non-Indigenous scholars in the fields of Environmental management, Ecosystems Management and Studies, and Indigenous Geography. What this portion of the literature review draws out
is that these fields have extrapolated what primarily non-Indigenous scholars understood to be useful information about ecosystems management, from Elder stories. These scholars came to the knowledge contained within Elder stories from the perspective that they could extract anatomized parts of these deeply interconnected stories and have this extracted knowledge stand alone and representative of the whole story. What these fields failed to realize was that the Indigenous Knowledge contained within Elder stories was a highly complex and interconnected network of community stories, and that the deep knowledge in these stories can only be fully appreciated if we also understand the complex interconnection of not only the way the stories are told, but the ways in which individual stories cumulatively contribute to a body of shared community knowledge about being and living in the world. A world entirely defined and related to the geography from which the stories are created, and remain in relationship with, through their telling. I also discuss the methods by which these scholars attempted to extract or access what these literatures refer to as Traditional Knowledge (TK) or Traditional Environmental Knowledge (TEK).

The next section of the literature review looks at how Indigenous Scholars have tried to redress the issues that Elders and Indigenous Storytellers have argued is a persistent problem with how their knowledge has been represented and described within academia. This section of the literature review uncovers that what Indigenous Scholars have been able to accomplish through their work is to begin to create a theoretical framework that describes the attributes or characteristics of what these scholars describe as being Indigenous Knowledge. The literature review looks across the works of various Indigenous Scholars from across Canada and internationally and begins to map out the common ways in which these scholars have described Indigenous knowledge, and the
common attributes that emerge as the theoretical basis for this complex knowledge. I also discuss the common methodological approaches used to study Indigenous Knowledge by this group of scholars. What emerges from this discussion is that a limitation of describing Indigenous Knowledge as theoretical or conceptual is that it still misses the fact that Indigenous Elders and storytellers have been arguing that Indigenous Knowledge is something you do, or practice; and not something you describe theoretically or conceptually (McGregor, 2004 p. 391).

The third section of the literature review explores a close reading of Anishinaabe Creation stories about the rocks and water; the plants; the animals. Clint encouraged me, that if I was to decolonize my colonial understandings of how knowledge was produced and carried, and if I really wanted to be prepared to listen to the knowledge shared by the Elders in the Customary Ways dataset, I would have to learn to listen to the Creation stories that he believed were intimately tied to the knowledge that Elders were sharing. As I began the process of learning to listen to the Elder interviews, with Clint’s guidance, I came to understand that the knowledge Elders were sharing in the Customary Ways interviews, were intimately tied to listening to stories from their grandparents and great-grandparents, and those ancestors before them; and that these stories were all tied in some way to the Creation stories about water, plants, animals and people.

Thus, in order to be able to listen to the knowledge Elders share in the Customary Ways interviews, I needed to understand and listen to the stories that their knowledge was connected to. That is, I needed to understand where their knowledge came from, to better understand the ways in which they were describing how they listened to the land beneath their feet.
Thomas King has taught me that stories are wonderous, but also dangerous things (King, 2003, p. 154), and Ben Okri has taught me that stories have the ability to shape who we are, because we not only “live by stories,” “we live in them,” and, “if we change the stories we live by, quite possibly we change our lives” (Okri, 1997, p. 47). Which is, I think, the power of the wonder and the danger of stories: that we take on the qualities of the stories we hear, and we are shaped by them as much as we shape the stories we tell.

For the story of Kitche Manitou, I rely on Anishinaabe Elder and storyteller, Basil Johnston’s seminal 1976 text, Ojibway Heritage as the basis for my close readings. Johnston’s text is still today, to be considered one of the most comprehensive collections of Anishinaabe stories by both Indigenous Storytellers and Anishinaabe scholars.

I not only take the reader on a close reading of the Anishinaabe Creation Story of Kitche Manitou’s Vision but also a series of interconnected stories that teach about the Anishinaabe’s relationships to what the Creation Story establishes are the four interconnected parts of Creation: rocks and water; plants; animals and people.

What we learn from reading these stories is that they are all inter-dependent on one another; that is, one cannot tell the story about rocks and water, without first listening to the story about Kitche Manitou’s Vision. And, one cannot tell the story about plants without understanding their relationship to the rocks and water, just as one cannot tell the story of animals, without having listened to the stories about plants, and the stories about rocks and water. The last stories we read are the stories about the people, or the Anishinaabe, and what we realize by reading the Creation Stories in this order is that all life is interconnected, and that we cannot understand ourselves, as human beings, and our place within Creation, without first understanding our intricate relationship and
responsibilities to the rocks and water, the plants and the animals, without whom we would not be able to survive.

It is through the close reading of the Creation Stories that I begin to learn that if we really want to discuss and understand Indigenous knowledge, we must first understand that much of this knowledge is embedded, or carried in stories, and thus, we need to listen to the stories Elders tell, in order to understand the context for the instructions (or subject) for how Indigenous Knowledge forms the basis for how Indigenous Peoples have come to both know (the means or form of the stories) and create the world around them.

Secondly, I begin to learn that we also must understand that Indigenous stories are interconnected and interdependent upon one another, and thus, we need to find ways in which we can understand these interconnections and how they are expressed at the level of the community. That is, how does a collection of knowledge stories form a network that increases the resiliency and efficacy of the ethical and practical knowledge the stories carry with them?

Essentially, I wanted to learn, if the power of the network of stories is precisely how infinitely interconnected the stories remain in the network, and thus, the network has a magnifying effect of listening to any story, because the stories are not generated in isolation from one another, but are connected in a complex story network, always mirroring back to one another, and amplifying their teachings, and capacity to create an Anishinaabe world, through each interconnected telling.

Third, the close reading of the Creation Stories teaches us that in order to listen to the Creation Stories, one must not only understand their relationship and responsibility to the world around them, but also, and importantly, the way that one gets at this understanding is by learning to listen to the stories that are contained within that land; that
Huner, Erin

are of that land. Because what the Creation Stories teach us is that without the land, there would be no stories for the Anishinaabe to tell; and without the land the Anishinaabe would literally not have come into existence. We also learn that by listening to the motion in the land beneath one’s feet is how the Anishinaabe created an Anishinaabe world; through the stories they collectively tell; and it is through the telling of these stories, in reciprocity with the bees, waters, plants and animals, that the community learns both how and where to stand in the world.

Story no.3: An overview of how I learned to listen

It was about a year and a half after we first met, that Clint asked me if I thought I might want to work on a project that tried to understand the set of 50 interviews that comprised the Customary Ways project. I was deeper into my PhD studies at that point, and almost finished my course work, and I jumped at the idea of being able to analyze what I imagined to be a rich qualitative dataset. At the time I understood this as a dataset of n=50 primary interviews, and I was so excited, as an aspiring Geographer, to be able to have such a huge volume of qualitative data to unpack, get to know, and understand.

Clint and I agreed to start thinking about how we would analyze these interviews together and it is at this point of our work together that I first realised: I am going to have to do a lot of listening!

In order to begin telling you the story of how Clint and I worked together, I need to tell you about the first Anishinaabe story I learned to listen to, the Story of the Four Hills. At first, I was hesitant to think that I might be able to map my learning and changed listening to an Anishinaabe story. Could I as a, first generation Canadian, Settler Woman engage in this kind of storytelling? Was my place to find meaning about myself in this Anishinaabe story, or through this Anishinaabe way of thinking and telling about time? Through many conversations, over many months, Clint helped me to realise that in understanding myself, and my changing ability to listen, through an Anishinaabe story, like the Story of the Four Hills, I would never be telling my story as an Anishinaabe person, nor would I ever be claiming to be an Indigenous storyteller. Clint helped me to see that if I could locate and better articulate my standpoint by listening to this story, I would be working to better understand my positionality as a White Settler woman in relationship to the
Indigenous stories I was about to analyze, and listen to. If I could learn to understand my positionality by understanding the teachings of the Story of the Four Hills, then I might be able to make deeper contributions to our research project, because I would be able to listen differently, and tell about who I am in a much deeper way. But, as I learned from Clint over our many hours of conversations, and stories, that I couldn’t learn to listen differently if I didn’t first understand who I was, and how my listening needed to change.

The story of the Four Hills is important to tell you about, because after listening to this story, and talking with Clint about what I was learning from listening to the Story of the 4 Hills, we were able to begin to map out how we were going to work together as research partners.

Very early on in this process, Clint told me I needed to figure out a way to be reflective of my own learning, to capture it, and importantly, to learn to tell about it. Because if I couldn’t tell someone who I was, who I really was in my heart and mind, in relationship to the world around me, how could I tell anyone anything worth listening to? That is, if I couldn’t tell who I was, how could I be trusted to tell stories that should be listened to? He suggested that I would learn how to listen if I could understand how my own capacity to listen was changing.

The story of the Four Hills has become an important structural story for me. I say structural, because this story has literally given voice and shaped the ways in which I have been able to track, understand and make sense of the ways in which my own capacity to listen has changed over time, and with experience. It was through many conversations with Clint, that we decided I should try to write about the changes in my own listening, using the structure of the Story of the 4 Hills. And so, I would like to tell you part of that story now.

There is an Anishinaabe story I have come to know called the story of the Four Hills. I understand the Four Hills to represent the paths we journey on to collect knowledge over the course of our lives, and that these paths of knowledge build on one another, successively building on one another as we move through our life journey (Rheault, 1999) (Borrows, 2010) (Johnston, 1976). Throughout traversing these paths, we collect and build deep knowledge about who we are as individuals; about our relational accountability to our environment - the plants, the water, the animals, the people; and to the production of collective wisdom through learning to find balance in one’s self through different stages of learning. Anishinaabe storyteller Basil Johnston describes that the Four Hills correspond to “different physical and moral stages: Hill 1: a time of preparation (infancy); Hill 2: a time of quest (youth); Hill 3: a time of vision (adulthood); Hill 4: a time of fulfillment (old age)” (Kahsenni, 2017, p. 100).
After reading my notes in my journal I kept throughout the process of creating this dissertation, I have come to realise that in my first hill, I can understand that my thinking was in its infancy, and that I need to learn first who I was in relation to Clint and the Elders of Walpole Island, if I was to ever understand myself in relationship to the 50 Customary ways interviews. I needed to deeply ask “Who am I as a non-Indigenous person in this relationship?” As a settler woman what must I learn, and importantly, unlearn, in order to know who I am in relationship to listening to the Elder stories in the Customary Ways interviews? How can I begin to understand or reconcile different ways of knowing the world if I do not first know who I am? What am I offering to reconciliation and the process of co-creating knowledge if I come empty handed with nothing to say for who I am? Ultimately, I need to know who I am so that I can tell this story to my research collaborators, because it is through this story—the story of who I am and how I understand my place in the world—that my research collaborators will come to know and understand me. They understand me through my offer of who I am, through the story I tell about myself. Because, as I embarked on this research journey, Clint taught me that the way in which I will come to understand him, and the Elders in the Customary Ways interviews is—in the same way—the offer of who they are, through the stories they tell.

In my second hill, my journal notes start to transform, they begin to take on the qualities of tentative stories. At this point, Clint and I have been working together for a few years, and I have begun to establish who I am as a Settler woman, but need to learn, through doing, what it means to really listen—listening in ways that challenge and disrupt my Western understanding of what it means to listen, to know, and to create knowledge. I must do this work in order to be prepared to really listen to the Anishinaabe stories that I begin to realize are contained in the Customary Ways interviews. In order to make-sense of a new way of knowing the world, I need to first understand how to listen for the structure, description, and practice of Anishinaabe ways of knowing the world.

In my third hill, I have established who I am, and have begun to listen very differently to the world around me, and because of this new listening, I have also begun to tell stories. Real stories. Not just notes and reflections, but stories. I share these stories with Clint, and we begin to use these stories as the basis for how we negotiate the process of analysing the Customary Ways dataset. The stories I share with Clint become a testimony of sorts; they become a means for us to communicate with one another— I am able to tell Clint what I am hearing in the environment, and through this demonstration of a new way of listening, Clint is able to understand if I am really
ready to engage in the sense-making of the Customary Ways dataset. It is at this point in this research journey, that Clint and I really begin to map out together, the ways in which I will listen to the Customary Ways dataset. It is in my third hill that I begin to make sense of what I have heard in the Customary Ways dataset, and I begin to write about what I have heard the Elders say and describe about their relationship to the land. It is also in my third hill, I begin to understand what this research might contribute to the field of Indigenous Geography, and to the community of Walpole Island.

I am not sure that I reach my fourth hill in this process, that question, I have learned must remain open. This question can only be decided by the people who read this dissertation, and the stories I have learned to tell. Because only once this dissertation and these stories are shared and taken back up by others on their own journey will I ever know if I have reached the fourth hill.

ii) Overview of Chapter 2: Methodology

The question of needing to learn to listen emerged early in the research process as both a methodological and practical concern.

a) Methodological Imperative for learning to listen:

Methodologically, I began to quickly realise that I needed to uncover who I was in relationship to these interviews as a first generation Canadian, White Settler woman, who holds a worldview that was not shaped by the same philosophical, structural, cultural or social ways of coming to form and acquire knowledge that shaped Clint and the Elder’s worldview. Based on the work of Sandra Harding, I decided I would keep an autoethnography about my journey of coming to learn to listen to the Elder interviews. What started as a methodological choice, to ground part of the research in standpoint theory as an autoethnography, I have now come to realise was really a journey about learning to really listen, in order to learn to tell stories. That is, I no longer recognize my notes, and what I would have classified as informal writing over the last 7 years as a process of autoethnography; instead, I recognize this work as the cumulative stories I
have learned to tell. What learning and understanding the theoretical work of Harding’s standpoint theory has allowed me to uncover, in my own work, is that it is only once we discover what Harding calls our *radical subjectivity*, that we are able to *really* listen to the stories that people tell (Harding, 1993, pp. 51, 54, 70). I have tried to extend Harding’s standpoint theory by literally implementing it through the writing of, and telling of, stories throughout this dissertation as both a methodological choice, and a method of building an ethical space of engagement in the research process.

The way in which Clint and I managed the inherent power dynamics of the colonial power structures I am a product of, and through which I have come to know the world, was to shift this power, and place me in the position as a continual learner. That is, our process of decolonization was a process of learning. First, learning who and how I was a product of colonial processes; and how these processes had shaped my world view; and then, a process of taking up space as a learner; a learner who needed to learn to listen through an Anishinaabe framework.

As part of this process, I recognized that I needed to learn to listen in an *embodied* way. This was a difficult and long process, one I am still very much working through, and a journey that would have never occurred without the encouragement of Clint, and the stories of the Elders in the *Customary Ways* dataset. I needed to learn to listen in a new way; I needed to learn to quiet my mind and listen to the stories of the Elders in their entirety; not as interviews; but as stories that contained knowledge about how to live in a good way; how to love fully, and how to care for the world around me, and myself.

I needed to learn to listen with my body so that I could come to understand that my body, and the spirit contained within my body, was the entity through which I was connected to my community, and the environment around me. And I needed to learn this
important lesson so that I could make sense of the ways in which the Elders were shaping
the stories they told within the Customary Ways dataset.

b) **Practical Imperative of learning to listen:**

With a dataset of n=50 interviews, and each interview being on average 2 hours in length,
comprising a total of 335,329 words: the volume of data that supports this dissertation is
immense. Mason (2010) completed an empirical analysis of the average number of
interviews contained within qualitative PhD theses, using data collected from theses.com (Mason 2010). Through an analysis of 560 PhD theses, that Mason coded to be theses that utilized qualitative methods, he determined the mean number of qualitative interviews was 31 (Mason, 2010, p.13) but when looking at defined methods, theses using a
grounded theory approach used (mode: 25) and (median: 32) interviews (Mason, 2010, p.9). Other empirical work cites that the average number of qualitative interviews needed to reach saturation within qualitative research to be 16 interviews, where meta-themes could begin to be established reliably at around 6 interviews (Guest, Bunce, & Johnson, 2006, p. 83)

Practically then, I had a dataset with almost double the number of interviews that are on average utilised in PhD dissertations, and nearly 4 times the number estimated to be needed to reach saturation. How would I practically and reliably start to work with this vast dataset?

As a foundational part of my methodology, I decided that in parallel to listening to all 50 interviews, I would do a close reading and analysis of 13 interviews within the dataset that contained the highest number of what I came to identify were actually stories. That is, what emerged early in my listening of the 50 Elder interviews, through a
grounded theory coding exercise, was that Elders were telling many stories within these interviews. In fact, in most cases, Elder answers to the interviewer’s questions were told as distinct stories. As I coded the 50 interviews, I noticed that there was a subset of 13 interviews that emerged with the highest number of stories. That is, in these 13 interviews, Elders almost exclusively told stories. In order to better understand how the Elders were telling stories, what the structure of these stories were, and how these stories were connected to one another I decided to focus on these 13 interviews for a detailed and multi-method analysis using close readings, story mapping, and grounded theory. I wanted to understand if by understanding these detailed stories, I might better understand how and why Elders tell stories as a means of describing their relationship to the land.

The differentiation between listening to interviews and stories is an important one for this dissertation. As I began to learn to listen to the Elder interviews, and I proceeded through my grounded theory approach of listening, and finding themes amongst the 50 interviews, I realised that what was emerging were not only interviews- but interviews that contained stories; and more surprisingly, that these stories and their themes were all interconnected.

Propositionally, then, how would I manage to bear this idea out? How would I begin to really understand if the 50 interviews contained interconnected stories? I would need to deploy machine learning, because machine learning is the only tool available that has the capacity to not only work from the data-up, that is, without the imposition of pre-determined categories, (NVivo, for instance, works using a top-down approach, requiring subjective themes or ideas to be inputted into the database, and then searched and codified), but machine learning, and in particular Natural Language Processing (NLP),
allows a researcher to literally map the ways in which ideas emerge from the data as a network of interconnected nodes, without the imposition of subjective themes.

By establishing nodes, then one might be able to trace or map the way the data works together to create a complex system of interconnected ideas and themes, or in the case of the Customary Ways dataset, I might be able to ascertain if the interconnection of stories I found in the subset of 13 interviews, existed across the 50 interviews, thus forming a collection of interconnected community stories. NLP allowed me to test the idea that emerged from my literature review and listening of the 50 elder stories: that these stories were internally complex and interconnected across repeated story themes; but also, and importantly, the individual Elder stories were highly interconnected across a series of interrelated themes and ideas that worked to produce what we might begin to call a collection of community level stories.

iii) Overview of Chapter 3: Results

In the results chapter of this dissertation is anchored by the guiding question Clint had for the Customary Ways dataset: *How do Elder’s describe their relationship to the land?* In order to answer this question, we ask three inter-related questions:

1a) How do we define a story for the purposes of this dissertation? How do we know we are listening to stories in the Customary Ways dataset?

1b) Are there emergent story categories and patterns that Elders use to construct the stories that describe their relationships to the land in the Customary Ways dataset? Question 1a) and b), are answered through the analysis conducted in section 3.1.1: *How do we know we are listening to stories in the Customary Ways Dataset?*

2) What type(s) of knowledge is contained within these Elder stories in the Customary Ways Dataset? Is there a relationship between the types of knowledge contained in a story and its structure?
Question 2, is answered through the analysis conducted in section 3.1.2: *What type(s) of knowledge is contained within the Elder stories in the Customary Ways dataset? Is there a relationship between the types of knowledge contained in a story and its structure?*

3) Within the Customary Ways dataset, are the Elders telling interconnected stories, or are these stories isolated from one another? Do these stories work together at a community level, and not just at the level of the storyteller?

Question 3, is answered through the analysis conducted in section 3.1.3: *Natural Language Processing Analysis: Anishinaabemowin dances with the cycles of life."

iv) **Overview of Chapter 4: Making Baskets:** *Ezhianishinaabebimaadiziyaang mii sa ezhianishinaabeaadisokeyaang*\(^9\)

In this chapter, I discuss how the Elder stories within the Customary Ways dataset work together as a collection of Anishinaabe stories, and in this chapter, I propose a set of local storytelling principles that emerge from the Customary Ways Dataset.

v) **Overview of Chapter 5: Key Contributions:**

In this chapter, I explain the major contributions that this dissertation makes to the field.

v) **Overview of Chapter 6: Future Directions**

In this chapter, I propose the ways in which this research might be extended both within the academy, and the field of Indigenous Geography as well as a community-based project that builds upon and leverages the findings from this dissertation.

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\(^9\) The way in which we live, that is the way we write/make stories
1.0 CHAPTER 1: LITERATURE REVIEW

Story no.4: Stories are both wonderous and dangerous things!

I am still in the process of learning to listen, and I am still learning to listen to the stories I am about to tell you. And, I am grateful for that; for the fact I am continually learning to listen, because as I continue to learn to listen, I learn more about myself, my blurred spots, my biases, my heartache, my hopes and my dreams. In learning to listen I am also learning to know myself, and this interconnected process has allowed my voice as a writer, and poet, as much as an academic to emerge. Learning to listen has also allowed me to understand the importance of storytelling in shaping not only how we understand ourselves, but the ways we come to know the world. I have come to learn, that listening might provide the activity and the lessons which form the knowledge contained within the stories, but it is through the telling of stories, that we actively shape the worlds we inhabit, live in and are able to imagine. Each time we tell a story that is connected to creation, and the stories that came before our telling, we re-inscribe the world with the ethics and teachings needed to both live in and imagine the world.

Thomas King has taught me that stories are wonderous, but also dangerous things (King, 2003, p. 154), and Ben Okri taught me that stories have the ability to shape who we are, because we not only “live by stories,” “we live in them,” and, “if we change the stories we live by, quite possibly we change our lives” (Okri, 1997, p. 47). Which is, I think, the power of the wonder and the danger of stories: that we take on the qualities of the stories we hear, and we are shaped by them as much as we shape the stories we tell. Leslie Silko, Jo-Ann Archibald, John Borrows, Kahente Horn-Miller, Brian Maracle, Rachel Qitsualik, Jovette Marchessault, Leanne Simpson, Winona LaDuke, Tanya Talaga, Deb McGregor, Wendy Makoons Geniusz, Waziyatawin (Angela Wilson), Linda Smith, D’Arcy Rheault, Margaret Kovach, Basil Johnston, Clint Jacobs and the 50 Elders of Walpole Island, have all taught me, through the telling of their own stories, that you have to be very careful about the stories that you tell, and also about the stories that you listen to—about what they mean to you, about how you take them in, and transform them into your own story; and most importantly, how you live your life through stories, creating the world you inhabit through the words you breathe forth to your community.

The first part of the story that I would like to tell you is about what happens to Indigenous knowledge when only parts or sections of a much more complicated story are listened to, and acknowledged. In this story, it is important to listen for who told this story and who decided what
parts of the story would be told. That is, who let this story out, and maybe more importantly, who was listening to, and objecting to this story? Who was working to retell this story? This story begins by asserting that Western Scholars and the Western Academy have told an incomplete, and in many ways false story about what Indigenous Knowledge is, how it is best described, and what its key attributes or concepts might be. The Academy tried to extract those parts of Indigenous knowledge that mapped to its dominant discourses or filled gaps in these discourses. And the Academy only listened for what it had been trained to listen for and disregarded and purposefully contested the legitimacy of the rest of the story. And, in so doing, the Academy missed the most important parts of the stories they were being told by Indigenous Elders and Indigenous community members. And here we come to an important point: once a story is let out, it can’t be called back, but it can be contested, and new stories can be created and told in its place.

1.1.0 Indigenous Knowledge and its historical representation in the Western Academy

1.1.1 Descriptions of Traditional Knowledge in the Western Academy


These objections stem from the fact that within the literature (i.e. ecology, ecological management, complex/adaptive ecosystems, environmental geography, Indigenous geography etc.) an assertion is made in the way the research (story) is told: that Indigenous Knowledge has a singular purpose, and that purpose is to give focused knowledge about “managing” or “understanding” the environment, or discrete species,

Indigenous scholars and Elders have argued that these widely used descriptions are insufficient for capturing the complexity and deeply relational aspects that underlie Indigenous stories and the knowledge contained within these stories, and are instead based on Western ways of knowing, mapping and managing the environment, and therefore cannot, and do not, capture or represent the complexity present in Indigenous ways of knowing and being in the world (Batiste & Youngblood Henderson, 2000, LaDuke, 1994, Simpson, 2001, 2004, 2011, Smith, 2001, Wickens-Pearce & Pualani-Louis, 2008, Wilson W. A., 2005, Wilson S. , 2008)

Over the last 20 years there has been a sharp rise in the use of a Western concept of Traditional Knowledge (TK) (Roberts, 1996, Shackeroff Janna M & Campbell, 2007, Nadasdy, 1999, Simpson, 2001, 2004, White, 2006) within these literatures, and at the same time there has been a glaring lack of discussion by Western researchers and policy makers about the fact that what is described as Indigenous knowledge is most often, at its source, a deeply connected network of interrelated stories. When Indigenous Knowledge is represented this way in the literature and in policy (such as, for instance, environmental policy in Canada), we lose sight of the fact that what is described as TK is only a very
small part of what is a broader and more complex participatory knowledge comprised of, and contained within stories.


Instead, most currently used concepts of TK/TEK in the literature forces, what is in reality a nuanced system of knowledge stories that are enlivened as a practice, into
becoming static, disconnected and abstract descriptions of knowledge that comes from a very complex network of local knowledge stories.

As Simpson argues, Indigenous peoples “do not want other people deciding which components of our knowledge are important and which are not. We do not want scientists interpreting our knowledge” essentially removing these interconnected knowledge stories from the “values and spiritual foundations that give it meaning” because Western scientists have not learned to listen for and understand the many different kinds of knowledge contained within Indigenous stories (Simpson, 2001, p. 140).

Deborah McGregor argues that Traditional Knowledge is “something one does, rather than simply something one knows” (McGregor, 2004, p. 391), and telling Indigenous stories is a central part of the practice of living these stories in the community, and on the land that constitutes both the stories and the people. Simpson echoes this idea when she states that interrelated to the prevailing issues surrounding Western interpretations of Indigenous knowledge stories is that when Indigenous “knowledge is removed from our people the power of our knowledge is lost” (Simpson, 2001, p. 140).

The practice of Indigenous knowledge has changed drastically over the last 500 years in North America, and in particular in Canada, since the onset of rapid and persistent colonization of Turtle Island. A well-documented and agreed upon reason in the literature for the imposed change in the practice of Indigenous Knowledge, is the lasting effects that Colonialism has had on the relationship that Indigenous peoples have been able to maintain with the land (McGregor 2014, Richmond & Ross, 2009, Simpson 2001, Talaga 2018).

Richmond has demonstrated through her work that processes of what she has described as “Environmental Dispossession” has had lasting effects on Indigenous Peoples, in particular on Indigenous Peoples and their communities, because they “live within a legacy of environmental dispossession that has profoundly uprooted a land-based way of life and the social, spiritual and cultural well-being that has nurtured and maintained good health for centuries” (Tobias & Richmond 2014, p. 26). For Richmond and Ross, Environmental dispossession is the active "processes through which Aboriginal people's access to the resources of their traditional environments is reduced" (Richmond and Ross, 2009, p. 403). And it is through this reduction that Tobias and Richmond argue that the very practice of Indigenous Knowledge has been altered. As the land is altered or made inaccessible, due to disease, pollution, loss of access, or invasive species, the capacity to engage in traditional practice is diminished, and as a result, Indigenous Knowledge is changed (Richmond & Tobias, 2014).

Indigenous Knowledge defies the codification and commodification that western philosophy and science requires, and instead exists as a what is described by Indigenous scholars, storytellers and Elders as a continuously changing and adaptive way of living, observing and respecting the land (Absolon & Willett, 2005, Archibald, 2009, Batiste &
Youngblood Henderson, 2000, Basso, 1996, Pualani-Louis, 2006, Rheault, 1999, Wilson W. A., 2005, Wickens-Pearce & Pualani-Louis, 2008). As Thomas King notes, “There is a story I know. It’s about the earth and how it floats in space on the back of a turtle. I’ve heard this story many times, and each time someone tells the story, it changes. Sometimes the change is simply in the voice of the storyteller. Sometimes the change is in the details. Sometimes the order of events. Other times it’s the dialogue or the response of the audience. But in all the tellings of all the tellers, the world never leaves the turtle’s back. And the turtle never swims away” (King 2003, p. 1).

What King draws out here, is that although different Indigenous Peoples may tell their stories with different forms; that the storytellers might make choices about how they tell their story, signalling that it belongs to their community; there are constants in the conception of the relationship Indigenous Peoples have to the land. That is, what becomes common amongst Indigenous Creation stories, and thus Indigenous Knowledge, is the relationship that Indigenous Peoples cultivate with the land, through their storytelling. The land and the people are always connected. (King 2003, Noodin 2014, Simpson 2011, Talaga 2018). The people and the land are always in a reciprocating relationship that recognizes that to know one’s self requires one to know, and listen to the land beneath one’s feet (Noodin, 2014, Simpson 2011, Smith, 2000, Talaga, 2018).

Yet, when we examine the methods used for soliciting what is described in the literature as TK/TEK from Elders used by many Western Scientists and Social Scientists is antithetical to the description of Indigenous Knowledge that King and other Indigenous storytellers have described. Karen Roberts argues that “capturing a single aspect of traditional knowledge is very difficult. Traditional knowledge is holistic and cannot be separated from the people. It cannot be compartmentalized like western scientific
knowledge” (Roberts, 1996, p. 115). White and Nadasdy have both illustrated through their work, that most often Elder knowledge has been extracted by Environmental Science and Ecological Management scientists through very intense interrogation about what and how Elders know about a singular environmental process (Nadasdy, 1999, White, 2006, 2008,). In most cases, as McGregor, as well as Nadasdy and White have shown in their work, this information is solicited for the purposes of what is described by both scientists and policy makers as environmental assessment and, sometimes, as Simpson has demonstrated (Simpson, 2004) towards exploitation of resources, through what Simpson describes as the co-opting of highly specific ecological knowledge that is part of the much more complex system of Indigenous Knowledge (Simpson, 2004).

Nadasdy notes, that “the idea of integration of [TK with Western science], however, contains the implicit assumption that the cultural beliefs and practices referred to as “traditional knowledge” conform to Western conceptions about “knowledge,” which Nadasdy disputes, questioning the very purpose of Western knowledge versus Indigenous Knowledge, noting that Western knowledge is a process of rationalization and objectification, enabling the scientist to stand as the objective view from nowhere, whereas, Indigenous Knowledge provides a relational and deeply local viewpoint that defies the western view from nowhere stance (Nadasdy, 1999, p. 1).

Nadasdy and White describe that when Elders have answered questions by telling stories, these Elders were redirected to only tell the information that was considered by the scientist to be relevant to the singular environmental process that was in question. White details the difficulty Elders had in a consultation meeting when one Elder expressed frustration at telling a knowledge story in English.
This Dene Elder noted that “we’re faced with the problem of having to deal with non-Dene people and non-Dene systems to make ourselves understood. If you want to understand us [and our TK], then you must learn our language (White, 2006, p. 406). Nadasdy describes a situation between an Elder and a scientist, where the scientist was insistent on gaining a numeric value for the number of sheep in a given herd. Nadasdy writes, that “community members attending these meetings expressed frustration at the tendency of scientists to treat animals as numbers,” with one hunter declaring “The sheep don’t fall out of the sky! They are born, raised out there in the wild. That is where they are born; that’s where they die. It doesn’t matter how many numbers you put on a piece of paper; out there is still the same” (Nadasdy, 1999, p. 8).

Indigenous knowledge stories will never fit the model of data or generalizability that western science requires in order to create a grand theory of knowledge, nor will Indigenous knowledge ever fit the model of data required to understand the environment as a complex series of isolated processes (Kovach, 2009). Methodologies and research studies that fail to recognize this fact ultimately reproduce colonialism, because as Battiste and Youngblood-Henderson argue, Western scientific thinkers have “imposed” definitions of what they understand TK to be, rendering TK within this context as a “uniform concept across all Indigenous peoples” (Batistte & Youngblood Henderson, 2000, p. 36) and like McGregor, and Simpson, Battiste and Youngblood-Henderson argue that Indigenous stories “cannot be separated from the bearer to be codified into a definition” because “Indigenous knowledge must be understood from an Indigenous perspective, using Indigenous language” (Batistte & Youngblood Henderson, 2000, p. 46).
1.1.2 The relationship between Colonialism and the field of Geography: Mapping and its view from nowhere

The relationship between colonialism, western science and Indigenous Knowledge is one that must be taken very seriously if scholars and policy makers are genuinely concerned about creating scholarship and policy that engages in decolonization rather than colonialism. Western Science is traditionally understood to be a universal and neutral means of accessing knowledge (Rorty, 1979, p. 6), and one of the major epistemic assumptions that underlies this belief is that “to know is to represent accurately what is outside the mind” (Rorty, 1979, p. 6). Western science has used this assumed neutrality and objectivity as a means of displacing and delegitimizing many non-western ways of knowing the world over the course of history (Harding, 1993).

The idea of power and how it organizes the scientific gaze is important to recognize when examining the use of Indigenous Knowledge in the majority of western scientific and social science research and policy work because the scientific gaze has the powerful effect of “dividing culture up into areas which represent reality well, those who represent it less well, and those who do not represent it at all (despite their pretense of doing so)” (Rorty, 1979, p. 9).

As a result, Indigenous Knowledge has been deconstructed, and forcibly reconstituted within Western science, losing in the process, the integrity of its original material presentation, or form. And for Indigenous Knowledge, at a global level, Western science has dispossessed this knowledge not only from the people, but also from its original form: the story (, Borrows, 2010, Johnston, 1976, Kahsenni, 2017, Maracle L. , 1994, Rheault, 1999, Silko, 1981, Talaga, 2018, Thomas, 2005, Wattss, 2013, Whiteduck, 2013, Wilson W. A., 2005).
Through its perceived neutrality and universal representation, western scientific knowledge has been deemed (by Western Science) as being the only legitimate means of observing and knowing the world at the expense of Indigenous claims to knowledge and ways of observing and making sense of the natural world, and Indigenous Peoples’ relationship to the world. As such, within much current literature, the concept of Traditional Knowledge is only made legitimate insofar as it aligns and is supported by western scientific claims of knowledge, and where discrepancy arises, western scientific knowledge is positioned as having the means and power to make Indigenous knowledge illegitimate.

Guided by inflexible norms, western environmental scientists, ecologists, wildlife management scientists, geographers etc. have most often, in creating current Western definitions of TEK, rejected “the traditional knowledge of native hunters as anecdotal non-quantitative, and a-methodical. Unable to overcome a deeply engrained and ethnocentric prejudice against other ways of knowing,” they ultimately “turn their backs” on an incredibly complex and nuanced system of knowledge (Nakashima, 1990, p. 23).

The discipline of geography and its most used tool, that of cartography, literally inscribes the earth with its universal view from nowhere, providing a newly articulated and sanitised version of the landscape that allowed for the “expansionist policies of Europe throughout the age of [the] empire” making possible the colonization of Turtle Island (Painter & Jeffrey, 2009, p. 176).

“Thus far Western cartographic techniques and technologies have overwhelmingly been used to present positivist representations of space,” (Wickens-Pearce & Pualani-Louis, 2008, p. 107), and as a result in 1995 Nietschmann famously asserted that “more Indigenous territory has been claimed by maps than by guns” (Nietschmann, 1995, p. 5), but Nietschmann adds, “more Indigenous territory can be reclaimed and defended by maps then guns” (Nietschmann, 1995, p. 5).

Vine Deloria Jr. asserts that “Western people have never learned to consider the nature of the world discerned from a spatial point of view,” (Deloria, 1999, p. 78) and that western society has denied (at almost every chance we get) our bodily connection to the landscape and how this connection would allow us to discern a “spatial point of view” that is intimately connected to our bodies, our knowledge production and the landscape.

Wickens-Pearce and Pualani-Louis describe the ways in which western cartography eschews the emphasis of “experienced space or place,” and instead that western cartography depicts “space as universal, homogenized and devoid of human experience” and most importantly, that human experience is not shaped intimately, by the geography from which it emanates and exists (Wickens-Pearce & Pualani-Louis, 2008, p. 111). In many ways then, the Western cartographic tradition has created maps that are articulated from a view from nowhere which aligns with Western thinking’s insistence that the only knowledge about the world that is trustworthy or that has veracity is knowledge that is acquired through objective ways of knowing, and bodily perception, since the time of Descartes, has, within the Western tradition been considered not an objective means of accessing knowledge (Rorty, 1979, p. 67).

As a powerful tool of colonization, map-making is a fraught activity, and as Stone argues, Indigenous communities have a choice: “map or be mapped” (Stone, 1998, p. 54).
But as Wickens Pearce and Pualani Louis argue “issues of ontological and epistemological differences in cartography and map symbolisation between Indigenous communities and those who design, market and provide instruction in geospatial technology generally have not been addressed” thus, causing the map or be mapped dilemma to be one that entrenches Eurocentric ideas about space, time, and place in current and historical cartographic and geographic practice (Wickens-Pearce & Pualani-Louis, 2008, p. 109).

The result is that “Indigenous cultural knowledge is often distorted and suppressed or assimilated into the conventional Western map” (Wickens-Pearce & Pualani-Louis, 2008, p. 109), and Western cartographic traditions have failed to understand that stories can also be maps. That is, Indigenous stories, with their highly attuned relationship to the land they tell about, literally map the landscape to the stories being told.

What happens then, when western science inadequately locates the knowledge located within Indigenous Knowledge within a map without being able to fully express the meanings and interrelatedness of this knowledge to the landscape? Or, when Western science only listens for ecological aspects of a broader knowledge system? Only a superficial preservation of aspects of the holism of Indigenous knowledge can be translated to a western map, essentially diluting both the meaning and performance of the sensory knowledge “through secular and decontexted performances” of western cartography (Wickens-Pearce & Pualani-Louis, 2008, p. 109).

Within the western geographic and cartographic tradition, the western map essentially becomes an arbiter of what aspects of Indigenous knowledge are considered legitimate, while at the same time, imposes the material form by which that knowledge will be presented. In doing so, western mapping of Indigenous knowledge homogenizes
deeply local knowledge, built over generations through continuous residence, to a very universalised view of geography, and not the stories told from the land beneath one’s feet.

Second, and most problematic, the extraction of Indigenous knowledge for the purpose of western mapping, separates this deeply held knowledge “from the bearer to be codified into a [static] definition” that does not consider the cyclical thinking, interconnectedness and relationality, responsibility or dynamic nature of the land (Battiste and Young-Blood Henderson, 2000 p. 36).

Thus, western map making completely destroys what, Battiste and Young-Blood Henderson argue is a critical concept of Indigenous knowledge, that “Indigenous knowledge is a way of living within contexts of flux, paradox, tension,” and the realisation that being of the world, and part of creation means, accepting change as a constant part of life (Batistte & Youngblood Henderson, 2000, p. 54). For Youngblood-Henderson and Battiste, it is being conscious of, and respecting this dynamic nature of the land that allows Indigenous people to have a deeply held interconnected “solidarity with the natural world” (Battiste & Youngblood Henderson, 2000, p. 54).

Western science’s insistence on dividing Indigenous Knowledge up into component parts- such as ecological knowledge; climate knowledge; geographical knowledge, cartographic knowledge- undermines its inherent holism and in this process makes any aspect of Indigenous Knowledge that does not map accurately to Western knowledge or does not satisfy what new knowledge Western researchers are seeking, illegitimate (Cajete, 2000, McGregor, 2004, Nadasdy, 1999, Pualani-Louis, 2006, Simpson, 2001, 2004).

Chief Robert Wavey, in an address given in 1993 to the International Program on Traditional Ecological Knowledge for the then, International Development Research

1.1.3 Western Scientific methods used to access and described Traditional Knowledge

In 2008, Brook and McLachlan undertook a systematic literature review of what they term Local Ecological Knowledge (which for all intent and purpose is another term for Traditional Knowledge). They examined the growing trend and use of Traditional Knowledge over 25 years in 360 different journals (Brook & McLachlan, 2008). They then did a more detailed analysis of 12 highly cited ecological and conservation journals. Their findings indicate that in most cases the vast majority of researchers who are engaging in research that incorporates Traditional Knowledge are employing methodological approaches that further entrench colonial power over Indigenous communities, and do not reflect that they understand stories are both the form of, and the subjects of Indigenous Knowledge.

The Brook and McLachlan study identified that the increase in TK use was most prominent in applied and interdisciplinary journals but was almost completely absent from prominent and established theoretical literature (Brook & McLachlan, 2008). The results of Brook and McLachlan’s study support White, McGregor, Simpson and Nadasy’s arguments. The authors found that in the group of 12 journals examined in detail (172 total journal articles from the 12 sources) that 1/3 of the articles lacked a detailed methods section, making it impossible to identify participants by gender, age or
occupation. Only 11% of the empirical papers “explicitly recognize or discuss a spiritual component to the [Indigenous Knowledge] in the study,” instead focusing on the perceived more “practical” or distilled components of what is described as Traditional Knowledge (Brook & McLachlan, 2008, p. 3505). Their systematic review revealed that only a little more than fifty percent (52%) of the articles explicitly recognized the contribution of study participants in any way, and only a mere 6% of those articles examined in detail included community participants as co-authors (Brook & McLachlan, 2008). Brook and McLachlan also found that only 24% of “studies indicate that any feedback was obtained from the community,” and only 12% of the empirical studies used direct quotes from participants (Brook & McLachlan, 2008, p. 3505). The dominant means for communicating what is described as Traditional Knowledge data in the papers examined was through the author’s voice, and in the 12% of articles that did include quotes, the “median number of quotes was nine” (Brook & McLachlan, 2008, p. 3506).

That researchers are not engaged in asking the theoretical and philosophic questions that directly affect the use and engagement with Indigenous Knowledge is a significant part of the continued power imbalance between Indigenous communities, academic researchers and government policy makers. If, as a community of researchers, academics are engaging with Indigenous Knowledge with little to no theoretical reflection, it is not surprising that, as Simpson, McGregor, White and Nadasdy argue, the use of what is described as Traditional Knowledge in both research and policy, and applied sciences such as environmental and ecosystems management has become a colonial enterprise (McGregor 2004, 2006, Nadasdy, 1999, Simpson, 2001, 2004, 2011 White, 2006).
Nadasdy argues that a great deal of the colonial power displayed in the ways in which Indigenous Knowledge are accessed, and then used, hinges upon the fact that there is a growing “imperative of incorporating TEK into the state management system,” which has ultimately caused researchers and policy makers to focus their methodologies on the ends— the ability to extract “from communities only that kind of information which can be expressed in a very few specific ways” (Nadasdy, 1999, pp. 5, 9). Nadasdy’s work illustrates that the majority of current research methods used (within the fields of ecosystems management, environmental studies and science and forestry) when working with Indigenous Knowledge must produce work that is considered acceptable to certain disciplinary forms such as journals, books and reports.

As such, the Indigenous Knowledge that is recorded must be turned into what is considered acceptable data, and therefore does not reflect that “survival in the bush depends on one’s knowledge of the environment as a whole. It is not enough to know only about bears or moose; one must know about all of the animals out there—how they behave, what they eat, how they interact with one another, and how they think,” and this type of holistic understanding of the environment belies the data collection processes that most ecosystems management/environmental scientists understand or define as being useful (Nadasdy, 1999, p. 6).

These approaches have continuously disavowed the legitimacy of knowledge transferred through stories, as being unacceptable, and in many cases, not a credible form of knowledge, because these data collected about distinct species, that drive the work of ecosystems management and environmental science research, have not been able to listen to the fact that when Elders tell stories about living on the land, they are telling stories that describe one must not only know about a specific animal, but must understand “how
they fit into a complex web of practices, values, and social relations that encompass not only all animals plants and land forms, but humans as well” (Nadasdy, 1999, p. 6).

The result is the use of methodologies that necessarily have as their aim the “distilling of these TEK artifacts out of the interrelated complexity of social relations,” which has very serious consequences for Indigenous participants because in essence the practice of distilling “facts” from an oral narrative forcibly removes the holistic social interrelations that made the process of a living Indigenous Knowledge meaningful to the bearer and listener of that story (Nadasdy, 1999, p. 7).

The problem of Non-Indigenous academics deciding what parts of Indigenous Knowledge will be valued is a persistent and dangerous problem within the literature, and academia generally. The findings in the Brook & McLachlan study are not isolated: in 2000, a special issue of *Ecological Applications* “dedicated a special invited feature on the topic of TEK” where 8 papers were written about TEK and how it could be best applied within the realm of the Natural Sciences (Simpson, 2004, p. 375). As Leanne Simpson notes, the “vast majority of the papers were written by non-Native scientists appealing to the readership of primarily ecologists to consider TEK as valid and useful knowledge” (Simpson, 2004, p. 375).

Further, Simpson argues that this edition of *Ecological Applications*, can be, and should be understood as a microcosm of what is most dangerous about the ways in which Indigenous knowledge has been used and defined in the literature because alarmingly, “none of the papers mentioned the impact of colonialism on Indigenous Knowledge, the role academics and western scientists played and in many cases continue to play, in the oppression of the world’s Indigenous nations,” not to mention the “current threats to Indigenous Peoples, the land, and their knowledge systems” (Simpson, 2004, p. 375)
Simpson, along with McGregor (Batiste & Youngblood Henderson, 2000, McGregor, 2004, 2006, Smith, 2001), have all argued that by compartmentalizing Indigenous Knowledge into the idea of its entirety expressed as TEK, not only presents Indigenous knowledge as a commodity, or “untapped resource for the world’s ecologists to tap into” (Simpson, 2004, p. 375) in their own search for solutions to environmental management and climate change mitigation, but also, and importantly by “disconnecting TEK from the colonial oppression of Indigenous Peoples” academics become entirely disconnected from “their responsibilities as beneficiaries and perpetrators of both political and intellectual colonialism,” further “entrenching the relationships between the colonizer and the colonized” (Simpson, 2004, p. 376).

**Story no.5: Wisdom sits in places**

*The second part of this story describes how Indigenous scholars, storytellers, and artists have argued and worked to describe Indigenous knowledge, and how Indigenous Knowledge might best be described at a conceptual level. That is, what are the qualities of Indigenous knowledge that have been left out of the ways in which Western Scholars have described Indigenous Knowledge? This story argues that we must work to open up space for Indigenous scholars, storytellers and artists to be “strategic about how [they] recover and where [they] focus [their] efforts in order to ensure that the foundations of the system are protected and the inherently Indigenous processes for the continuation of Indigenous Knowledge are maintained” (Simpson 2004, pp. 376). And this story argues that the very best way we can do this as an academy and as scholars is learning to listen to the whole story, and to the wisdom that sits in places; places the academy rarely ventures to listen (Basso 1996).*
1.2.0 Indigenous approaches to describing Indigenous Knowledge in the literature

1.2.1 Conceptual descriptions of Indigenous Knowledge

In 1994, Winonna LaDuke defined Indigenous Knowledge as “the culturally and spiritually based way in which Indigenous peoples relate to their ecosystem” (LaDuke, 1994, p. 127). She also noted that importantly, this knowledge is generated as a process over time, founded on generations of careful observation within an ecosystem of continuous residence” (LaDuke, 1994, p. 128). From this description we begin to understand that a critical aspect of Indigenous knowledge is the idea that it is a continuous process of learning about the ecosystem, and that this deep and holistic learning happens because of continuous residence. That is, part of the holism of Indigenous knowledge is predicated on the fact that Indigenous peoples lived deeply on the land, for generations, living in the same geographic regions, developing intricate and trusting systems of knowing the land from which their knowledge emerged and was bound.

That is, the concept of the land, best understood as a complex ecosystem and not simply the ground beneath one’s feet, was a constant feature in the lives of community members, creating the basis for both social and knowledge structures that would both organize and govern communities (Antweiler, 1998, Cajete, 1994, Cruikshank, 2001, Deloria, 1999, Herman, 2008, Howe, 2002, Maracle L., 1994). Simpson articulates this inter-relationship when she notes that “Indigenous knowledge comes from the land through the relationship Indigenous peoples develop and foster with the essential forces of nature” (Simpson, 2004, p. 378). And, that these essential and primary relationships
“are encoded in the structure of Indigenous languages and Indigenous political and spiritual systems” (Simpson, 2004, p. 378).

Thus, when the land changed subtly or dramatically, Indigenous knowledge would change, adapt and become renewed in step with the land. Simpson also notes, like Richmond, that “without intact ecosystems, Indigenous peoples cannot nurture these relationships,” and thus, Indigenous Peoples’ ability to remain “in step with the land” is dramatically reduced (Simpson, 2004, p. 378). Simpson also argues without the ability to nurture and maintain these relationships with the land, practicing Indigenous knowledge is threatened because dispossession of the land, disconnects Indigenous peoples from the primary source of their knowledge and systems of being in and of the world (Cruikshank, 1990, Johnson J. T., 2008, King, 2003, Rheault, 1999, Richmond & Ross, 2009, Simpson, 2001, Simpson & Dribben, 2000, Talaga, 2018, Wattss, 2013, Whiteduck, 2013).

1.2.2 The sensing body, observational knowledge and its relationship to Indigenous Knowledge

The basis for sharing and living Indigenous Knowledge occurs through storytelling, which can take many forms such as oral stories; beading; weaving; dance and songs; sewing; and painting (Archibald, 2009, Geniusz, 2015, King, 2003, Kermoal, 2016, Kovach, 2009, Talaga, 2018). In relation to Indigenous Knowledge, it is also important to recognize, that regardless of the storytelling modality, Indigenous bodies act as living archives through which and in which stories are told. Joy Parr argues that “our bodies are the instruments through which we become aware of the world beyond our skin,” and that our “bodies are archives that store sensory information, allowing for a retooling of our senses and practices in relation to changing circumstances” (Parr, 2010, p. 1). The body, then becomes a vital node of the Indigenous Knowledge System, because
the body was the means through which a multitude of historical sensory experiences were passed on, retooled, and reconstituted in new and changing landscapes. Within the complexity of Indigenous Knowledge, the body literally carries the *meaning*, or the information, of the story, as Indigenous Knowledge was organised and reconstituted within and between Indigenous peoples and the environment.

Parr urges us to consider that “the environments and technologies with which we live, play, and work lead us to develop specific modes of bodily attention and perception,” which in turn allow “humans to feel at home, competent and safe” within these material landscapes (Parr, 2010, p. 4). What happens then when landscapes are radically altered? For the people affected by these altered landscapes, Parr notes that they recounted how these changes had “unsettled their daily lives and forced them to encounter their environment anew and adapt the practices through which to live competently and sustainably everyday” (Parr, 2010, p. 11). They described having to relearn how to attune their bodies to the “winds and the weather, in the lakes, rivers and native vegetation that surrounded them; in the needs of the crops and livestock they tended; and the aquifers, fish and woods upon which they depended,” in order to infer how to interact and live within the changed landscapes in which they found themselves (Parr, 2010, p. 18).

In essence, they described, having to learn to listen to the land in relational ways, wherein changes to the land need to be acknowledged and taken into how one knows and interacts with the ecosystem, and eventually, how one tells the story of being of the constantly shifting land. As Gregory Cajete describes, Indigenous knowledge represents an interconnected and cumulative body of knowledge that, when expressed through storytelling demonstrates an “understanding and application of relating to *their* land” that
creates “models for the art of relationship that must be re-taught through modern education” (Cajete, 1994, p. 78).

Mi’Kmaq artist Ursula Johnson illustrates Battiste and Young-Blood Henderson’s point, that “Indigenous knowledge is a way of living within contexts of flux, paradox and tension” (Batistte & Youngblood Henderson, 2000) during an interview on the CBC programme, Ideas, when she describes the Mi’Kmaq process of understanding colour. First, Johnston describes that in English, for instance, the colour orange can be understood as a colour and as a fruit. It’s quality as a word is 2 syllables. She counters this western idea of colour and place and object by describing the Mi’Kmaq description of the concept of orange. She notes in Mi’Kmaq the word orange is 8 syllables, and “instead of just a colour or fruit,” the concept means: “an edible food that has oxidised to become a fruit we can eat” (Johnson U., 2017). In her description she draws out that for the Mi’Kmaq the concept of an orange is animate, that it is in a process of becoming something as time moves forward, and, that the concept of orange can only be explained through a narrative or story of its becoming.

Johnston further illustrates the ways in which Indigenous knowledge has built in ways to not only deeply appreciate, but grapple with, the complexity of living in and being part of a constantly shifting and evolving ecosystem when she describes what she learned from her grandfather about colours.

Johnston comes from Eskasoni First Nation and is from a long line of Indigenous artists. She decided she wanted to study at NASCAD, and before she left her grandfather discussed with her, the danger in learning the western colour system, because of the language attached to it. He told her that if she took painting, she would have to learn
western colour theory, which will say “red is red. Blue is blue. Yellow is yellow. And that red and blue makes purple” (Johnson U., 2017).

What her grandfather draws out is that the Western colour system is entirely static and doesn’t actually describe the real nature of colour; its quality, the process of its becoming. He makes this point when he says “in our language colour is dependent upon light and light is forever changing. There is no “this is red, or this is blue”. Things are always in the process of becoming red or leaving red,” and he cautioned Johnston, that if she took Western colour theory her “mind [would] change how [she] perceived everything: colour, and the environment” (Johnson U., 2017). And, for Johnson, this deeply connected description of understanding the becoming of colour, as a process of the land, is gained by being deeply connected to her Eskasoni lands; to her people and to her language and to the stories that tell of this process of becoming.

Chief Robert Wavey, in his keynote address discussing Indigenous concepts of Traditional Knowledge, connects the idea of continuous residence, and being deeply connected to one’s land, to the ways in which Indigenous knowledge is acquired through a multisensory observation of the land: “As Indigenous people we spent a great deal of our time, through all the seasons of the year, travelling over, drinking eating, smelling, and living with the ecological system that surrounds us” (Wavey, 1993). He describes that this generational practice of observing and experiencing the land in a deeply connected way, has allowed Indigenous people to “often notice very minor changes in quality, odour, and vitality long before it becomes obvious to Government enforcement agencies, scientists or other observers of the same ecological system” (Wavey, 1993).

Wavey also describes, like Johnston, and Simpson (Simpson, 2004, 2011) the important ways in which Indigenous language carries meaning- and the process of this
meaning. LeRoy Little Bear notes, “the English language is all about nouns, things, and objects, following up on the notion of an objective language. It is not about process. Native languages are process oriented” and it would follow that the knowledge described through interconnected Indigenous stories, would be process oriented as well (Simpson, 2001, p. 143).

1.2.3 Minobimaatisiwin: Living in a good way through relationships, reciprocity and respect

For the Anishinaabe, LaDuke argues that a central feature of the process of practicing Indigenous Knowledge, and observing the land, is captured in the practice of Minobimaatisiwin, which LaDuke defines as “the good life” (LaDuke, 1994, p. 128), and Geniusz describes Minobimaatisiwin as living “life to its fullest sense,” which draws on the idea that Indigenous knowledge is a process of deep observation acquired through multiple senses that are deeply attuned to the land, and its cycles (Geniusz, 2015, p. 5).

For LaDuke, the idea of Minobimaatisiwin can also be understood as “continuous rebirth” and is fundamentally tied to what she describes as two essential tenets of Indigenous knowledge, in this case base on Anishinaabe ways of knowing the world (LaDuke, 1994, p. 129). For LaDuke, along with Simpson and McGregor (Simpson, 2001, 2004, 2011, Simpson & Dribben, 2000) and (McGregor, 2002, 2004, 2006, 2008) essential to Anishinaabe Indigenous knowledge is the idea of “cyclical thinking and reciprocal relations and responsibilities to the Earth and Creation” (LaDuke, 1994, p. 128).

For LaDuke, the idea of cyclical thinking is not just essential for Anishinaabe thinking, but a common feature “amongst most Indigenous or land-based cultures and value-systems” in that these knowledge systems understand the world through cycles
That is, the “moon, tides, women, lives, seasons or age” all occur in cycles, and these cycles must be respected and honoured if balance is to be maintained within the ecosystem, because with this epistemological framework, or way of knowing the world, is a clear directive that built an ontology that is predicated on an understanding that “what one does today will affect one in the future, on the return” through the cycle of birth and rebirth that defines the balance of any ecosystem (LaDuke, 1994, p. 128).

The second fundamental concept for LaDuke is that of “reciprocal relations” (LaDuke, 1994, p. 128). For LaDuke, the idea of reciprocity “defines responsibilities and ways of relating between humans and the ecosystem,” which are established, nurtured and adapted through the process of deep and intentional observation of the land (established through continuous residence) (LaDuke, 1994, p. 128, 1999, 2002).

As LaDuke notes, to be able to establish a secure and trusting relationship with the land, one that would allow the people to not only survive, but flourish ethically, spiritually, and politically, required a knowledge and way of living that understood the act of, for instance hunting or harvesting that “involves more than just skill; it also involves careful observation of the ecosystem,” coupled with and inextricably linked system of ethics best expressed as “social values and cultural practices” that both defined and determined the ways in which Indigenous knowledge was both acquired and practiced:

A hunter always acts as if the animals are in control of the hunt. The success of the hunt depends on the animals: the hunter is successful if the animal decides to make himself available. The hunters have no power over the game, animals
have the last say as to whether they are caught.

(LaDuke, 1999, p. 129).


Within this epistemological and ontological framework one “could not take a life without a reciprocal offering” (LaDuke, 1994, p. 128) just as one could not take a life (be it plant or animal, water or rock) without literally entering into a spiritual bond, or conversation, through ceremony with that being (Borrow, 2008, 2010, Johnston, 1976, Maracle B., 2005, Simpson, 2011, Thomas, 2005, Wilson S., 2008, Whiteduck, 2013).

1.2.4 Mno Nimkodadding Geegi: We are all connected within Indigenous Knowledge

Fundamental to Anishinaabe Knowledge is the understanding that “all things created are alive,” and although they might “grow and reproduce differently than humans; they may talk differently than humans,” they are all animate with spirit (Geniusz, 2015, p. 21). For instance, Geniusz gives the examples of how one might begin to understand their relationship with the land, and their responsibility to respect not only the land, but their place within creation by understanding the life of the rocks, through the Anishinaabe concept of Mno Nimkodadding Geegi, which establishes a fundamental concept of
Indigenous Knowledge, in particular within Anishinaabe Knowledge systems: the understanding that we are all connected.

Geniusz describes that the lifespan of a rock “is so much longer than ours; it is no wonder we are such different beings. The rocks are the bones of Mother Earth. Their language and ways of being are very much different from ours. I often think about the ways in which the rocks must view us. We are so temporary in this world. Our whole lifetime [as human beings] are so short compared to that of a rock” (Geniusz, 2015, p. 21)

Like Chief Wavey, Geniusz describes Indigenous knowledge as being in constant conversation with the land, and creation, and that all of creation is connected when she teaches us that to really understand these interconnections, for instance the connection between rocks and water, one must practice “watching, really watching a lake,” and through really watching and listening to a lake, one learns about the ways in which the rocks multiply; the ways in which they “break apart and come together again to create more of their kind” (Geniusz, 2015, p. 21) We must look to the water, to the way the water interacts with the rocks, and the rocks with the water in order to tell the story of both rocks and water (Geniusz, 2015). And in order to tell the story of what we have observed, we must tell the story of the rocks and the water for many generations, because rocks change and move in their own time, a time, as she points out, that is “very much longer than ours,” thus necessitating the interconnection of Indigenous Knowledge across generations (Geniusz, 2015, p. 21).

It is through this process of deep observation and listening, that Geniusz teaches us that this type of listening, and “watching and truly seeing the world around us might help us realize that we have purpose in the world, too. And it might help us realize how
much harm humans can do to the “balance when they see themselves as the only beings on the planet” (Geniusz, 2015, p. 22)

Gregory Cajete suggests that Native Science (which by his definition is an Indigenous Knowledge System) is a “lived and creative relationship with the natural world,” that produces an “intimate and creative participation [which] heightens awareness of the subtle qualities of a place (Cajete, 2000, p. 20). He also argues that there is a paradigm difference in the way that Western knowledge is acquired, and how Indigenous Knowledge is acquired, and he speculates that it is this difference in paradigm that has caused a great deal of the “misunderstanding between Western objectified science and Indigenous traditions of knowledge” acquisition (Cajete, 2000, p. 81).

Within Indigenous knowledge traditions, broadly speaking, Cajete argues that there are “certain processes [that] must occur in a particular order, which in its way is similar to the precise ways that an experiment is executed within the western scientific method” (Cajete, 2000, p. 81). And, it is through respecting these processes and progression of knowledge acquisition that Indigenous Knowledge is inscribed within both the person acquiring the knowledge and the landscape through which this knowledge is acquired (Geniusz, 2015, Herman, 2008, Johnson U. , 2017, Johnston, 1976, Johnson & Murton, 2007, Kahsenni, 2017, Maracle L. , 1994, Richmond & Ross, 2009, Rheault, 1999, Simpson, 2011, Talaga, 2018, Thomas, 2005, Wattss, 2013, Wavey, 1993, Wilson W. A., 2005).

1.2.5 Indigenous Knowledge Acquisition

Geniusz describes the process of Indigenous knowledge acquisition, when she describes the process of becoming a medicine woman. First, she draws out a very
important, but often overlooked point: Indigenous Knowledge is deeply and elegantly pragmatic. That is, Indigenous peoples “do not keep what is not valuable. To have retained and kept and utilized knowledge for that long a time, it stands to reason that the People down through the ages thought it valuable because it was effective in making their lives, and the lives of their children easier” (Geniusz, 2015, p. 18). She also astutely describes a great divergence between Western ways of acquiring knowledge, and, in her case Anishinaabe ways of coming to know the land. Geniusz describes how, within the Doctrine of Signatures, it was believed that “God put a “signature” or “writing” or “clue” to the benefit of a certain plant within the growing structure of that plant that a person could read as if it were a book” (Geniusz, 2015, p. 19). She notes that her teacher always said, if the Anishinaabeg learned this way, they “would soon graze themselves into an early grave” (Geniusz, 2015, p. 19).

So then, how did the Anishinaabeg acquire medicinal knowledge? Geniusz describes a process that was deeply guided by both spiritual practice and pragmatic physical discovery, and it was only when these two ways of coming to know were combined that knowledge of the land was acquired. The mashkikiwininiwag or mashkikiwikwewag (medicine man or woman) were, through their years of deep observation and connection to the land, and all of creation given the ability to listen to the land through their visions. Many times, these visions would allow the mashkikiwininiwag or mashkikiwikwewag to organize and retool their knowledge about healing properties of plants, such that they would learn new ways to use and administer the medicines (Geniusz, 2015).

Geniusz describes that “one gets the idea in the vision, or dream, but one then tests the knowledge;” thus, visions were an essential part of a very pragmatic and
systematized way of validating the efficacy of medicines. In the case of the Anishinaabeg, Elders often offered themselves to “test such knowledge for the good of all the people” (Geniusz, 2015, p. 19). This empirically tested medicinal knowledge was then adapted and maintained through storytelling and systems of learning where younger people would learn from their Elders, cumulatively adding to, and maintaining this vast system of medicinal knowledge (Geniusz, 2015).

1.2.6 Indigenous Knowledge is alive

Another aspect of Indigenous knowledge that Geniusz clearly articulates is that it is lived knowledge- and because it is lived knowledge, it is given veracity. That is, one would understand the veracity of the knowledge that a mashkikiiwininiwag or mashkikiiwikwewag held because that mashkikiiwininiwag or mashkikiiwikwewag would have tested their medicines on themselves and taken their medicines before they would ever administer them to other Anishinaabeg: “No one will believe a medicine person who cannot offer a personal story about the making and administering of a particular cure, about the effectiveness of that medicinal cure” (Geniusz, 2015, p. 3).

Geniusz notes, like Cajete, Battiste and Young-Blood Henderson, Simpson and McGregor, that what “non-native science and medicine dismisses as anecdotal and therefore suspect, is in the Anishinaabe way the highest possible degree of credible information” because, “to us, source is all” (Geniusz, 2015, p. 4). “There is no place in ethnobotany for a mistake. Dead is dead, and there is no degree of deadness,” one must intimately know the land, and trust in a progressive process of acquiring knowledge through all of the senses, and that includes the intimate and spiritual connectedness that the Anishinaabeg maintained with the land, and the land with the Anishinaabeg (Geniusz,
2015, p. 19). Because, as Geniusz argues, “to just go merrily along trusting to the idea that one will know a poison by the way it looks would be to invite disaster” (Geniusz, 2015, p. 19). Therefore, building and maintaining a relationship with Creation, by “talking to the plant is valuable because it will make one feel connected to the plant, to the cycle, and to the balance” (Geniusz, 2015, p. 21) and it is through this process of *coming to know* the land, that the Anishinaabeg knew occurred through both listening and building relationships with all of creation, that a deepened interconnectedness and relationship with the land was established and maintained (Altamirano-Jimenez & Parker, 2016, Barnhardt & Kawagley, 2005, Cajete, 2000, Cruikshank, 1998, Geniusz, 2015), Deloria, 1999, Howe, 2002, Johnston, 1976, LaDuke, 1999, McGregor, 2004, Nakashima, 1990, Simpson, 2001, Wilson W. A., 2005).

Wilson (Wilson W. A., 2005), Archibald (Archibald, 2009), Pualani Louis (Pualani-Louis, 2006, Wickens-Pearce & Pualani-Louis, 2008) and Herman (Herman, 2008) all suggest that the landscape within which the process of living, creating and reconstituting Indigenous knowledge is undertaken is as important a consideration as the story being told, because as Basso has argued wisdom sits in places, and wisdom is based on cumulative experience (Basso, 1996). Geniusz describes that these knowledge “stories are necessary in our way; they tell the reader [or listener] that I have actually used the medicine [or other knowledge that is being learned]. One learns something. One utilizes that knowledge and then one has more knowledge to pass on to another person. Anishinaabe knowledge grows like crystals in rocks. The process is slow, and it is beautiful,” and what emerges are interconnected stories, that are very much alive (Geniusz, 2015, p. 4).
Herman argues, experience is materially constituted through specific landscapes and places, thus social and cultural knowledge is encoded through an intricate process of practicing Indigenous Knowledge within landscapes, and if those landscapes are altered or if bodies are dispossessed of the landscapes in which their experience had been materially constituted, then Indigenous Knowledge needs to be altered in order to remain in a reciprocating relationship with the land, and the land with the Knowledge system (Herman, 2008).

Maintaining balance in the ecosystem, is a deeply held by most Indigenous communities (Cruikshank, 1990, Batiste & Youngblood Henderson, 2000, Deloria, 1999, Geniusz, 2015, Kahsenni, 2017, Talaga, 2018, Wattss, 2013, Whiteduck, 2013, Wilson W. A., 2005, Wilson S., 2008), and is an outcome of practicing Indigenous knowledge. That is, the ethic of respect for all living beings, is predicated on an understanding that all beings are animate and connected within the ecosystem, enables balance in the ecosystem to be maintained.

Geniusz, teaches us that, “whenever it is necessary to change the balance as we find it, we have to talk to the individuals involved to get their consent to the change” (Geniusz, 2015, p. 19). For instance, she notes that if we want to make gravel from rocks, “we have to talk to the rocks,” and “we have to talk to the plants if we want to obtain their help in the healing of ourselves of another being” (Geniusz, 2015, p. 23). Geniusz admits that at first, one might feel foolish getting to the know the land, by talking to it, but she cautions, that it is only through communicating with the land, that one will activate the “art of relationship” that Cajete describes (Cajete, 2000, p. 20). Geniusz asks us to understand, that not until we “think about the plant or the individual rocks or the individual animals as the other persons that they are,” will we really begin to listen to,
and be in relationship with the land (Geniusz, 2015, p. 23). That it is through the practice of deep observation and relational accountability with all aspects of the land that Minobimaatissiwin is achieved, because as LaDuke argues, “there is no way to quantify a life, only a way to live it” (LaDuke, 1999, p. 34). And, it is the practice of living of the land, that McGregor notes is the way of life “that sustained us for generations, and that got us through very troubling times. It is the way that will guide our future” (McGregor, 2004, p. 403).

1.2.7 Methodological Approaches used by Indigenous Scholars to describe Indigenous Knowledge

From this literature review, there are some common methodological approaches that Indigenous scholars have utilized in order to understand and describe Indigenous Knowledge. From my coding of this literature, four dominant methodological categories emerged:

<table>
<thead>
<tr>
<th>METHOD</th>
<th>CITATION</th>
</tr>
</thead>
</table>

Chart 1: Methodological approaches used to describe Indigenous Knowledge
1.2.8 Conceptual Descriptions of Indigenous Knowledge in the Literature

From the methodological approaches listed in chart 1, some common conceptual qualities emerge within the literature that describe Indigenous knowledge in the following ways:

*Chart 2: Conceptual descriptions of Indigenous Knowledge*

<table>
<thead>
<tr>
<th>Relational to the land</th>
<th>Built from observational shared knowledge of the land</th>
<th>Spiritual in practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actualized on the land</td>
<td>Geographically specific to a defined territory of land</td>
<td>Ethical practice with all of creation</td>
</tr>
<tr>
<td>Circular in its form</td>
<td>Process driven</td>
<td>Adaptive and responsive to the changing landscape</td>
</tr>
<tr>
<td>Circular in its relationships</td>
<td>Participatory between community members</td>
<td>Language the connection between activity and observation</td>
</tr>
<tr>
<td>A practice; something one does</td>
<td>Intergenerational</td>
<td>Predominantly contained within knowledge stories</td>
</tr>
</tbody>
</table>

What is common about these descriptions is that they frame Indigenous Knowledge as being conceptual. That is, Indigenous Knowledge is talked about from an abstracted and theoretical perspective. Although these descriptions come closer to being able to express the complex nature of this knowledge, than the anatomized descriptions
that western scholars created, listening only for ecological knowledge, these abstracted conceptual descriptions miss something very important. These concepts, which are common amongst a variety of sources and perspectives, are only made animate when they are connected through stories. It is the power of storytelling that enlivens and activates these concepts into a powerful network of interconnected stories, and it is the process of acquiring this knowledge that is lost when we think of Indigenous Knowledge as a concept, because how one comes to know a concept, is a very different type of learning, then how one comes to learn a practice.

Deborah McGregor argues an essential part of Indigenous knowledge is the process of practicing Indigenous knowledge. She notes that it is the process of practicing this knowledge that is the vehicle for its acquisition, and that over time and through generations one comes to know who one is (McGregor, 2004).

**Story no.6: There is always a beginning**

The next part of the story I would like to tell you, is what I have come to know is the most important part of the story I am learning to listen to. What I have come to know, by learning to listen and coming to know the world around me with my heart and my head, is that if you really want to understand Indigenous Knowledge, and understand the process of coming to practice Indigenous Knowledge, you need to start at the beginning, because that, I have learned, is the very best and only place to start.

It is through listening to the Creation stories, the first story, that one is given instructions about how to learn to really listen. And learning to listen in this way requires being on the land, and not just any land, but the land that is literally constructed through these narratives and continuously reflected back to the listener and teller through an incredible network of knowledge stories.
1.3.0 Indigenous Knowledge in practice

1.3.1 Storytelling and Indigenous Knowledge:


Creation stories differ from community to community, nation to nation, and amongst geographical regions (King, 2003, Smith, 2001, Talaga, 2018, Wilson W. A., 2005, Wilson S., 2008), but common amongst these first stories is that the creation story forms the beginning of what becomes a network of Indigenous Knowledge stories told by the community and cared for by the community (King 2003, Talaga 2018, Smith 2001). It is important to remember, that all of the subsequent knowledge stories told and cared for by the community emanate in some way from the first story (Johnston 1976, 2011, 2013).
Deborah McGregor argues that Indigenous Knowledge needs to be understood as a “gift from the Creator” that provides “instructions for appropriate conduct to all of Creation and its beings” (McGregor, 2004, p. 389). She also draws out an essential point about Indigenous Knowledge when she notes Indigenous Knowledge “not only instructs humanity but assigns roles and responsibilities to all of Creation as well” (McGregor, 2004, p. 389). McGregor argues that to know Indigenous knowledge requires that one recognize that “Indigenous understanding of our relationship to Creation did not start with the arrival of newcomers: there were already well-developed philosophies or conceptual frameworks, ethics and values that had flourished for thousands of years” (McGregor, 2004, p. 384). Brian Maracle states that the creation story marks “the defining moment in our history. That was when we were given the sacred responsibilities that shape our lives. That was the moment that shaped how we think and what we believe” (Maracle B., 2005, p. 14).

In section 1.1.0 and 1.2.0 we read the words of non-Indigenous and Indigenous scholars in order to begin to unpack and understand how one might describe or conceptualize Indigenous Knowledge. And by doing so, we found that Indigenous knowledge, when anatomized as TEK, or abstracted into conceptual concepts, still misses the animate nature of this complex knowledge system. That is, section 1.1.0 and 1.2.0 begin to identify that Indigenous knowledge works as a complex system of knowledge that requires the reciprocity of the environment and land, and the deep understanding of the knowledge holder about their responsibilities and relationality to all of creation. In this way, Indigenous Knowledge is more aptly described as a complex system, rather than a static or siloed set of disconnected knowledges, and many Indigenous scholars have

Deborah McGregor asks “if Indigenous knowledge is something one does, rather than simply something one knows, how is it acquired? What is the process of coming to know” (McGregor 2004, pp 391)? Indigenous Knowledge, McGregor argues is not simply a material commodity, or externalized product, but “it is a process,” deeply “rooted in place,” thus for McGregor Indigenous Knowledge “represents and integration of person, place, product and process,” and, further, she begins to articulate that we need to develop methods to understand Indigenous Knowledge as a process-based system of knowledge (McGregor 2004, p. 391). McGregor also stresses that within this knowledge system, “who you are matters,” and, the very best way to understand who you are, is through Creation stories, because the Creation stories teach us to understand where we will stand in the world, and how we will stand in the world, as we literally feel our feet upon that very land, “because the truth about stories is that that’s all we are” (King 2003, p. 153).

In Centering Anishinaabeg Studies, Understanding the World Through Stories, we are given important directions, insights and tools to begin to understand how we might learn from Anishinaabe stories. In particular, this text gives important guidance for how one might approach the reading of, and learning from Anishinaabe stories as a process related to what Doerfler, Sinclair and Stark argue needs to be understood as Anishinaabe studies, in and of itself, and distinct from a pan-Indigenous approach to understanding Indigenous knowledge systems and their stories, ceremonies and songs (Doerfler, Sinclair & Stark, 2013).
*Centering Anishinaabeg Studies*, as a collection of collective thinking by Anishinaabe writers and scholars, “challenges Indigenous Studies to be less pan-Indigenous” and demands that Indigenous Studies “reconfigures academic rigour along Anishinaabeg epistemological lines (Lee, 2013 p.133). As a result, this collection cautions researchers (Indigenous, Anishinaabe and non-Indigenous) to centre not only their approaches to knowing, but the tools (or methods/frameworks) they apply to this process of coming to know, through Anishinaabe conceptions of language, knowledge, and ways of being (Lee, 2013). Thus, this text asks us as scholars to reverse course: rather than using universalized approaches to describing Indigenous knowledge; its qualities; its epistemologies, ontologies and axiology; it asks us to “move toward a nation-specific approach,” that centres nation-specific stories, and understandings of the connection points between stories, their structures, concepts, and *tellings* to the nations that produced the knowledge being listened to and studied (Lee, 2013 p.133; Doerfler, Sinclair & Stark, 2013).

Damien Lee argues that a nation-specific approach to understanding Indigenous stories and knowledge systems is an act of resistance, and that this resistance works in two important ways (Lee, 2013). First, when “Eurocentric observers of Indigenous knowledge centre Indigenous ways of knowing in scholarship, it becomes an act of resistance against distortion and cognitive imperialism” and further, this resistance is deepened when a nation-specific approach to understanding knowledge, and Indigenous stories is applied by scholars (Lee, 2013 p. 134). Second, the centering of nation-specific stories and knowledge in scholarship “resists cognitive hegemony by centering Indigenous peoples’ stories of survivance” because as Lee, argues “stories are resurgent
moments, which reclaim epistemic ground that was erased by colonialism” (Lee, 2013 p. 135).

Further, Lee argues that by making space for Indigenous stories within scholarship, in particular nation-specific scholarship, provides space for, what Lee describes as a “living-out” of decolonization. That is, for Lee, Indigenous stories and their re-telling, are the practice of “living out decolonization,” because nation-specific stories “root us to the material realities of the people whose lives bear the scars of colonialism, and the long histories of resistance and triumphs” (Lee, 2013 p. 135). Further, “this living out produces stories that are told and retold, thereby adding to our identities as peoples who are still here” (Lee, 2013 p. 135).

When we work to understand Indigenous Knowledge systems, then we must turn to the spaces and places within that system where we are given access to coming to know Indigenous nation-specific knowledge. For the purposes of this dissertation then, we must turn our attention to the stories of the Anishinaabe, and in particular, Anishinaabe stories that are related to the land of Walpole Island First Nation, as the learning in this dissertation is based on Elder interviews about the land (Walpole Island) in the Customary Ways dataset. And the entry point in this dissertation to coming to understand and learn about the Anishinaabe knowledge contained in the Customary Ways dataset, is through interviews about the land of Walpole Island.

When Clint Jacobs and I talked through what I was learning about Indigenous knowledge and knowledge systems, throughout the creation of the literature review, he suggested the last pieces of literature I needed to understand, to begin to really grasp what, as Garoutte and Westcott argue, “stories do” (Garoutte & Westcott, 2013, p. 62, 65, 75), were the creation stories that were most likely related to the knowledge the Elders in
the Customary Ways interviews shared. Clint noted that only once I read the creation stories about the rocks; the waters; the plants; the animals and the people, would I begin to understand what stories are capable of doing, as a means of carrying the process-based learning that Indigenous Elders and scholars had described. That is, to understand the “doing” of Indigenous knowledge, I also needed to understand what stories could do, as the means through which knowledge was both created and acquired. Because, stories are active both internally to their own structure and narrative, but also active in what they are able to create with the listener. That is, stories are in conversation, or dialogue with the listener. Stories and listeners require one another to engage in the doing (Garoutte & Westcotte 2013).

Clint was very attuned to my need, as a settler-scholar, to move from a pan-Indigenous understanding of Indigenous knowledge, to an Anishinaabe centred understanding of Anishinaabe knowledge, and the knowledge that he thought I should focus on, based on his understandings of what the Elders had shared in the Customary Ways dataset, was to better understand the structures, content, action and ethics embedded in Anishinaabe creation stories about rocks/water; plants; animals and people. In particular, he urged me to read Basil Johnston’s seminal 1976 collection, *Ojibway Heritage*, because of its importance to the history of Walpole Island, the land and community knowledge he had hoped to preserve with the Customary Ways project. Thus, following the work of Doerfler, Sinclair and Stark (2013), Damien Lee (2013), Basil Johnston (1967; 2011; 2013); Heid Erdrich (2013), this literature review will centre Anishinaabe creation stories, based on Basil Johnston’s seminal 1976 text *Ojibway Heritage*, as a basis for learning about nation-specific stories and knowledge as they relate to the Three Fires Confederacy Peoples of Walpole Island First Nation.
Basil Johnston begins *Ojibway Heritage*, by urging readers to understand that if “Native people are to be understood, it is their beliefs, ideals, values attitudes and codes that must be studied,” and that in “story, fable, myth and legend, that fundamental insights and attitudes toward life and human conduct, character and quality in their diverse forms are embodied and passed on” (Johnston, 1976 p.7). He also cautions, that it is “not enough to listen to, or read to understand the truths contained in stories,” and that “according to elders the truths must be lived out and become part of the being of a person” (Johnston 1976 p.7). Thus, it is imperative to underscore, what we learn together, by reading the creation stories contained in Objiway Heritage, are just an entry point into better understanding what stories can do; what they are able to actualize; and the ways in which they are able to carry knowledge. As a settler-scholar, I am not making claims to uncover new aspects of Indigenous knowledge by reading these stories, and including them in this literature review- instead, my hope is that by including the original stories, in their form as told by an Anishinaabe storyteller (Johnston), that I am demonstrating the importance of incorporating Anishinaabe sources of knowledge within academic dissertations.

Damien Lee argues that the western Academy is “still a hostile environment for Indigenous peoples’ ways of knowing,” and stories are an important part of the Anishinaabe way of coming to know the world (Lee, 2013 p. 134). Basil Johnston argues that “unless scholars and writers know the literature of the peoples they are studying or writing about, they cannot provide their students and readers what they are seeking and deserving of” (Johnston, 2013 p. 5). Johnston goes on to argue that there is enough “literature both oral and written available for scholarly study,” but that unfortunately for
the most part this body of knowledge “has been neglected by scholars” (Johnston, 2013 p.5). He notes that within the western academy, not unlike Lee, and Doerfler, Sinclair and Stark, there is a “lack of understanding and interest in the [Anishinabe] culture,” and that there is a well-documented arrogance of the western academy that Indigenous knowledge, in particular knowledge bound within stories, “has little important to offer the larger white audience” (Johnston 2013, p.6).

Damien Lee argues that, “if how one knows is constantly defined or regulated by Eurocentric or pan-Indigenous approaches- specific nations epistemologies will continue to struggle against Eurocentric epistemological hegemony (Lee 2013, p. 134).

“Anishinaabeg intellectual sovereignty” is what is at stake when we take the time to read and come to know Anishinaabe ways of being through stories (Lee 2013, p.135). And, it is minobimaadiziwin that is learned, when we listen, read and come to know through Anishinaabe stories; that is the power of what stories do: they enliven Anishinaabe worlds and Anishinaabe ways of being (Garroutte & Westcott 2013, p.76). For Lee, Anishinaabe stories have the power to unify communities, because they are the web that are embedded in relationship making- practices. That is, Anishinaabeg stories “institute [relationships], explain them, and or define them” (Doerfler, Sinclair and Stark, 2013 p.59).

Basil Johnston encourages us to “read my literature, and you will get to know something of my thoughts, my convictions and aspirations, feelings sentiments and expectations,” in reading Anishinaabe stories, Johnston encourages that we will come to better understand Anishinaabe sovereignty, because it is by coming to learn from Anishinaabe literature, we begin to understand the ways in which Anishinaabe stories
create an Anishinaabe world; a world that is developed in reciprocity with the plants, animals, rocks and waters, with the storyteller, and the listener (Johnston 2013, p.8).

1.3.3 Learning to answer: Anishinabimadze (how are you living)? The Anishinaabeg Creation Story

Basil Johnston’s telling of the Anishinaabeg creation story begins by describing a time when there was nothing, only darkness. And in this darkness, we learn there was no sun, moon, stars or life. In this endless darkness one being emerged. No one is sure where or how this being came to be, but this being made everything a possibility (Johnston, 1976). We come to learn, through Johnson’s telling of this story, that this Great Spirit is Kitche Manitou\textsuperscript{10}, and that s/he had a magnificent dream, and in this dream s/he saw “a vast sky filled with the stars, sun, moon and earth. S/he saw an earth made of mountains and valleys, islands and lakes and plains and forests. S/he saw trees and flowers, grasses and vegetables. S/he saw walking, flying, swimming, and crawling beings” (Johnston 1976, p.13). We learn that importantly, Kitche Manitou also “witnesses the birth, growth and the end of things (Johnston 1976). “Amidst change, there was constancy,” and through this dynamic process Kitche Manitou heard “songs, wailings and stories;” s/he touched the wind and the rain; and s/he felt “love, and hate, fear and courage, joy and sadness” (Johnston 1976, p.15). Through the wisdom that Kitche Manitou possessed, s/he knew “that this vision had to be fulfilled. Kitche Manitou was to bring into being and existence what s/he had seen, heard and felt” (Johnston 1976, p.18).

Throughout the telling of the story of the beginning, the listener learns that Kitche Manitou “out of nothing made rock, water, fire and wind,” and that into each one s/he

\textsuperscript{10} I am using the spelling of Kitche Manitou because I am using Basil Johnston’s 1976 text as the basis for this close reading. (Johnston 1976).
breathed the breath of life” (Johnston 1976, p.18). From these four elements, Kitche Manitou “created the physical world of the sun, stars, moon and earth” connecting each element with the breath of life (Johnston 1976, p.19). Each of these elements were given their own qualities: the sun was given the ability to make light and heat; the earth was able to both heal and grow; the wind was given sound, in the form of music and the “breath of life itself” (Johnston 1976, p.19).

As Kitche Manitou realised their vision, they created mountains, valleys, lakes, rivers and bays. “Everything was in its place, and everything was beautiful” (Johnson 1976, p.20). Next, they created the plant beings. S/he created 4 types: “flowers, grasses, trees and vegetables,” and “to each s/he gave a spirit of life, growth, healing and beauty” (Johnson 1976, p.21). And through this process of creation, each plant was placed “where it would be the most beneficial and lend to earth the greatest beauty and harmony and order” (Johnston 1976, p.24). Next, Kitche Manitou worked to create the animal beings, “conferring on each special powers and natures. There were two-legged, four legged, winded and swimmers” (Johnson 1976, p.23). Last of all, Kitche Manitou made man. Although man was “last in the order of creation, and least in the order of dependence” (man depended on all of creation, but all of creation did not depend on man), and “weakest in bodily powers,” Kitche Manitou gave man a great gift “the power to dream” and tell stories (Johnson 1976, p.24).

After Kitche Manitou made all of the beings, the rocks and water beings; the plant beings; the animal beings and the human beings, s/he created the “Great Laws of Nature for the well-being and harmony of all things and all creatures” (Johnson 1976, p.25). The Great Laws were created with love in order to govern the place and movement of the sun, moon earth and stars; governing the powers of the wind, water, fire and rock; governing
the continuity of life, birth, growth and decay” (Johnson 1976, p.25). All things Kitche Manitou created “lived and worked by these laws. Kitche Manitou had brought into existence his vision” (Johnson 1976, p.25).

In Johnson’s telling of the first part of the Anishinaabeg Creation story we are introduced to the order of creation: rocks/water; plants; animals; human beings, and the fact that they all come from and are connected by the same living breath. We also learn that Kitche Manitou created a set of Great Laws of Nature, that would ensure the balance and harmony of all the beings he created. At the end of the first part of the story, Kitche Manitou has created a harmonious and balanced world, similar to the balanced harmony of the Sky World from which Sky Woman falls in the Haudenosaunee Creation story. In the second part of the Anishinaabeg Creation story, not unlike the Haudenosaunee Sky woman story, there is a series of misfortunes that causes destruction, chaos and deep learning.

After Kitche Manitou had brought their vision into being, great “disaster fell upon the world. Great clouds formed I the sky and spilled water upon the earth, until the mountain tops were covered” (Johnson 1976, p.26). All that was left of Kitche Manitou’s vision was “one vast sea,” and “only water animals and birds and fishes lived on” (Johnson 1976, p.26). What was once the earth became a “huge unbroken stretch of water whipped into foam and wave by the ferocious winds” and “the world remained a sea for many generations” (Johnson 1976, p.26).

After the destruction of Kitche Manitou’s vision occurs in the second part of the Creation Story, there is the third part of the story: the re-creation story. The narrative form of the Creation story follows Kitche Manitou’s vision, in that s/he foresaw the birth,
growth, end and rebirth of all beings. And in that circle, Kitche Manitou’s vision saw the cyclical thinking that is an essential part of Indigenous ways of knowing the world.

The Anishinaabeg re-creation story is very similar to the Haudenosaunee story of Sky Woman. Just as in the Haudenosaunee Creation Story, in the Anishinaabe Creation Story, Sky Woman lives in the sky world. In the Anishinaabeg Creation story, she lives alone in the sky world and grows lonely “without a companion” and becomes despondent (Johnson 1976, p.27). Kitche Manitou takes compassion on Sky Woman and sends a “spirit to become her consort” (Johnson 1976, p.28). “Sky Woman and her companion were happy together. In time the spirit woman conceived. Before she gave birth, her consort left. Alone she bore two children, one pure spirit and the other a pure physical being” (Johnson 1976, p.28). These new beings “of opposite nature and substances hated one another. In a fiery sky battle, they fought and destroyed one another” (Johnson 1976, p.28). After the destruction of her children, Sky Woman was once again alone. Kitche Manitou, knowing Sky Woman’s loneliness, once again sent her a companion. “Again, Sky Woman conceived. As before her consort left, but Sky Woman was content” (Johnson 1976, p.28).

The water animals, living below the sky world, in the deep and vast sea, “observed what was happening in the Sky World, sensed the weariness of Sky Woman, and pitied her” (Johnson 1976, p.29). Through their compassion, the water animals tried to figure out ways to help Sky Woman. “Eventually they decided to persuade Turtle to rise to the surface of the waters and offer his back as a haven” (Johnson 1976, p.29). When the Turtle emerged, the water animals called for Sky Woman to come down to them (Johnson 1976, p.29). The Sky Woman accepted the offer and jumped through the sky world to toward the back of the gigantic Turtle below.
Just like in the Haudenosaunee Creation Story, Sky Woman asks for the cooperation of the water animals to get some soil from the depths of the ocean. The water animals all agree to help, and a series of animals try to reach the depths of the ocean to bring back a precious handful of soil (Johnson 1976, p.28). Beaver tries first, but he fails. Next Fisher tries, but also fails. Next was Marten, then Loon, but each water bird is unable to reach the bottom of the vast ocean.

Lastly, the smallest and least powerful of the water animals tries. Muskrat says he will try to reach the bottom of the ocean. “At his announcement, the other creatures laughed in scorn, because they doubted this little creature’s strength and endurance. Had they, who were strong and able, been unable to grasp soil from the bottom of the sea? How could he, a muskrat, the most-humble among them, succeed when they could not” (Johnson 1976, p.29)?

It is muskrat who is successful. After being gone for a very long time, the muskrat’s small body floats to the surface of the waters “more dead than alive, but he clutched in his paws a small morsel of soil” (Johnson 1976, p.28). We learn, as listeners, just as in the Haudenosaunee Creation story, that where “the great had failed, the small succeeded,” and from this lesson the listener begins to understand that creation is a cooperative process that requires the participation of all parts of creation.

McGregor describes that for her, through all of the “many tellings” of the Anishinaabeg Creation story, the most compelling part is the lesson that “all of Creation is important; all must be respected,” and that if we “lost or disrespected even the tiniest and most seemingly insignificant being, we would not be here” (McGregor 2004, p.388). She asks: “If the muskrat had failed, where would we the Anishinaabe be” (McGregor 2004, p.388)?
As muskrat is tended to by the other water animals and brought back to health, Sky Woman “painted the rim of the Turtle’s back with the small amount of soil that had been brought to her. She breathed upon it and into it the breath of life. Immediately the soil grew, covered the Turtle’s back, and formed an island” (Johnson 1976, p.30). The Island was called Mishee Mackinakong and is now called Michilimackinac (Johnson 1976). For his service the Turtle was given a special gift: Turtle became the “messenger of thought and feeling that flows and flashes between beings of different natures and orders. He became the symbol of thought given and received” (Johnson 1976, p.30). In Turtle we understand that all beings have spirit, and that all beings can communicate with one another within Creation, which is a central feature of the description of Indigenous Knowledge that Geniusz describes in her tellings of Anishinaabe knowledge stories.

As the Turtle’s back grew, the animals worked together the gather the plants that had drowned in the great flood and planted them firmly on Turtle’s back. Sky Woman worked with the animals by breathing her life-giving breath into each plant they brought her, so that they would “live once more,” and in the same way she revived the animals that had drowned, eventually “everything was restored on the that island home” (Johnson 1976, p.31).

Sky Woman then fulfilled her promise to Kitche Manitou, the Great Spirit and birthed life. She gave birth to two children, one boy and one girl (Johnson 1976, 31). These children were opposite in nature, but unlike her first children, were not intent on destroying one another. For Sky Woman’s children, “neither was complete or fulfilled without the other. Only together did they possess meaning; only together could they fulfill their purpose” (Johnson 1976, p.31).
Each child had a soul-spirit and that spirit or “cheejauk” was made of six essential qualities: “character, personality, soul, spirit, heart or feeling, and a life principle,” this “cheejauk” had the capacity to “dream and receive vision. Through dream and vision mad would find guidance in attaining fulfillment of self (Johnson 1976, p33). The “new men and women were called Anishinaabeg, and the “cycle was complete: creation, destruction, recreation” (Johnson 1976, p.33).

In the first year, the animal beings cooperated to help the nurture and nourish the Sky Woman’s children. “For all of their needs, the Sky Woman and her children depended upon the care and good will of the animals” (Johnson 1976, p.33). The listener learns, that the Anishinaabeg would enter into a long journey to learn to listen to the land; to learn about their relationship to all aspects of the land that their mother and the water beings had created. During the first winter the Anishinaabeg babies grew sick and lost their strength. “It seemed as though they might not survive the winter,” the Sky Woman was inconsolable, and the animals were alarmed that these babies they had come to love so much might die. “The Bear, fearing the death of the infants, offered himself that they might live” (Johnson 1976, p.34).

The babies thrived on the Bear’s sweet flesh, and “thereafter, the other animals scarified their lives for the good of men,” and as the babies grew into adults, “they bore a special love for the Bear and honoured him in their ceremonies” (Johnson 1976, p.34). Once Sky Woman was sure of her children’s survival, she told them she was going to return to her proper place, the Sky world or the “land of peace” (Johnson 1976, p.34). She instructed her children to live their lives ensuring they had lived in a good way, by honouring the great laws, they “too would leave their bodies” and go to “the land of peace and soul-spirits and live there in another way” (Johnson 1976, p.35).
In Johnson’s telling of the Creation story, after Sky Woman returns to the land of peace, the Anishinaabeg prosper, and grow in numbers and for many years the Anishinaabeg and all of the beings worked readily and happily together (Johnson 1976, p.35). But this balance would not be maintained, and this happy state would not last.

In Johnson’s telling, a series of fatal events befall the Anishinaabeg, and in order for the Anishinaabeg to learn about their relationship to creation: to the water and rocks; the plants; the animals and to one another, Kitche Manitou sends the spirit Nanabush to “teach the Anishinaabe” (Johnson 1976, p.35).

1.3.4 Mno Nimkodadding Geegi: we are all connected, and so are the stories

What follows in Johnson’s complex and interconnected text, *Ojibway Heritage*, is a series of interconnected knowledge stories that teach the Anishinaabe about their relationship with all of creation; about how to maintain balance; and about the responsibilities and reciprocity in the Anishinaabeg’s relationship with the rocks, plants and animals.

i) *Nibi/Asin (rocks/water):*

For instance, in the stories about the Father Sun and Mother Earth, Nanabush learns from his father, Epingishmook, that “the Anishinaabeg are to remember as they smoke their special relationship to and dependence on the sun, the earth, moon and stars. Like animal beings they ultimately depend upon the earth and the sun” (Johnson 1976, p.28). Nanabush also learns that “there are four orders in creation. First is the physical world; second the plant world; third the animal world; and last the human world” (Johnson 1976, p.28). Epingishmook stresses that the Anishinaabeg must understand that “all four parts are so intertwined that they make up life and one whole existence” (Johnson 1976, p.28).
Importantly, from this story, the Anishinaabeg learn that human beings are “constrained to by this law to live by and learn from the animals and the plants, as the animals are dependent upon the plants which draw their sustenance and existence from the earth and the sun. All of them depend ultimately on the physical world. The place, sphere and existence of each order is predetermined by great physical laws for harmony” (Johnson 1976, p.28).

And then, Epingishmook explains a very important part of the Anishinaabeg relationship with the land: human beings “must seek guidance outside of [themselves]. Before [they] can abide by the [great laws of harmony that Epingishmook has just explained to Nanabush], [Anishinaabeg] must understand the framework of the ordinances. In this way [the Anishinaabeg] will honor the order as was intended by Kitche Manitou (Johnson 1976, p.28).

And what happens next, builds the network of knowledge stories of the Anishinaabeg. Through a series of interconnected stories, Nanabush helps the Anishinaabeg learn the ordinances. For instance, in the first series of knowledge stories, the Anishinaabeg learn about the importance of the sun and the moon, by observing the dusk and dawn, and through the annual regeneration and dissolution of life. By learning to observe and listen to the land, and they rhythms of the sun and the moon, the Anishinaabeg learn the importance and their reliance on these cycles to maintaining the balance of creation.

Fatherhood is learned to be in the quality of the sun, just as motherhood is learned to be the quality of the earth, and that “both the sun and the earth were mutually necessary and interdependent in the generation of life (Johnson 1976, p.29). There are also interconnected stories about Grandmother moon; Grandfather Thunder, the Northern
Lights, or Waussnodae, and the four directions (Johnson 1976, p.29). What is common amongst these stories is that they describe the process of coming to know the land; to recognizing that the Anishinaabeg are deeply related to all aspects of the land: to its cycles, to its birth and rebirth. These stories teach, that for the Anishinaabeg to truly know who they are; who they belong to; where they are from, they must know and respect the first order of creation, physical earth, and their relationship to, and place within, creation.

Johnston has argued that “learning comes not only from books but from the earth and our surroundings as well. Indeed, learning from the mountains, valleys, forests and meadows anteceded book knowledge…The earth is a book; alive with events that occur over and over for our benefit. Mother Earth has formed our beliefs, attitudes, insights outlooks values and institutions (Johnston, 2003, p.vii).

ii) Gitigaaden (plants):

In a second series of stories, the Anishinaabeg learn about the second order of creation and the importance of plants in their lives. Kitche Manitou, in creating the four orders, first created the sun and moon, earth and stars. Next, they created the plants. “Plants were therefore prior to animals and to the Anishinaabeg” (Johnson 1976, p.32). An important aspect of understanding the plants and the earth, was to appreciate that “they could exist alone; they were not dependent upon other beings for their existence or well-being” (Johnson 1976, p.33). The plants relied only on the earth, the waters and rocks, and soil. The moon and the sun and the stars.

Kitche Manitou imbued each plant species with its own soul-spirit, and this soul-spirit was a unique and “vitalizing substance that gave to its physical form, growth and self-healing” (Johnson 1976, p.33). The combined spirits of the plants gave to “each valley or any other earth form- a meadow a bay, a grove, a hill- a mood which reflects the
state of being of that place” (Johnson 1976, p.34). Johnson encourages us to think about the proof of the mood that exists in a particular place when he says that if “one destroys or alters or removes a portion of the plant beings, the mood and tone of what that valley will not be what it was before” (Johnston 1976, p.34).

There are many knowledge stories about plant beings. Some tell the story of plants as food, for instance the story of Medamin (corn), others tell the story of plants as medicines and the deep observation of the land that occurred in order to come to know the medicines. For instance, Johnson tells a story of a little girl and her grandmother, on the land, in the bush. They come upon a little frog being chased by a snake. The grandmother asks her granddaughter to watch, to observe what is about to happen. The little frog jumped into a patch of poison ivy. The snake did not enter the poison ivy but instead stayed near its edge waiting to strike if the frog left the shelter of the poison ivy. Eventually, the snake gave up and slithered away, and the frog, once it felt safe jumped into a “grove of jewel weed” (Johnson 1976, p.35). Once there, in and amongst the jewel weed, the little girl watched the frog “twist and turn and writhe, washing every part of himself” (Johnson 1976, p.35). It was through careful observation of the conduct of the frog that the “Anishinaabeg learned the cure for poison ivy,” and were once again reminded of the interconnection between all parts of Creation.

One of the most important stories that teaches the Anishinaabeg about their relationship to plants is the story about the Year the Roses Died. In both Basil Johnston and Wendy Makoons Geniusz’s telling of the story, the listener learns that Gichi-mewinzha gii-o shki-niiging akiing (a very long time ago), “when the earth was new, there was a horrible year that was remembered as the year the roses died” (Geniusz 2015, p.13). We learn that in that time many animals depended on the roses to survive for their food.
In the spring, no roses bloomed. Soon the animals became worried and realized that the roses were gone. There was great outcry and “a call for a council meeting to determine what had happened and, most important “who did it” (Geniusz 2015, p.13).

First the waawaashkeshiwag (deer) spoke. They implicated the bineshiinyag (birds) as the Waawaashkeshiwag said they saw the bineshiinyag eating too many seeds. The bineshiinyag declared that they had eaten some seeds, but not all of them, and that the culprits must be the aamoog (bees) because they ate all of the flower’s pollen! The aamoog admitted to taking pollen, but not all of the pollen, and said it must be the memengwaag (butterflies) who were responsible because they had laid their eggs, and the hatchling caterpillars ate all of the roses. The memengwaag said, it was true that they made a nursery for their children within the rose’s petals and leaves, but that their children only ate just enough, and not too much. The memengwaag accused the waawaashkeshiwag, saying they had stripped the roses bare eating too many stems. The waawaashkeshiwag admitted to eating some stems, but not too many, and said it was the waabooz (rabbit) who had dug up and ate the roots of the beautiful rose and ate too many (Geniusz 2015).

The animals were all furious with waabooz, and grabbed him and broke his tail, which is why waabooz “have such tiny tails” (Geniusz 2015, p.13). Many other animals pulled and tugged at waabooz, which is why to this day “his ears are so long, and his legs are so stretched out” (Geniusz 2015, p.13).

After all of the commotion, Makwa (bear) rose up and said “All right! Drop the Waabooz! I don’t like him much either, but Creator must have had some purpose for him, or Creator wouldn’t have bothered creating him” (Geniusz 2015, p.14). The Great Spirit (Manidoo in Geniusz’s telling and Nanbush in Johnston’s telling) arrived and asked the
animals what had happened. They all told Nanabush that waabooz had destroyed the roses.

“Then Nanbush said: “Killing the Waabooz will not bring back the roses. You all noticed that the roses were in trouble, and you all decided to take your own shares even if it meant killing the roses forever. There is no honour in this. This is not keeping creation in balance as you were told to do in the beginning of time. The animals all hung their heads in shame, because they knew this to be true” (Geniusz 2015, p.14).

Nanbush then said, “I will bring back the roses, but this time I am going to give them protection, so you won’t be tempted to eat them up entirely again. And I am going to leave Waabooz as he is so you will all be reminded of the disgrace of forgetting the balance” (Geniusz 2015, p.14).

From this story, the Anishinaabeg learn the essential nature of plants within creation; that “you can take the life of plants, but you cannot give them life” (Johnson 1976, p.38), and from this understanding the Anishinaabeg are reminded of their intimate relationship to the plant beings and their responsibility to live the great laws of Kitche Manitou, because when practiced, these laws allow all of Creation to stay in balance. And, that even the animal beings can create imbalance if they are not mindful of their relationship to Creation, because as we hear in this story, all of the animals were sure they had “taken just enough, and not too much” (Geniusz 2015, p.14). What we learn then, is that maintaining balance is a cooperative practice that requires that all beings in Creation work together, understanding that they are all interconnected, and that if they all take what they think is “just enough, and not too much” imbalance will ensue. Thus, the Anishnaabeg learn that it is through cooperation, all beings must listen to one another,
observing the cycles of Creation in order to understand how to work together to maintain balance, and their relational accountability to one another within creation.

iii)  **Awesiinh (animals):**

The third relationship the Anishinaabeg must respect is their relationship to the animal beings, and the knowledge stories about the animal beings teach important lessons about the maintenance of this relationship and the responsibilities that allow the relationship between the Anishinaabeg and the animal beings to be in balance.

One story about the Anishinaabeg’s relationship to animals teaches that there was a time when the Anishinaabeg did not treat the animal beings very well. Through a series of events captured in the narrative of the story, we learn that Makwa (bear) rises up and declares that “to make it difficult for man to enslave us again, no longer will we speak the same language. Instead, we shall speak in different languages. From now on, we shall lie to ourselves, for ourselves. Let men learn to fend for themselves without our help” (Johnson 1976, p.43). Johnson notes that human beings were reliant on animals for their food; clothing and tools. Human beings were also “dependent on animals for knowledge of the world life and themselves,” and that it was only through very careful observation and listening to the animal beings, that human beings would recognize their place within Creation (Johnson 1976, p.44). Because animals possess “unique capacity to sense the changes of the world the alteration of the seasons, the coming state of things,” and human beings do not possess this same “pre-knowledge possessed by bluebird, or trout, or squirrel” (Johnson 1976, p.45). Thus, for human beings to understand their relationship not only to the animal beings, but to the rest of Creation, human beings must learn to listen, by looking to their “elder brothers (the animal beings in the order of Creation)” (Johnson 1976, p.45).
Another knowledge story about the Anishinaabeg’s relationship to the animals is told by Johnson and describes that “animals were more than flesh for food, more than the reflections of coming changes, and more than images of character. They were living beings entitled to life and existence” (Johnson 1976, p.46). But this entitlement to life posed a paradox: for human beings to live, animals had to die (Johnson 1976, p.46). To acknowledge their dependence and great respect for the animal beings, the Anishinaabeg “included them in almost all of their stories” (Johnson 1976, p.47). The Anishinaabeg recognized that their relationship to animals was almost total dependence, and as a result, the Anishinaabeg told many stories that would describe the total disappearance of animal beings, where the story would ask the listener to “conceive of the consequences that would follow” from the loss of the animal beings (Johnson 1976, p.47). From these stories, the relationship and dependence the Anishinaabeg had with animals was reinforced, and through these stories the Anishinaabeg learned the “many customs, practices and ceremonies that were connected to the taking of game” (Johnson 1976, p.51).

For instance, Johnson invites the listener to reflect on a Prayer to a Deer Slain by a Hunter:

*I had need,*
*I have disposed you of beauty, grace and life.*
*I have surrendered our spirit from its worldly frame.*
*No more will you run in freedom*
*Because of my need.*
*I had need.*
*You have in life served your kindness in goodness.*
*By your life, I will serve my brothers.*
*Without you I hunger and grow weak.*
*Without you I am helpless, nothing.*
*I had need.*
*Give me your flesh for strength.*
*Give me your casement for protection.*
Give me your bones for my labours,  
And I shall not want.

Through the invocation of this song, it is clear that the Anishinaabeg understand their relationship to the deer; that they rely entirely on the deer to be strong and flourish. The deer give their life and in return the Anishinaabeg will honour this gift by using all parts of the deer, and importantly, they will honour one another, by mirroring the service of the deer’s life, in how the Anishinaabeg will serve one another.

Many other teachings about how to maintain balance in the land, in all of Creation are found within the network of knowledge stories shared by the Anishinaabeg. For instance, Johnson notes that “female animals with young were spared. Only males were to be taken. Young were allowed to grow. A pair of animal beings were to be allowed to live to insure continuation of life. The bones of game were to be used, not wasted, and the bones of fish were not to be cast in the water” (Johnson 1976, p.52). It was through understanding their deep connection and relationship to the animal beings that the Anishinaabeg were able to “honour the life, death and knowledge of their elder brothers (animal beings)” (Johnson 1976, p.52). Because, as Johnston points out: “From infancy, children were taught that the sudden calls or unexpected shadows of animals, or birds meant no harm, that these calls were talk in the animals’ and birds’ own language and that all creatures had their own purpose and affairs to conduct (Johnston, 1995, p. 116).

iv) Anishinaabe (the people):

By listening to the Creation stories, we learn where and how one will stand. We learn the answer to what Chief Justice Murray Sinclair has said are the most important questions for Indigenous Peoples to know: “Where do I come from? Where am I going? Why am I here? Who am I?” (Talaga 2018, p.220). Leanne Simpson notes that through the process
of living Indigenous knowledge one literally embodies knowledge stories, and it is through this process that Indigenous peoples will “come to understand the Earth as their mother. Through these teachings they will then come to understand the Earth as themselves” (Simpson 2011, p.36).

**Story no. 7: Stories hold the motion of life**

What we learn when we listen to the Creation stories is that Indigenous knowledge, and in particular, Anishinaabe knowledge, is animate because it is held within stories and that these stories do not occur in isolation but are highly interconnected. They are so interconnected that they actually form a network of stories that all rely upon one another for form and sense and purpose. And this beautiful network that emerges mirrors in form the complexity found in the land that the stories describe. Most importantly, as we have learned from this story so far, elders, artists and storytellers have been telling these stories the whole time and have known that, as Kimberly Blaser has noted, “we become the stories we tell” (Lee 2013, p. 134).

It is through listening and telling the Creation stories, through practicing deep observation of the land, and telling about it, that one comes to understand that the part of the practice of Anishinaabe knowledge is not a coming to know an externalized knowledge, but instead, one learns that the process of coming to know the land and the world around them allows one to come to know one’s self; one’s place in the world; where one belongs; and maybe most importantly, to whom one belongs.
2.0 CHAPTER 2: METHODOLOGY

How does a white, settler woman, begin to understand her role(s) and responsibilities within a research project that is about Indigenous knowledge? What role(s) and responsibilities can a white, settler woman hold within a research project about Indigenous knowledge? How might she begin to understand these role(s) and responsibilities? How does she begin to understand her privilege; her understanding of knowledge; her relationship to colonialism; her relationship to the academy and the Eurocentric knowledges she was trained to listen for, and recognize?

To begin to answer these questions, I recognize that I need to demonstrate to my research partners, and readers of this dissertation, that I understand the structural, theoretical and political ways in which colonialism has shaped me as a researcher, and the ways in which I think about research. As well, I need to demonstrate that I am aware of the ways in which processes of colonialism have afforded me exceptional privileges within Canadian society and the academy as a graduate student, and as an administrator within a colonial university.

I also recognize that I will need to develop a methodology and a series of methods to begin a process of decolonizing myself, both as a researcher and the processes through which I understand research; my roles and responsibilities in research, and in particular within the bounds of this research project which is a community-based research project about the ways in which Walpole Island Elders describe their relationship to the land, and their customary, or traditional, knowledge, within the Customary Ways dataset.
2.1.0 Colonialism and the Canadian Academy

Within the context of Canada, it is imperative to frame conversations about Indigenous research and Indigenous – non-Indigenous research relationships through a framework of understanding the ongoing and continued impacts of the colonial project that has created and continues to support the idea (tangibly as a political and social system) of Canada. That is, as researchers within the Canadian context, we cannot engage in discussions about Indigenous research without bearing witness to ways in which colonialism has shaped both Indigenous and non-Indigenous researchers (Biermann, 2011, Datta 2015).

Biermann argues that an important and imperative step in the process of bearing witness to colonialism, as a non-Indigenous researcher, is the process of coming to realize that “colonial systems of oppression diminish everyone’s humanity,” because socio-political systems that allow for the tangible and violent inequities that colonialism produces- requires what Biermann describes as a necessary “resistance by those who are systematically privileged” by their whiteness within the colonial system (Biermann, 2011 p.387). What Biermann draws our attention to, as non-Indigenous researchers, is an acute understanding that our positionality as settlers (and white settlers where this positionality applies) affords us with the privilege of living within a system that we at once may not recognize that we are part of, and also, are the direct beneficiaries of. Secondly, Biermann draws our attention to the fact that as settlers, and in particular white settlers, we must begin to grapple with, and recognize we are as much products of colonialism as are the Indigenous peoples that colonialism was designed to oppress (Biermann, 2011 p.387). We are products of colonialism, and our production is made tangible through the deep privilege and power the system has afforded us at the direct expense of exerting power

Biermann encourages white settler researchers to begin a process of contesting the colonial structures they have been created through, and privileged by, through a process of deep recognition of “the injustices of colonial oppression and, as a fellow human being, doing all within one’s power to dismantle unequal and unjust structures that produce privilege and disadvantage” (Biermann, 2011 p. 387.)

I must recognize and then learn to contest the colonial practices and structures that have produced me, as a product of their teachings and training, allowing myself to become aware of the “ways in which the academy has historically [and currently] been implicated in the process of colonization” (Biermann, 2011 p.388).

One of the first places we need to become cognizant of the ways in which the colonial project has been enacted within the academy is to understand that the very act of academic knowledge production and categorization is purposefully entangled with the “maintenance of unequal power relations” with peoples whose knowledge has been deemed to be illegitimate and not allowed to be considered as part of this academic power-privilege production of knowledge (Biermann 2011 p.388, Datta 2015, 2017, Tuck & Yang 2012, 2104; Battiste 2001, Smith 2001).

Brunette-Debassige & Debassige (2018) have described that colonial whiteness is “normalized in universities,” and that often this colonial whiteness operates “in invisible and taken for granted ways, through structures, policies, relationships, ideologies, discursive practices, biases and assumptions” that together work to uphold the colonial practices and structure of the academy (p.121). When we describe colonialism, we must be cognizant of the fact that it is not only a structural relationship that places a discursive
emphasis on “hierarchical and cultural dissimilarity between the colonizer and the colonized,” with a distinct and sustained “antipathy toward intellectual exchange and counter-acculturation;” but, that colonialism is not only a structural relationship “but also a particular interpretation of this relationship” that allows the colonizer to exist from a view from nowhere within the system they built, participate in, and benefit from (Biermann 2011 p.388, Datta 2017, Tuck & Yang 2018, Said 1994).

Biermann notes that this colonial whiteness is a “Eurocentric view” that gains its discursive power by being “suspended and sheltered from the realities of the colonial encounter” (Biermann 2011, p.388). That is, the power and the privilege of the discursive subjectivity of colonial whiteness is the very fact it is not identified as a position at all, by those that hold this discursive subjectivity. In fact, the power of the colonial project is its ability to allow privilege and power to be at once held, and disavowed as being such, by the privileged colonial agents within the colonial system.

The Canadian university, as an idea and an entity, is “deeply implicated in the continuation of deep epistemic and ontological assumptions about knowledge, production, and education, based on Eurocentric imperatives and goals, including notions of rationality, objectivity and empiricism” and as a result, are incredibly resistance and in many cases incapable, of practicing epistemological pluralism (Brunette-Debassige & Debassige, 2018 p.122; Biermann 2011). There is a sustained and pronounced “unwillingness of colonizers to engage with Indigenous intellectual and philosophic traditions in a process of” what might be described as counter-acculturation (Biermann 2011). Marie Battiste has noted in her work that the Canadian academy has been governed by “an imaginative and institutional context” that has centred “Eurocentrism [as] the dominant [and singular] dominant consciousness and order of contemporary”
academic life (Battiste 2001, p.67). The result is the othering and positioning Indigenous
knowledge outside the academy and “outside of the scope of” what is considered to be
academic knowledge (Biermann 2011, p. 392).

Another important aspect of the colonial practices of the Canadian academy that
one must bear witness to, and acknowledge as being a historical and contemporary
reality, is the fact that Canadian universities are built on Indigenous lands, and in many
cases built on lands that are part of treaties. And, there is an almost complete disavowal
by universities to recognize and reckon with the fact that their very existence is a
significant and sustained structure that supports the ongoing colonialism of Indigenous
peoples in Canada (Brunette-Debassige & Debassige, 2018).

Linda Smith (1999, 2012) and many other scholars, have identified the irony that
“Indigenous peoples have been written about” and researched in such high numbers, that
they have become a pre-occupation of the academy, so much so that research about and
on Indigenous peoples fills university libraries, journals and research programs, and
curriculum (Brunette-Debassige & Debassige 2018, p. 122). Yet, there is little to no
recognition by universities that their very existence has contributed to continued
colonialism that seeks to oppress Indigenous peoples, their knowledge and their
sovereignty over who has access to this knowledge, its definitions and its description
within these libraries, journal articles, books, research projects and curriculum (Battiste

Engaging then, in working toward creating an academic system that honours and
values Indigenous intellectual sovereignty must be at the core of our processes of
decolonization. That is, we must, as settler researchers begin to contest the spaces we
have been taught, trained and work to allow for the intellectual sovereignty Indigenous

colleagues and students, and communities have been demanding of us, and our current academic system (Tuck & Yank 2012, 2014, Datta 2015, 2017). It would seem then, that a first step in a process of decolonization of the academy requires that the academy recognizes that intellectual sovereignty in modern settler states is at the core of our current power relationships in universities.

White settler scholars like myself, must work to reject the inherent and necessary hierarchies that have created my privilege and power within the academy, and we must “reject the hierarchical colonial epistemological paradigm” in order to meaningfully begin the process of “integrat[ing] the multiple ways of knowing” that form Indigenous knowledge systems (Biermann 2011, Battiste 2001, Datta 2017, Kovach 2009, Tuck & Yank 2012, 2014).

We must attend to, and recognize the very basis for how the academy has arbitrated what counts as knowledge and what has not counted as knowledge must be interrogated, because we cannot aim to simply have Indigenous knowledge be in addition to, or integrated within a European canon of knowledge. Instead, we must first recognize that Indigenous knowledge systems are process-based knowledge, and this type of knowledge requires its own space, place and accounts within the academy (Battiste 2001, Datta 2015, 2017, Biermann 2011).

Having a “different understanding of the process of knowledge generation, legitimization, and dissemination rather than just additional perspectives that can be easily slotted into existing paradigms” is the major challenge that faces the Canadian academy, with respect to our institutional practices and curriculum design (Biermann, 2011, Tuck & Yang 2012, 2014, Battiste, 2001).
So then, how do settler researchers begin to confront this ongoing practice of colonialism that has produced, trained and sustained our practice as researchers? First, we need to recognize that we need to engage in and design ongoing processes and practices of decolonization. To begin this process, we must identify the colonial structures and systems that we have been produced within and participate within. Then, we need to take this theory and apply it in practice. We need to commit to designing decolonial practices in relationship with Indigenous colleagues, students and community partners. Our approaches to decolonization need to be shaped by those voices who have also been shaped by colonization, but have not been afforded privilege, power or sovereignty through that process.

As a means of confronting the privilege and power of being a white settler scholars, we need to place ourselves in the space of a becoming constant and intentional learners (Datta 2015, 2017). We need to learn about ourselves, and our positionality, but also, we need to learn about the ways in which our privilege and power have the capacity to shape the research relationships we have with our Indigenous partners, we need to approach the research enterprise as learners, and not, discovers of knowledge.

That is, within the context of settler scholar research, I would argue that settler scholars must understand they hold the role of learner about Indigenous knowledge systems, and those parts of the system that Indigenous partners grant us access to. This knowledge is not ours to discover, rather, this is knowledge we have a responsibility to learn from. We may, during the process of learning, discover something about ourselves, and our research training, and western knowledge systems, but we must understand, that as settler scholars we must commit to moving away from research with Indigenous
peoples that is about discovery, in particular when we are engaged in research that is about Indigenous knowledge.

Deborah McGregor gives us hints about how we might be able to be supportive and, in some cases, important research partners when engaged in projects that undertake the delicate work of engaging with, and learning from, Indigenous knowledge. She encourages settler scholars to take on the role of “resource people” (McGregor, 2010 p.119). As resource people we can support and supplement the research questions that are determined by our Indigenous partners, but we should not, and cannot, take on a role beyond the bounds of what is determined by our Indigenous partners. I would extend this role of supporter to include that we uphold and understand, that as settler scholars we are not discoverers within the contexts of Indigenous research; we may support the recovery of Indigenous knowledge, by supporting projects with methods and techniques that we have capacity and training in, and that are in alignment with the goals and processes of our research partners, but we must not confuse this role of support, with the goal of research discovery. Challenging the colonial goal of discovery as the objective of academic research is an important pursuit in processes of decolonization.

We must ensure that we decolonize our research methods through a process of coming to learn from Indigenous knowledge and Indigenous ways of being, and recognize the limitations of western research methods and approaches for understanding process-based knowledge (Biermann 2011, Denzen 2008, Datta 2015, 2017). That is, we must recognize that process-based knowledge will require methods of inquiry that recognize the participatory and action-oriented ways in which process-based knowledge is engaged with; conceived of; valued; captured; and utilized. There may be spaces and places that Western methods are very helpful at identifying distinct characteristics of
process-based knowledge and the Environmental Humanities is space and place within
the western academy where this work is currently exemplified.

Unfortunately, for researchers of the Environmental Humanities, who take
seriously the proposition that knowledge can be embodied, and attuned to our bodily
perceptions and engagements with our environments, and that the study of this
attunement results in subjectivities that are deeply connected, cognizant of and related to
the environment, their methods have been slow to be accepted by the broader academy
be because of their reliance on methods and approaches to research that are considered to
be outside of what is recognizable to the dominant colonial discourses that arbitrate the
methods, methodologies and knowledge production of the social sciences and humanities.

We must also confront and unsettle colonial concepts of neutrality (which is not
neutral at all to those peoples and bodies for whom neutrality has been weaponized
against) as well as interrogating our understandings about rigour. Damien Lee encourages
us to understand that within Indigenous research approaches, rigour is collaborative.

That is, rigour is based “on doing work that intentionally seeks to establish and
maintain good relationships with peoples and the ecology” (Lee 2013, p.137). For Lee,
then, scholarship can be considered rigourous when it supports the building and
continuation of relationships to all parts of creation. For Lee, the acknowledgement,
practice and sustenance of our relationships with all parts of creation is an imperative of
research rigour, which requires settler scholars to understand that within an Indigenous
research framework “academic rigour- is not rigorous- it if comes at the expense of our
relationships, including our relationships with the ecology” (Lee 2013, p138).
Another critical aspect of research and researcher decolonization is centering the research questions and research process to be useful, respectful, relevant and reciprocal with the community. If settler scholars are invited to participate in research projects that are about Indigenous knowledge then, their approach to being “resource people” needs to be guided by research questions that are defined by the community.

We must also ask ourselves critical questions about capacity building and how our engagement in the research process can impact, support and be additive to the capacity built within the community with whom we are working and supporting. Some of the ways “resource people” can build capacity is by committing to engaging in collective and consensus-based data collection, analysis, and presentation. By unsettling the privilege of the role of the researcher, and settling the researcher into a role of a resource person, creates a learning dynamic where the research agenda, data collection analysis and presentation are guided by the knowledge and goals of the Indigenous community (or partner). In doing so we begin to recognize, as Datta (2017) suggests, that research is action; action that requires the “careful, responsible respectful and diligent implementation of” decolonizing practices to our research processes (Datta 2017, p. 3).

Further, we must recognize that as agents of a colonial system, the development and design of a practice of decolonization (of both ourselves as settler researchers and our research) is an imperative when engaging in Indigenous research. Battiste (2001), Kovach (2010), (Smith 2001), Wilson (2008), McGregor (2010), McGregor, Restoule and Johnston (2018), all agree: “research without decolonization” is an act of oppression toward Indigenous peoples. Because it is only through the commitment to engaging in a decolonization practice, that settler scholars confront the fact we must continually engage in a “process of becoming, unlearning, and relearning who we are as researchers” within
the colonial systems we operate, and most importantly, in relationship to our Indigenous research partners and the knowledge we commit to learning from (Datta 2017, p.2).

2.2.0 Applying Theory to the practice: the process of becoming a constant learner. My practice of decolonization as a researcher.

I have structured the methodology that Clint and I developed to unsettle and decolonize myself as a settler-scholar, based on the theory discussed in section 2.1.0. Clint and I have worked together to create a decolonizing methodology that aims to provide a framework through which we have taken the theory discussed in section 2.1.0 and put it into practice in section 2.2.0.

At the core of this decolonizing methodology is that I have taken up the positionality in our research relationship as being a) a resource person (McGregor 2010), b) a constant, reflective and intentional learner. To achieve a) and b), we have used the structure of the Anishinaabe story of the Four Hills as the framework through which I would become a learner, and in particular, a reflective learner.

The story of the Four Hills is a learning story. That is, as it was taught to me, I have come to understand that what we can learn from the story of the Four Hills is an awareness that learning is a process that occurs over time; that it is not linear; that it requires reflection on the part of the learner to understand where they are in their learning process; and this framework requires one to learn across scales and time.

Clint and I decided I would endeavour to learn from, and then implement the structure of the Story of the Four Hills as the basis for my decolonial learning process. We made this decision because a) this centred concepts of learning as being deeply connected to Anishinaabe concepts of both learning and processes of learning; b) this was
a framework that I could utilize as a means of capturing my learning over time, which we knew was an incredibly important part of building a decolonizing practice.

I could not simply read and understand colonial and decolonial theory. I needed to be able to apply what I had come to understand about this theory in my research practice, and in my understanding of myself. And c) if a goal of this decolonial practice was to come to learn and listen in a new way, through an Anishinaabe framework of learning and listening, I needed an Anishinaabe story to guide this practice. Because as this literature review describes, stories have the capacity to do many things. And one of the important doing capacities they hold is their ability to teach, through action-oriented or process-based knowledge.

Below, I will tell you the story of how I was confronted with a deep need to learn to listen differently, and in doing so, how I engaged in a process of coming to learn, unlearn, and relearn who I was in relationship to the Customary Ways dataset; to the Elders who shared this knowledge; to Clint as my research partner; to the academy and its colonial practices, to myself as a settler scholar; and to the ecology that I am connected to.

In my first hill, Clint and I decided that I needed to learn to listen to the practices and customs of Walpole Island Elders, related to how one tells the story of who they are, as a means of establishing trust and authenticity in relationships. I needed to learn to tell the story of who I am, where I come from, and how I understand my positionality as a settler scholar within this research project.

In my second hill, I needed to learn to listen and hear through an entirely new framework, an Anishinaabe framework, so that I could, once I had demonstrated I was ready, engage in the data analysis, and work of learning how the Elders of Walpole Island
described their relationship to the land, through the Customary Ways dataset. To do so, I would also need to listen to the Anishinaabe creation stories that are connected to Walpole Island, as a means of understanding, what Garoutte & Westcott describe as the “doing” of stories, and what Heid Erdrich describes as the “landmarks” that are left in stories that “draw [readers/listeners] toward [an] understanding” of what it means to be Anishinaabe (Garoutte & Westcott 2013, Erdrich 2013).

In my third hill, I needed to co-design a series of methods to engage, in this new form of listening I had learned in my second hill; there was an imperative to take everything I had learned by practicing this new form of listening, and co-developing a methodology that would allow me to learn how Elders described their relationship to the land, and the importance of learning the ways in which they structured the stories about this relationship. I may never know if I reach my fourth hill, because I have come to understand this is not a determination I must make.

My first three hills are subjective and are related to my own understanding and recognition of my growth and change over time. There are external features to this understanding, but my first three hills, and the recognition of where they have occurred over the journey of creating this dissertation have been primarily based on self-reflection and personal learning, guided by Clint and the theory discussed in section 2.1.0. The determination of whether and when I reach my fourth hill, I have come to understand, is and should be externally determined. If the community, and other scholars see value in this work, and take it up, and weave some of this knowledge into their own stories, research and methods, I will have reached my fourth hill.

Without engaging in this decolonizing work, that is captured in the stories I have learned to tell, I would not have been able to engage in the work of learning from,
listening to, and acting as a resource person, in the process of working with Clint to analyse the Customary Ways dataset.

And therefore, a significant part of my decolonizing practice, as a white, settler woman, required the work of coming to understand myself, and unsettling my privilege, through the stories I have learned to tell as a learner. Thus, for this dissertation, the academic work of analysis and learning could not have taken shape without the reflective work that I have engaged in; the tracking of my changing perspectives, deepened understanding of myself and the limitations of my settler understanding of knowledge; and the ability I developed to begin to listen to the motion in the land around me; recognizing the forms of knowledge and ethics that are held in the ecosystem; and tell the stories of what I had come to hear.

Only once I was able to tell these stories, was Clint assured I was ready to begin the long journey of learning from, listening to and coming to understand the ways in which the Elders in the Customary Ways interviews described their relationship to the land.

2.2.1 Hill 1: Locating My Standpoint

a) Locating the Place from Which I Speak

The “very fact that we constitute the initial audience for the narratives we collect influences the way in which our collaborators will construct their stories” (Borland 1991, p.523). As the constructors of the “initial audience” within the research process, it is critical then, for researchers to clearly articulate the standpoint of the researcher (Harding 2004, p.62). That is, who they are, in relationship to the academy, to colonialism and to the hegemonic powers that the academy asserts over those peoples the academy has

Absolon and Willett agree, they unequivocally state that the “most fundamental principles of Aboriginal research methodology is the necessity for the researcher to locate him or herself. Identifying at the outset, the location from which the voice of the research emanates” (Absolon & Willett 2005, p.97). Within the work of Smith, Battiste and Youngblood Henderson, Said, Kovach and Wilson there is agreement that within the context of Indigenous research it is critical that the researcher articulate the “place from which they speak” (Battiste and Youngblood Henderson 2000, Kovach 2009, Said 1994, Smith 2001, Wilson 2005). The importance of articulating the “place from which [one] speaks”, as Wilson argues, is because knowledge is socially constituted, and as such, knowledge should not be understood as being objective and therefore value-neutral, but instead being relational and contextually bound (Wilson 2005, p.39, Harding 1993, Kovach 2009).

From this understanding, of learning that identifying the place from which I speak was an essential part of decolonizing myself as a researcher, I recognized I needed to interrogate the power and privilege that I carried as a white settler scholar in a research relationship with Clint. I also recognized I needed to deepen my understanding of how my thinking about knowledge, knowledge creation, research and research questions had been shaped by the dominant western hegemonic discourses that had produced my discursive subjectivity as a white settler woman, as well as how this discursive subjectivity framed my understanding of my responsibilities and relationship with Clint.
b) Standpoint Theory:

Sandra Harding’s conceptual notion of a *standpoint theory* interrogates the “relations between knowledge and power and also,” acts “as a guide to improving actual research projects- as a methodology” through increasing the epistemological rigour that defines the research process (Harding 2004, p.62). She argues that “standpoint theorists analyz[e] the gaps between actual and ideal relations between knowledge and power” ultimately, requiring the researcher to interrogate and account for their own biases and notions about the legitimacy of knowledge and power (Harding 2004, p.63). In so doing, Harding argues, that the researcher will be able to better articulate and account for the choices that are made during the research process, and will, as the project unfolds, be able to apply a type of epistemological rigour, or awareness to their research that would be otherwise unavailable if the initial standpoint had not been articulated.

From Harding’s work on standpoint theory, I recognized that Clint and I needed to engage in a constant process of discussing, unpacking, interrogating, listening and learning from one another. And, in particular, Harding’s work on standpoint theory made me even more cognizant of the fact that the best way that I could unsettle and disrupt my settler colonial privilege and power would be to engage in a process of being a constant learner (Datta 2015, 2017). It was also at this point, I came to better understand that the ways in which Clint and I would co-design the methods for this dissertation would have to be in service of the outcomes and goals he had as my research partner; and that I could take up the role of a support person in the context of this project by applying different methods and approaches that could support Clint in achieving the research goals he had set for the Customary Ways project.
How does an articulation of standpoint theory intersect with concerns about rigour within Indigenous research? I think that first and foremost, we must understand that the articulation of both the researcher and collaborator’s standpoints is the only means through which any type of rigour can materialise. That is, rigour is first articulated as an epistemological issue; that is, one must be rigorous in their articulation of how the context of the research is defined, how the standpoint of the researcher is articulated, and how the standpoint of the collaborator(s) is positioned. Based on Lee’s work, we must also recognize and centre our understanding and practice of rigour around the idea that, within Indigenous research context, rigour can be understood as a collaborative act, that substantiates and sustains our relationships - with one another, and with the ecology (Lee 2013).

A part of this approach to rigour must then require, as a means of building and sustaining relationships, the articulation of the collective standpoints of the research partners and collaborators. That is, through the articulation and acknowledgement of the discursive subjectivities of the partners, that research can be done in a “good way,” ensuring that an “ethical space for engagement can be articulated” (Ermine 2007, p.193, Simpson 2011, p.20, 31-32,). Thus, we might begin to define rigour in the context of this dissertation through an ethical quality of the space co-constructed with Clint, in this case through our shared stories. And, along with the commitment of the researcher to hold the positional space and subjectivity of a learner. Further, the edges of this ethical space was defined by first and foremost, Clint, as he was the original designer of the Customary Ways dataset, and my role was articulated as a supporter of his initial project, to learn the ways in which Elders described their relationship to the land.
By engaging in rigour that is based on collaboration, and through articulating the standpoint of not only the researcher but also the community and collaborators, a significant shift occurs in the research relationship from the more traditional role of Researcher and Subject to Collaborators. Although the semantic shift is subtle, the epistemological and philosophical shift constitutes a paradigm shift within the partnered research paradigm. As collaborators, who have clearly articulated their respective standpoints, the tension between interpretation and speaking for one’s self is lessened. The tension is lessened because the process of conducting research is collaborative and relational to the context within which the research is defined. The researcher’s standpoint combined with the standpoint of the collaborator creates what Ermine articulates as a space for ethical engagement, “wherein two parties’ worldviews are poised to engage with one another” (Ermine 2007, p.193). It is the constant engagement of both parties’ worldviews that removes the tension of interpretation and replaces this tension with a generative process of creating newly emerging knowledge that is triangulated between the researcher, the collaborators and the combined standpoints of the parties that constitute the research context.

Within standpoint theory, interpretation is always subject to interrogation by both the collaborator and the researcher because it is understood that knowledge is socially situated, and as Borland suggests the “very fact that we constitute the initial audience for the narratives we collect influences the way in which our collaborators will construct their stories” (Borland 1991, p.523). As such, it is of the utmost importance to realise, as Harding suggests, that we can never escape the fact that we will constitute the initial audience through which our collaborators construct their stories, and that no amount of
so-called value-neutral objectivity will allow us to escape the socially constituted nature of knowledge (Harding 1993, 2004).

Instead, we must embrace, as Harding argues, the instability of these categories, and apply epistemological rigour within the qualitative process of interpreting our collaborator’s words (Harding, 2004). It is only through a rigorous and collaborative articulation of the philosophical framework through which we conduct our interpretation that we will be able to avoid the interpretive silencing of our collaborator’s voices. And it is through the generative process of co-creating both the philosophic research framework and the ethical space of engagement between the researcher and collaborators that the production of newly constituted knowledge can be generated and interpreted from within the context from which it emanates.

**Story no.8: Learning who I am so that I can listen and engage in sense-making**

What do I bring to my research partners? How do they now know me? How have I come to know myself? Maybe, I can try to offer the story of my lifeline. The story of who I am in relationship to the people I love and call my family.

When I first started working with Clint, and travelling to Walpole, I think I basically always uncomfortable. At first, I thought my discomfort was born out of not wanting to say the wrong thing; then I thought my discomfort came from the fact that I didn’t want to do the wrong thing. Thinking back and reflecting on it, I am pretty sure my discomfort was palpable. So, what did I do to try to mask my discomfort: ask a lot of questions! I thought that if I asked a whole lot of questions, I could show Clint and whichever community members I was working with, how much I cared about the work we were doing. That somehow a deluge of questions would demonstrate my commitment, my desire to do good work; that a whole host of questions would demonstrate that I was a good research partner. What I have come to understand is that this way of masking my discomfort really only showed how much I didn’t know about myself, and in not knowing anything about myself, in relationship to this work, I really couldn’t tell anyone the story of who I am, and
where I come from. By not being able to tell my lifeline story, I couldn’t tell any story that was really worth trusting, and by extension, I remained unknowable to the people I was meeting.

So, with Clint’s guidance, I began to listen to Anishinaabe stories about connection and lifelines. In this learning, I came to understand the concept of Madjimadzuin. Alexandra Kahsenni, has described in her recent article, “From Great-Grandmothers to Great-Granddaughters: “Moving Life” in Baby Carriers and Birchbark Baskets” (2018), that in the early part of the 20th century the “Anishinaabek of Wasauksing First Nation (Parry Island, Ontario) told anthropologist Diamond Jenness about the concept of madjimadzuin — the “moving life-line” or “moving life”—in which women play a central role” (Kahsenni 2018, p101). The story the Anishinaabek of Wasauksing was captured by Diamond, and was transcribed as:

The milky way is an enormous bucket-handle that holds the earth in place; if it ever breaks, the world will come to an end. The madjimadzuin is a human milky way; it is the chain of ancestors connecting those who have gone before with those who follow, the line of ancestors and descendants together with all the inheritance factors they carry with them. (Jenness 1935, p90).

I have come to learn that in the telling of the story of one’s madjimadzuin, one describes the importance and animate nature of the interrelatedness between generations. In reading these accounts, and really listening to the ways in which Elders, in particular women Elders introduced themselves to me, I began to understand that the majimadzuin is a powerful way in which women can tell the story of who they are, by telling the story of how they are connected to, and their responsibility for “maintaining this netted chain of moving-life” that connects women to their mother and grandmothers, and great-grandmothers, as much as it connects them to their children and future generations. In essence, one tells a story about their lifeline.

As I began to understand the teaching in the telling of the madjimadzuin, I began to understand that the discomfort I was feeling when I travelled to Walpole came from the fact that I had not yet figured out how to introduce myself. How to tell Clint, the Elders and community members I would meet, who I was and who and what spaces and places I was connected to. I had focused on demonstrating my trustworthiness and accountability through asking many questions, but I never first told a story about who I was as a woman, how I became the woman I am, and what spaces and places had contributed to my becoming tethered into the net of my relations.
And so, I began to work on telling that story, and this is the story I will tell you now, so you can decide how to listen to the stories I tell. So, you can begin to understand what I offer through this telling.

I am a settler to this land, and it is on this land I first became a daughter, and granddaughter, then a wife. I became a mum and then an aunt all while walking a path as a settler to turtle island. I was born a daughter on Algonquin territory, to parents who are both settlers. My mother’s family were courier du bois, and wandered the lands and waters of the Kanien’kehà:ka. My father emigrated to Canada from the Netherlands as young boy, and settled with his family, where my grandparents worked as labourers, on the traditional territories of the Haudenosaunee. As a young girl, I was raised on the traditional territory of the Haudenosaunee, Anishinaabekwe and Leni- Lunaape peoples, where I spent a great deal of time with my father, walking in the forests. As a young woman, I left the land that I grew up on and journeyed to the traditional and unceded territory of the Coast Salish, the Lkwungen-speaking peoples, Songhees, Esquimalt and WSÁNEĆ peoples, where I studied and became a wife. I became a mum for the first time on the traditional territories of the people of the Treaty 7 region, which includes the Blackfoot Confederacy (comprising the Sikiska, Piikani and Kaini First Nations), the Tsuut’ina First Nation, and the Stoney Nakoda (including the Chiniki, Bearspaw, and Wesley First Nations). My eldest son took his first breaths on a snowy morning on the rolling foothills of the traditional territory of the Tsuut’ina First Nation. I became a mother for the second time on the land where I was raised; my second son took his first breaths on the traditional territories of the Haudenosaunee, Anishinaabe and Leni-Lunaape peoples. Although I am no longer a wife, I am raising my sons, with the support of my mother and father and their auntie, and many collected aunties, to know and listen to the land of the traditional territory of the Haudenosaunee, Anishinaabe, Attawadaron and Leni- Lunaape first peoples. They are learning that this land is not theirs; that they are settlers to this land, but that they play an important role in sustaining the land beneath their feet. And they have learned that the best way they can sustain this land, is by understanding who they are, and who they are in relationship to this land, and all of their relations, through the net they will forever be a part of.

c) A Space for Ethical Engagement: Stories build a set of ethics

The research relationship that Clint Jacobs and I have forged over the last 6 years, has been a process of creating an ethical space for our standpoints to co-exist. I think it is
because we have taken the time to talk, and think, share ideas, and most importantly, share stories, that we have been able to really articulate who we are in relation to one another, and the research project we have been working through.

Clint and I have worked very hard to articulate our standpoints, in the hope of creating a space where our collective ways of knowing can intersect and both stand as legitimate ways of knowing the world, ideally collaborating to know the world together, each learning and growing in the process.

The idea of power and how it organizes Western ways of knowing is important to recognize when discussing standpoint theory and the standpoint of research, especially in the context of Indigenous research, because as a Fanon argues, “objectivity is always directed against them [Indigenous peoples]” (Fanon 1963, p.77). In effect, what Fanon describes is what Rorty identifies as being the central preoccupation of Western Philosophy, that Western Philosophy’s goal has been to “divid[e] culture up into areas which represent reality well, those who represent it less well, and those who do not represent it at all (despite their pretense of doing so)” (Rorty 1965, p.3).

As Fanon and Smith argue, Western objectivity has violently disoriented Indigenous voices simply because they have not reproduced the perceived objectivity of the dominant Western paradigm. As such, Indigenous voices and in particular Indigenous stories have been relegated to being thought of as being simply ill-informed “opinions,” “myths” or “legends” and “in order to achieve the status as knowledge, beliefs are supposed to break free of – to transcend- their original ties to local, historical interests, values and agendas” (Harding 1993, p.50). Yet, the transcendence from the relational to the universal is antithetical to Indigenous epistemologies, and as such, Indigenous ways
of knowing the world have been rendered illegitimate under the assumed value-neutrality of the Western gaze (Battiste and Youngblood Henderson 2000, Said 1994, Smith 2001).

Harding argues, that if self-awareness of a researcher’s standpoint is not necessarily part of the research process, then the researcher ultimately only becomes accountable to disciplinary and theoretical frameworks, and methodological requirements, and loses any of the epistemological rigour that can be created through radical subjectivity. The result is that the subjects of the research are further entrenched by these very conceptual frameworks, and the gap between those who hold the power over what makes knowledge legitimate grows even wider, silencing the possibility of research partners voices emerging as the leading voices within a research project (Harding 1993, p.73-74).

The key to solving this issue in the research we undertake is not to abandon objectivity, not to require “social neutrality” but instead, to embrace and interrogate our own standpoints, ultimately engaging with methodological choice as a means of bearing witness to our own standpoint, and its engaged relationship with those subjects and communities we engage in research. It is for this reason, that the methodological underpinnings of this dissertation identify the standpoints of all its participants and collaborators, as a means of creating an ethical space where this radical subjectivity can be taken up; interrogated; and understood as being legitimate knowledge. The ultimate goal being to create a research space where we can ethically come to know and understand one another, valuing one another’s ways of knowing the world in order to create new knowledges that are relational, respectful, responsible and reciprocal (Kirkness & Barnhardt, 2001).
So how did Clint and I begin to articulate our standpoints? We actually began to tell each other stories, some of which are captured throughout this dissertation. First, the stories of who we are, and how we came to be. Every time we would come together to discuss our research project, we would begin by telling one another a story. Clint would tell me about his childhood and growing up at Walpole; he has told me stories about his family; about his relative freedom as a youth, being on the land with Elders and his friends, fishing, and swimming in the waters that define Walpole Island. I have heard many stories about his son, who I know from listening to these stories, he loves deeply and is so very proud of. I have heard many stories filled with optimism and hope for his community and the future Clint imagines for his community, but I have also heard stories that have in them pain and sorrow, and fear.

Clint and I have shared stories that are very personal, over the years, for instance, I have shared with him some of the very difficult times I have had learning to raise my eldest son, who is, technically speaking, neurodiverse. It is was actually through sharing the stories about my son, and the ways in which he feels and senses the world, that Clint encouraged me to really learn from, and to try to understand the way in which my son has come to know the world by sensing it through his entire self.

**Story no.9: Beaver carves the rock with water, and so does my son**

*An Elder who, over time has gotten to know me and my son, once told me after witnessing a particularly hard day with my son, as he went through a very long and powerful tantrum, and me, eyes-wide and full of fear, that to understand him, I needed to understand he is like water. He flows, and he torrents; he can cover you in calmness and he can drown you, but he can carve rock, just like water. My mothering requires me, she said, to help him to learn to harness his power, and carve his life as he moves along the earth, finding his place through what he can feel, just like water.*
My eldest son was born in late May, to the howling wind of a wild snowstorm that had
rolled over the mountains. His birth was chaotic, as chaotic and disorienting as that snowstorm
seemed in late May. I remember two things very clearly: first looking out the window, snowflakes,
pelting the window, frozen water leaving its mark against the glass, as I gave one last giant push,
guiding his body earth side; and second, I remember seeing the whole world transformed and
cloaked in the whiteness of the fresh, soft snow. I remember thinking, I wonder what this means
for this wee babe? Being born into snow in the late spring? Into this world frozen by the force of
water?

My son, that wee babe, born into a late spring snowstorm, has become one of my greatest
teachers. Sometimes he has taught me through the great adversity that has marked both our lives
since his birth. But mostly, he has taught me through watching and learning to understand his
incredible ability to live in a moment: to feel it, to really sense it, to feel all of the motion that
exists in the world around him.

You see, that wee babe, well he feels and knows the world around him in ways that most
people will never feel or come to know. To say that he walks through life feeling the world is an
understatement. He deeply feels the world around him, so much so, I often, half-jokingly remark
that his birth was so difficult and long because he simply wasn’t ready to be of this world- in its
sounds and hyper-colour- instead wanting to stay safely cocooned in his warm watery world.

Our path as mother and son has not always been easy. I have had to learn to know and
communicate about the world with him in new ways. But one place, especially in the beginning,
when the days felt long, and the mis-communication between us was nearly constant, we could
find solace for both of our hearts, was in the woods. Somehow, deep in the woods, amongst the
ferns and waterlilies, near Beaver’s dam, we could connect, and through that connection we could
really see one another, and listen to one another.

Deep in the woods, I could let go of my worry that he would become too loud and too
agitated, making a scene in public because he suddenly did not like the sounds he was hearing or
the smells he was smelling. I could just see my son, as he was, happy to walk and gently explore
the woods. Because when you spend time in the woods with someone who feels the world
differently, you begin to hear and feel things you might never had heard before. The low hum of an
insect’s wings, or the sweet song of the golden finch. You might even decipher the way moss
smells differently right after a rain shower, or the way a stick feels like satin beneath your
fingertips, when its rough bark is removed by Beaver’s strong teeth.
Deep in the woods, I could embrace all of what, outside of the woods, seemed like insurmountable difference in my son. And it is deep in the woods we learned about persistence, and resistance, from our friend Beaver.

You see, near the pond that my son absolutely loves, we befriended a very large and friendly Beaver. Every night, my son and I would walk to the pond, and every night, just as the day would begin to turn into night, Beaver would emerge from his dam. We would sit in our usual spot, and we would watch Beaver. He would swim with such joy, that often my son would giggle, laughing at how Beaver would swim in circles sometimes delighting us by laying on his back, paws in the air, as he used his tail for balance. And sometimes, on lucky nights, Beaver would venture near enough to our spot, that we could make out his nose and eyes. He would steal a glance, and duck under the water, only to surface again at another point in the pond.

Our nightly visits went on for some time, until the city decided that Beaver and his family had transformed the woods too much. You see, Beaver had built a beautiful dam, and in doing so, flooded the forest floor with water. Water lilies blossomed, as did the frogs, and turtles. Bull rushes began to grow, and the forest floor transformed before our eyes. My son and I were excited to see all of the new animals and plants that came to the forest because of Beaver’s hard work. But the city was not.

The city trapped Beaver and his relations and moved them away from the pond. My son was devastated that his beaver friends were not at the pond, that first night we arrived after they had been moved. I tried to distract him by looking for the birds or insects that had come to make their home near the pond. He was not interested in me, or these other animals, but just sat by the side of the pond crying and calling out for Beaver.

A few weeks passed, and we continued our nightly walks in the woods, and I would try to avoid going near the pond, because of the distress it caused. We noticed a new silence in the woods, the sounds of the water had changed; there were fewer dragon flies and water insects, because the pond waters had begun to recede when the dam was empty. But one night as we were walking, my son stopped and looked at me, and said, “listen!” I stopped and could only hear the early summer mosquitos buzzing near my ear. I kept walking, hoping to out walk the impending bites, when my son stopped again and pulled my hand and yelled “listen!!” and there it was, the sound of moving water. The familiar sound the water used to make near the place Beaver had made their dam.
With excitement my son bounded ahead and shrieked with delight when he came upon Beaver’s dam, rebuilt and working to redirect the water from the stream into the flood plain it had created! And there, in the distance, we saw our big Beaver friend working away at collecting more wood for the dam, slowly, and with an earnest persistence, carving the rock with water.

2.2.2 Hill 2: Embodiment and the process of Listening through an Anishinaabe Framework

Over the last six years my thinking about how to learn from the 50 Customary Ways interviews has changed dramatically. Initially I was convinced that I would “listen” to the interviews primarily by reading the transcripts, assembling a set of questions to interrogate these transcripts with, and ultimately try to understand how Indigenous peoples “make sense of the land”. I expected that I would use a fairly traditional approach to coding the data, using grounded theory, or another similar qualitative method, and that I would use some form of qualitative data software, like Nvivo to help me code and analyze the transcripts Clint had given me from the Customary Ways dataset. And, important to note, I believed that I would discover something about Indigenous knowledge; that my contribution to the field would be discovery based, and not, as I have come to understand, learning centered.

Through numerous discussions with Clint, I realised that I had predetermined my answers about what I would find in the Customary Ways dataset by asking too many questions. By asking so many questions, I had also predetermined the answers. That is, by formulating so many questions related to the theories and literature I as reading in my studies, I had, through the framing of my questions, positioned Indigenous peoples in a passive position in relation to the land. I had initially posed a series of questions of the data that tried to establish that the ways in which Indigenous bodies were attuned to sensing, or perceiving, signals from the land. Initially I wanted to ask a series of questions

At the time, I didn’t recognize that as much as Elders “sense” the land, there is a deep recognition that the land, also responds. That is, at this point in my journey to learn to listen, I had not recognized that what the Elders were describing in their interviews were stories about listening to the land, and that the land listens and tells stories, too. I hadn’t recognized that when Elders would say, in their interviews that “we need to connect to the land to remember them [stories]. The stories will come back. They must be there [in the land]. We have forgotten them.” (Elder interview no. 12), that what they were talking about was a process of reciprocal listening. That the land has the capacity to listen, too.

At the time, I also didn’t recognize that the questions I was writing and defining my initial analysis of the Customary Ways dataset with, was critically, re-inscribing the colonization of Indigenous Knowledge by selectively extracting only a component of the complexity of Indigenous Knowledge. *The sensory relationship between bodies and the environment*, is a component of Indigenous knowledge, but it is not the entirety of this knowledge.

My thinking then moved to considering if I could understand Indigenous knowledge as a means of coping with, or managing the land through the senses, which again, positioned Indigenous knowledge as being embodied but with a singular purpose, as a discrete tool to interact with the land, and manage resources, but failed to address the relational, spiritual and ethical basis of Indigenous knowledge.
Over this time, Clint and I had countless conversations and, in each conversation, he very patiently encouraged me to really listen to the interviews, and really listen to the words of the Indigenous scholars I was reading. And, as always, Clint would end our conversations by asking me to think about and reflect on what I had heard.

I really did think that I was listening to the interviews; and I suppose that I was listening, in a very traditional colonial way. What I have now realised is that I was listening to data, and I was trying to discover what was in this data, using techniques I had been taught to use in my qualitative methods classes. I was using western colonial research techniques that, if applied to stories, miss the ways in which the structure, content and genesis of the that content work together to weave stories. And importantly, these methods missed what stories do, within an Anishinaabe context (Garoutte & Westcott, 2013, p.62, 65, 75).

That is, colonial methods miss the process-based ways in which stories carry and animate knowledge, because, these colonial research methods I had been taught, were themselves created to 1) discover new knowledge; 2) exert neutrality and objectivity as a means of discovery and removal of the recognition of researcher-subjectivity as a powerful and privileged lens through which information/data is interpreted; 3) contend with the static nature of data once extracted from interviews.

I thought I knew what listening was, and thinking back on this time, I suppose I was a good listener of western defined data. Of interviews. Of responses to questions. But I wasn’t very good at listening to Indigenous Knowledge, which for the purposes of this dissertation, was understood to be carried through the ways in which they described their relationship to the land, in Customary Ways interviews.
Then something changed. I began a process of learning how to \textit{really} listen, in order to be able to listen to, and learn from the knowledge the Elders of Walpole Island tell in the Customary Ways dataset.

In part this listening was learned through the process of reading, reflecting and reading again the Creation Stories that are located in the literature review (section 1.3.1) of this dissertation. Clint encouraged me to read these stories as a means of understanding the way process-based knowledge is contained in stories. He encouraged me to listen to and learn from the ways in which the Creation Stories are structured as a means through which one comes to know and learn about their relationships and responsibilities to the land and creation. He also encouraged me to listen to these stories because they were deeply connected to the people and the land of Walpole Island.

As I was reading these stories, and learning a new way to engage in learning, Clint encouraged me that I needed to get out onto the land with him, and with myself, to see if I could begin to hear what I was learning from these Creation Stories in the land beneath my feet and all around me.

In order to do this, I began a process of learning to quiet my mind and watching without speaking. And when I started listening, I realized I had not been really listening to the Elder interviews, because in my initial attempts to listen, I had come to listening with a set of questions (and in most cases, pre-determined answers), rather than coming to the interviews, with an open heart and mind, a necessary requirement to begin listening to the motion in the land that surrounds us all.
Story no.10: Learning to sing your song

In the first spring I was so excited that a robin had decided to make her nest in the corner of the roof of my porch. I would watch her on a daily basis, and often times, my excitement for the nesting activities compelled me to get far too close to her nest. I realise now, that I came with questions; I didn’t come to really listen to the robin. I wanted to record everything she did, and how she did it and why she did it. I wanted to watch her at every moment I could, observing everything I could. At the time, I prided myself on how much I knew about her; about how close I got, about how much I could say about what she did. In that first spring only one hatchling survived; she was nervous (I now know in retrospect), and she only roosted one time.

In the second spring, I stayed further away, but eventually my curiosity got the best of me, and I intervened too closely, thinking I could know so much more about this robin if I could just observe her more closely, if I could inhabit her space with her. Again, I came with my head full of questions, and positioned my listening as an activity that gave me the information I desired, but my questions didn’t leave any space for me to listen to the robin at all. Again, only one fledgling survived, and she roosted only one time.

The third spring coincided with me beginning to understand that listening to the land requires far fewer questions, and far more self-control and patience. And, most importantly, really listening to the land requires an open heart and mind in order to hear what changes: how one’s heart and mind changes in relation to the land, and how the land changes in response to one’s heart and mind. So, in my third spring with the robin I watched her from afar, from inside my window, actually. I watched her each and every day. I would wake-up and watch her while I had my tea- in the first light of day we would make eye contact, in an almost ritual of acknowledgement, and in the twilight, I would silently bid her goodnight- but I would never venture near her nest.

I would experience her tirelessly feed and care for her fledglings. I noticed how she change her flight patterns in the evening and in the morning; I admired how she cleaned and fed the fledglings with such incredible skill, and patience repeating the same movements and interactions hundreds of times over the course of the day. I was amazed to watch how she would skillfully catch bugs from mid-air, and could locate worms from watching the ground from high-up in the tulip tree on my front lawn. I also appreciated as she shared the near constant responsibility of caring for these fledglings with her mate- they tirelessly exchanged tasks, feeding and caring for
their offspring. As the fledglings grew, I listened to how she began to teach them their song,
everyday a little bit more, and every day from a bit of a further distance from the nest.

I listened as the fledglings began to learn their song, first with scattered chirps, a
cacophony of what seemed like just noise- but as they grew, their song grew too, until finally their
beautiful song took shape. As they grew, and began to outgrow their nest- their bigger bodies
finally outgrew the finely created nest I knew a new part of their lives were about to emerge. I
listened to them grow from blind hatchlings; to being covered by downy feathers, then to lose this
fine down to their spotted fledgling coat. With excitement I would see them each practice opening
and closing their wings- almost learning that the purpose of these appendages was for flight.

In what felt like the greatest of gifts and moment of intimate connection, I watched each
fledgling take their first flight into the world. On that particular morning, the mother robin sang to
her fledglings then took flight and landed on a low branch in a tree in my front yard. She sang to
her fledglings, and one by one they sang back. And one by one, they opened their wings like the
many times they had before, but this time, they took flight. First, they landed on my porch, then
after they seemingly recovered from the shock that they had left the nest, they took flight into the
world, each singing their song.

The robin roosted in that same nest three more times that spring and into the early
summer, and each time I listened. I learned so much from learning to listen to this robin. I learned
that parenthood requires patience and skill, and determination. I learned that tending to offspring
requires sacrifice and dedication. And most importantly, I learned that raising offspring is really a
process of loving them in order to let them go; to learn their song so that they might explore the
world.

a) Observation without Questions

This is a process I am still working through, but each time I am an afforded an
opportunity to be still in the environment, and really listen, I feel myself getting closer to
being able to achieve what Rheault describes as “observation without questions” (Rheault
1999, p.200). For Rheault observation without questioning “teaches patience and humility
since one is forced to quiet one’s natural inclination to want to know everything all at
once” because “at times asking too many questions obscures the obvious knowledge
available in the physical-spiritual world” (Day 2014, p.91). This process of starting to listen in new ways has taught me that “we will learn what we need to know when the time is right and that we cannot know everything all at once because we are not ready to have this knowledge” (Day 2014, p.92). Anishinaabe epistemology teaches us that becoming comfortable with silence, with having an open mind, and coming to listening with fewer questions, helps us to “accurately see the world around us and our place within the world” (Day 2014, p.92).

I have come to know that listening is a practice that is a process; that listening is not actually observation in the Cartesian sense, where observation is meant to be an objective means of coming to know something separate from one’s self. In a Cartesian sense, observation and objectivity very much requires a firm separation between the listener and the phenomenon being listened to; that is, objectivity aims to take up a view from no-where; a universal view from which a system, or phenomenon will be assessed or understood. In this sense, the observer is never really a part of the phenomenon or system they are observing.

Listening, in an Anishinaabe sense, represents a radical way of listening that is, in many ways, anathema to Cartesian ways of observing, and listening that I have been exposed to in my life- through both formal academic training and through growing up understanding the world, from a Eurocentric way of knowing.

At the centre of most Western, Eurocentric thinking- and I would argue listening- is a linear and disembodied model of cognition that values the proposition of creating questions that will reveal the most objective and most robust representation of reality- that is entirely disembodied.
b) A Brief History of Disembodied Listening

Descartes can be considered one of the Western thinkers responsible for creating what Western Philosophers call the theoretical duality of mind and body. The reason it is important to consider this duality is that this idea is anathema to Anishinaabe ways of describing human beings, learning, cognition and knowledge, because the quality of knowledge that you are able to recognize through a Eurocentric lens is very different than the quality of knowledge you can recognize through an Anishinaabe epistemology. That is, Eurocentric thinking necessarily leads one to uncover objective knowledge, whereas Anishinaabe concepts of knowledge are process-based and require the learner to recognize their deep relationship to that animate knowledge they are learning.


Descartes’ “arguments for the separation of body and soul are part of a long legacy of dualistic thinking,” that persists in much Western thinking (Anderson 2003, p.92). What the majority of Western socio-scientific thinking has “inherited from Descartes is a way of thinking about our relation to the world- in particular our epistemic relation to the world” (Anderson 2003, p.92). The important point here to draw out, is that for Descartes, his famous (and lingering) “ontological realization [is] that
he is a thinking thing conditioned and tempered by the epistemological admission that all he had accepted as most true had come to him through the senses; yet it is precisely this intrusion of the body between knowledge and world which in the end is unacceptable” for him (Anderson 2003, p.92).

Within a Cartesian worldview the body is both “necessary and unacceptable, and this ambivalence drives the mind and body apart,” rendering a great disconnect between the embodied experience of living in the world, and how one should rationally account for that experience (Anderson 2003, p.93). Cognitivism has as its central hypothesis that “the central functions of the mind- of thinking- can be accounted for in terms of the manipulation of symbols according to explicit rules (Anderson 2003). And, a reliance on the idea that thinking relies on explicit rules embeds a linear certainty in many of the presuppositions that support Western ways of knowing the world.

Michael Anderson argues that it is only recently, with the growth of the fields of Artificial Intelligence (AI) and Complex Systems thinking, that Western ways of knowing the world are starting to move away from their presupposition of linear Cartesian thinking. That is, Anderson argues, with the advent of AI and Complex Systems Thinking Western socio-scientific ways of knowing are beginning to grapple with the fact that “cognition- [the act of knowing the world]- is a highly embodied or situated activity” and that “thinking beings ought therefore be considered first and foremost as acting beings” deeply grounded in relational ways, to the world they find themselves within (Anderson 2003, p.91).

The Environmental Humanities gives us a place within the current academy to learn from the ways in which humanists have begun to think about, imagine and record the ways in which humans interact as acting beings with their environments. Haraway
argues that “we need stories (and theories) that are just big enough to gather up the complexities and keep the edges open and greedy for surprising new and old connections,” and that as scholars, we must pay close attention to the delicate work of paying attention to the details of these stories (Haraway 2015, p.160). In particular, Haraway notes that as acting beings, “it matters which stories tell stories; which concepts think concepts…which systems systemize systems” (Haraway 2015, p.160). Here, Haraway draws our attention to the fact that as acting beings, we are in relationship to the ecology through which we come to know the world, and as such, we must pay acute attention to the stories we tell about that experience.

Haraway connects the importance of stories, and the deeply human capacity to tell, listen to, and imagine both our pasts and future through stories. She also importantly ties the concept of storytelling to the act of kinship (Haraway 2015, p.161). Haraway puts forward a concept of kinship- that disavows traditional uses or understandings of this word, instead she argues that the act or practice of kinship is “something more than entities tied by ancestry or genealogy” (Haraway 2015, p.161). Haraway offers that, the practice of kinship can emerge as “kin-making” and that this kin-making is not relegated to only relatives- but can extend to and “not necessarily” confined to “individuals or humans” (Haraway 2015, p.161). Haraway centres then, as an imperative of the environmental humanities, a recognition that kin-making can be stretched and recomposed through a recognition that “all earthlings are kin, in the deepest sense, and it is past-time to practice better care of kin- as assemblages- and not species one at a time” (Haraway 2015, p.162). In doing this stretching, Haraway is asking scholars to, in some ways unsettle the human-centered approaches of the classic humanities, and instead envision a new, bold humanities that explores the stories held in all of our kin. And in
doing so, she asks us to consider the types of futures we can imagine if we were to tell the stories of our ecology through stories we tell in cooperation with the birds (Bird Rose 2012); the fungi (Tsing 2012).

In taking this imperative as a necessary practice of humanism, Haraway opens space for non-Indigenous scholars to bear witness to the ways in which humans are, as acting, conscious, embodied beings, kin to the ecology we find ourselves a part of, and a product of (Haraway 2015, p.162). That is, for Haraway, kin *is* an active “assembling sort of word,” that signals “all critters share a common “flesh” laterally, semiotically, and genealogically. That is, through kin-making, humans might begin to understand what is at stake when we tell the stories of who we are, and who we are kin to.

What Donna Haraway, Donna Bird Rose, David Abram, and Anna Tsing ask us to recognize, is that the academy, has in many ways worked to deny the embodied ways that humans, as acting beings, engage with their ecologies and environments, and how these environments tell us stories and act with us, too!

That is, within the traditional fields of science and social science (and humanities for that matter!) our bodies are not typically\(^{11}\) part of the process of the listening we engage in when we “connect” through our research methods. What we have utterly failed to realize is that this denial of our bodily attunement to the ecologies, people, subjects and concepts we endeavor to understand, does not allow us to participate in that great act of *Mythos*\(^{12}\), or collective storytelling, because the creative act of *Mythos* is fundamentally

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\(^{11}\) Here I take typical to mean the mainstream methods taught in methods curriculum across Western Academic institutions. Phenomenology, which has a long history in the academy, and has been used by post-colonial theorists, feminists and some environmental humanists, does centre embodied cognition, but this research method would still not be considered a mainstream, well-used research method within Geography or the social sciences, more generally.

\(^{12}\) Here I am using the concept of Mythos from the Greek storytelling tradition. A tradition that is tightly connected to Eurocentric thinking, yet rarely discussed in relationship to Eurocentric concepts of
about recognizing one’s connection to the world, to one another, through our corporeal bodies, and then, *telling* about that embodied experience.

Engaging in *Mythos*, requires the critically important recognition that when we participate in a collective experience of *being of* the world, by feeling the land that is beneath our feet, and our connection to it, we recognize, as Robert Fowler argues, that “when mythos is in play, something is at stake” (Fowler, 2011, p53). And that *something* is very often absent from traditional research methods and methodologies within the colonial academy.

That something, that is the very basis of *Mythos*, is the generative act of creating the world we wish to inhabit, by practicing the *telling* of the stories found in our imaginations, in our kin, and in our collective histories. But this is a telling that we must remember is born out of the relationships we have with the world around us, because first and foremost, human beings are sensory beings, and as such, our imaginations are informed by our experiences of the land beneath our feet, and so whatever imagined futures we create, or memories we carry in our bodies through history, will carry forward with them remnants of the places and spaces we know through our corporeal bodies.

Our imaginations are wonderfully primed to allow us to create futures based on the ethics and values we hold most dear, and if we practice observing the world around us, we will find it is full of an innate balance and set of ethical principles we can *tell* about, through the stories we create and share.

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knowledge within the Academy. The Academy is more closely connected to concepts of Logos, Mythos’ close kin. But a kin I would argue we must pay more close attention to, when we discuss Eurocentric concepts of knowledge, its production, power and history.
Taken together, the work of environmental humanists, offers us important challenges that have (and have the capacity to) “unsettle traditional approaches to the Humanities [and social sciences] including the questions that we ask and the ways in which we explore them” (Churlew et. al 2012, p. 4). In the context of social science research, and in particular Indigenous Geographies, the “novel and interdisciplinary approaches to scholarship” that are emerging in the environmental humanities, might offer us a means through which we are able to envision and design approaches to engage in Indigenous community-based research, that calls settler-scholars to action by recognizing the important place that storytelling has held within the history of Western thinking, and in particular, the humanities.

We have, through colonial processes of the arbitration of knowledge discovery and production, lost sight of the fact that within Mythos there is a powerful formative space through which we can test and retool the ethical qualities of who we can become; of how our communities could behave and interact. We have forgotten that it is through Mythos we can set forth a series of ethics about the ways in which we will walk on this earth. And that through the act of Mythos there is a deep recognition that we are of this earth and not separate from it.

It is through Mythos that we once spoke of what we knew about the world; the way the land felt under our feet; the way the wind felt on our skin; and the ways in which the soil smelled richly of the possibility of life. Mythos allowed us to describe the ways in which the waters carved rock, forming the landscapes we inhabit. And it was through the generative act of Mythos that we created worlds we hoped to inhabit; worlds we literally enlivened with the ethics we would collectively share and participate in.
Storytelling has had a long and fraught relationship with what Western thinking has defined as Logos, culminating in a defining moment when Plato banished the Poets and poetry from the Republic. That is, within Western accounts of its own history of knowledge, there are powerful narratives about what is often described as a great turning away from Mythos to Logos in about the 4th century BCE. It is said, that in this great turn, Western thinking and knowing moved from myth to reality, to an accounting of the world based on what was considered to be the objective truth contained within the practice of Logos.

Ultimately, it was through the philosophic narrative that divided Mythos so sharply from Logos that the Western world came to unknow that it was through the collective trust and participation in storytelling that we created and imagined the communities and worlds that we could inhabit. That held deeply within the very act of Mythos we were at once inhabiting stories and history; inscribing ourselves within the very stories that are our becoming, because as Thomas King notes, “the truth about stories, is that’s all we are” (King 2003, p153).

c) Indigenous Knowledge and Storytelling

Indigenous Scholars (Archibald 2008, Battiste and Youngblood Henderson 2002, Johnston 2011, Kovach 2009, King, 2003, McGregor 2004, 2006, Simpson 2011, 2001, 2004, Talaga 2018), have argued that storytelling is at the core of Indigenous ways of knowing the world, but storytelling necessarily requires listening, thus, I would like to suggest that it is storytelling and the practice of listening that form the basis for Indigenous knowledge. Storytelling reconstitutes the knowledge one learns through the deep listening that D’Arcy Rheault describes (1999). Storytelling is the way in which

Leslie Marmon Silko has described the power of the practice of listening found within the Laguna oral tradition in that the “oral tradition depends on each person/listening and remember a portion/and it is together/all of us remembering what we have heard together/that creates the whole story/the long story of the people” (Marmon Silko 1981, p.130). Kimberly Wilde echoes Marmon Silko’s observations when she notes that silence is an essential and important part of Indigenous storytelling methodology (Wilde, 2003). And, Noodin argues that “story, sound and meaning cannot be separated from one another, or from the people that communicate with them (Noodin 2014, p.3). Thus, the ways in which language is used to build narratives is an essential part of understanding Anishinaabe stories, because a Noodin argues, “the culture-specific ways of using language are reflected in the stories of the Anishinaabe people” (Noodin 2014, p.3).

Indigenous storytelling, as a valid research methodology for conducting research, but also as a method for making sense of the knowledge contained within Indigenous stories, has had a long and fraught relationship with the academy. Margaret Kovach poses an important question about the role of western research, and western research methods
and their dual relationship to gaining knowledge when she asks: “is research a form of knowledge-seeking that is amenable only to quantifiable generalizations? If that is the belief, it shuts out the possibility of Indigenous research frameworks where generalizabilities are inconsistent with the epistemic foundation” (Kovach 2009). What I have learned from the stories that Kovach (2009), Simpson (2011, 2020), Borrows (2010), McGregor (2004), Archibald (2005), King (2003), Cardinal (2004), Maracle (2004), Horn-Miller (2016), and Talaga (2018), are telling is that Indigenous Knowledge is lost when we try to abstract, generalize or make it conceptual, that is, when we no longer listen to, and tell the stories that make Indigenous knowledge material.

That is because Indigenous stories, as Kovach argues, provide “insight from observations, experience, interactions,” from knowing and being of the world that constitutes the story, and these stories cannot be told in deconstructed parts (Kovach 2009, p.67). You have not heard the story, if you only listen to a part or extracted section of a story. You have only really listened to a story if you hear it from the beginning to the end. Which is why we cannot apply traditional qualitative methods in and of themselves, to stories. Qualitative methods were created in order to extract and understand trends and themes that emerge from interviews or, datasets of interviews. The researcher might listen to or read the entire interview, but the coding of interviews requires the researcher to break the interview down into component parts, giving attention to details and patterns that emerge across interviews and between participant responses.

Basil Johnston observes that in order to understand the connection between Anishinaabemowin and the structure of storytelling, one begins to understand that for the Anishinaabe, speaking the language is much more than “the ability to utter words or to express simple wants and sentiments” (Johnston 2001, p.51). For Johnston, the purpose of
“language is to glean some understanding of the transcendental, the abstract, the world, life, being, human nature and laws both physical and human-inspired- as embodied in the literature,” because for Johnston, the primary way in which knowledge is carried for the Anishinaabe is through story, which is enlivened through the relationship between listening, language and the *telling* of stories (Johnston 1965, p.9).

So, then, how did I begin to learn to *really* listen? How did I begin to listen with my heart and my mind together? By first listening to the elder stories in the Customary Ways interviews, and then, practicing what I heard by listening to the world around me, and then listening to the interviews again, then practicing what I heard and listening to the world around me, and then telling about it. This is a process that continues to this day. I go back to the source, to the stories, and I listen, then I practice the telling that I have heard.

It is for this reason, the decolonizing practice of this dissertation has incorporated storytelling within the both the structure of this dissertation, and the methodology of this dissertation. I have used both storytelling, and academic writing so as to incorporate both ways of making-sense of the world, and to honour the stories I have learned to listen to, and importantly, learned from, over the course of the last 6 years. It is my hope that this mixed-method has also allowed me to capture learning that I might not be able to describe, if I had to rely only on traditional research methods and academic writing.

It is my hope that the storytelling I have engaged in has allowed me to capture the learning I have done, not only about myself and my positionality as a white settler woman, but also, that these stories, which I used to practice the ethic of trust and built a relationship with my research partner, Clint, will also build a relationship with the readers of this dissertation. That in reading these stories, you will learn who I am and how I have...
learned to listen differently, not only to the world around me, but the world the Elders
describe, through their descriptions of their relationship to the land, in the Customary
Ways dataset.

**Story no. 11: We shouldn’t take more than we need**

It was an incredibly hot August afternoon when I met a bumble bee. At first, I did not notice the
bumble bee, because bumble bees are quite small, and this one was particularly small. I was sitting
on my deck, listening to the birds who had come to relax in the shade of the trees in my back yard.
The air was so still, in the way it gets when the humid summer air comes. I am a stubborn woman,
and I do not have air conditioning. Well, that is not entirely correct. I have air conditioning; I just
have not fixed the broken air conditioner that is attached to my very old house. So, on hot days, it
is most often much cooler to be outside, rather than inside, which is how I found myself outside on
this particular summer day. I have learned that if you sit really still, in the shade, you can always
find the wind, even if only faintly, it is always moving, providing a bit of a reprieve from the heavy
humid August air.

So, on this particular afternoon, I was sitting still, and out of the corner of my eye I noticed
something small flying in very funny pattern in the air, and I could hear the faint humming of what
sounded to be wings. I took a closer look, and as I did a fuzzy, buzzing bumble bee was heading
straight for me in a very unusual pattern of flight. I ducked, out of the shock of it all, and the little
bumble bee landed, with a thud, on my cedar table. At first, I think we were both shocked. Me, for
almost getting hit in the head by an erratically flying bumble bee; and the bumble bee, for the
place it suddenly found itself. And so, we waited. I stayed still, and so did this small bumblebee.

As I watched the bumble bee, I noticed something very interesting— it was totally covered in
pollen—so much pollen that it looked like it was wearing a fuzzy yellow coat. There was not a part
of that little bumble bee’s body that was not coated in vibrant yellow pollen. And as I watched the
bumble bee, it seemed to be coming back to its senses by moving its legs and wings, gently turning
its head, as if to sense the air, and the table; as if to sense where it was in time and space; to sense
itself. Once settled, the bumble bee seemed to start to think about how it was going to get on with
flying.

As I watched this little bee, it started to clean itself. Slowly, using its legs, it started to clear
off some of the pollen, then it would pause, and wiggle a bit, and flutter its wings ever so gently.
Then it would pause and start to remove a bit more pollen. This dance continued for some time; the bee gently and cautiously removing pollen, and adjusting itself, reassessing itself; then more removal, then reassessment. As this process was continuing, my youngest son came to find me. He curled up in my lap and without me saying a word, started silently watching the bumble bee with me. After some time passed the little bumble bee gave a great shake and to our amazement spread its beautiful wings widely, gently shaking them, and then flew into the sky. We tried to watch for as long as we could, but eventually we could no longer see the little bumble bee, because it became one with the sky.

As my son sat on my lap, I asked him what he thought the bumble bee was doing for all that time, and my son, with great wisdom told me: “Mumma, the bumble bee realised that it had tooken too much pollen from the flowers he visited. So it had to give some back. The bumble learned you should only take as much as you need. I think that is why he shaked so much. The bumble bee was testing how much it could take. The bumble bee learned if you take too much you can’t fly. And then you can’t make the honey. You only need enough pollen to make honey, little bee. Not too much. Mumma, you know we are like the bees. We only need just enough things. We shouldn’t take more than we need.”

I was still again. I was in awe of what my little son had so astutely learned by listening to this little bumble bee. I was grateful to the bee for teaching us both such an important lesson.

2.2.3 Methods as a means of listening

As Heather Castledon et al.’s 2012 article suggests, Community Based Participatory Research (CBPR), when done well, or as Ball and Janyst (2008) describe “in a good way,” requires that researchers and communities engage in relationship building (Castledon et al. 2012, Ball & Jaynst 2012, p.33). Relationships are not built in a protracted amount of time, and as such require a commitment of time from all parties involved in the research collaboration (Minkler & Wallerstein, 2008, Ball & Janyst 2008, Smith 1999, Castledon et al., 2012). Clint and I have been working together to set our research relationship and ethics of engagement over the last 6 years. We have been
following Kovach’s 2005 and 2009 work where she argues that research with Indigenous communities should be guided by an “Indigenous epistemology,” and that the “receptivity and relationship between [the] researcher and participants” should be engaged as a “natural part of the research methodology” (Kirkness & Barnhardt 1991, Kovach 2005, 2009). And, we have been building, and continue to build this relationship through our exchange of stories.

Kovach also argues that “experience is a legitimate way of knowing, and that Indigenous methods such as story-telling, [are] a legitimate way of sharing knowledge,” and that the engagement of community members and researchers should occur through a research framework that recognizes “collectivity as a way of knowing that assumes reciprocity to the community” (Kovach 2005, p.28). Clint and I have engaged in this way over the last 6 years, where I have visited the community, met with different community members, and worked to listen and understand the goals and aspirations of my research partner in the hopes of co-creating work that not only builds capacity at the community level, but also produces work that positions Indigenous ways of knowing as a foundational principle of the work produced- both in its theoretical outputs, and in its applied community outputs. But the ways in which I have learned all of these important points, is not through a formal document, or a research MOU. The ways I have come to know what is important to Clint, and his hopes and dreams are through all of the stories we have told one another; the walks we have taken together; the times Clint has taught me to listen, by showing me how to do so.

Story no.12: Learning to hear the motion beneath my feet
How did I learn to listen to birds? By walking with Clint on the land. One day, I went to Walpole for a research meeting, and as we have done many times, Clint and I took a walk. On this day, we took a walk through the tall grass savannah that Clint had worked to restore on the island. At one point, as we were walking, Clint said, stand in one spot, close your eyes and listen. I said “okay”, feeling a bit silly and awkward. I of course peeked a bunch of times to see if Clint had his eyes closed – which he did! - and at first I couldn’t hear anything but my own awkwardness. But over the course of a few minutes, my mind began to quiet, and I started to hear things! I started to hear the rustling of the long grass in the wind; I remember hearing the way the swallow’s wings sound as they glide through the air, and I remember the sounds the frogs made deep in the long grass. I also remember feeling so excited, when, as the wind shifted direction, I could smell the sweet smell of sweet grass waft through the air.

We walked in silence for some time, and Clint asked me, “Erin, what did you hear?” And I answered simply, “I heard the land, Clint. I heard all of its motion, because I think I might finally be learning to listen.”

a) Listening method no. 1: Community-Based-Participatory Research

Community-based research, or CBR, is not itself a new research methodology. What is new, is its use within the practice of Geography as a means of redressing the colonial history of our research discipline. In many ways, the practice of Geography, which espouses such concern with place, space and context has had a surprisingly silent historical relationship with interrogating its own historical implications in forcibly shaping and entrenching the colonial spaces, places and contexts Indigenous communities take up within geographic research (Godwelska, 2010). While there have been numerous relevant, culturally sensitive and constructive research outcomes that have occurred within Indigenous research in Canada, those instances are “are certainly outweighed by the “bad stories”” (Castledon et al. 2012, p.160). Research fundamentally structured as being on Indigenous communities rather than conceptualized as research with Indigenous communities has greatly and significantly harmed many communities and its individual
community members (Smith 1999). For instance, “research has often been undertaken by “parachute” researchers who collect data at a time of their choosing (also read as a time of convenience to the researcher) and exit as quickly as they appear with little or no communication before, during or after the study (Castledon 2012, p.160). The result of cultivating research relationships based upon “the researcher” and “the research subject” (Indigenous communities) is that colonial power disparities are replicated within research methodologies, and the welfare of Indigenous communities suffers in innumerable ways. The Canadian Tricouncil was urged by the research community and Indigenous leaders to address the fact that research in Canada was predominantly on Indigenous people rather than created in collaboration with Indigenous communities\textsuperscript{13}. As a means of addressing this problem, standards for work with aboriginal\textsuperscript{14} people were created across all three arms of the Tricouncil (SSHRC, NSERC, CIHR). The principles very closely align with the core epistemological concerns of CBR: that Community-based, participatory research be conducted with communities; that ideally communities would approach researchers, rather than researchers approaching communities; that communities be involved in all aspects of research from research design, to methodology to publication and dissemination; and, that the community and the researcher own the results of the research together (Castledon 2012).

CBPR approaches “differ from others in that they attempt to equitably involve community partners in research, draw on their knowledge and experience, share decision making responsibilities and build community capacity” (Castledon et al., 2012, p.164).

\textsuperscript{13} The process of creating the 2010 guidelines for work with “aboriginal” people has a long history that began in 1982 (see Castledon et al 2012).
Minkler and Wallerstein (2008) have argued that CBPR should have as one of its goals the development of theories and epistemological frameworks that are culturally relevant and sensitive to the community (Minkler & Wallerstein 2008). The identified and created research frameworks should also be created in collaboration with the research participants in order to identify “the most effective ways to answer particular research questions” (Castledon et al., 2008, p.165). A CBPR approach was chosen to inform the epistemological framework of this dissertation because a CBPR approach could effectively work as a decolonizing research method. Early in our research relationship, it was understood that a research framework that recognized and worked to “equalize power differences, build trust and create a sense of ownership in an effort to bring about social change” was necessary (Castledon et al., 2008, p.165).

Clint and I have worked hard together to ensure that as my research partner, his goals and ideas have guided the design, implementation, and outcomes of this research project. What might be surprising to some readers, is that our community-based approach is really based on the decision that I would work most directly with Clint, as the Supervisory of the Heritage Centre, and not the community more widely. Clint used his community network to keep the community and the Heritage Center committee informed of the project, its momentum forward, and some of the learnings that occurred as we moved forward together in this work.

We made this decision because Clint is the person who has the important and trusted relationship with the Elders that gave the interviews for the Customary Ways project. We decided early on in our research relationship, that Clint would act as the mediator of not only my learning, as a non-Indigenous research partner, but also, Clint
would be the knowledge holder and person who would keep members of the community informed about the progress we were making on this project.

We applied for research ethics to do this work together, to the Walpole Island research and ethics committee (as well as my university REB), which granted me access to the Customary Ways dataset. I would be using the interviews as secondary data, because I did not collect the original interviews, but I would become part of the Customary Ways project as I would be working with Clint to think about how to answer a key set of questions Clint had about these interviews. In part this sense-making was a response to the distress some Elders had voiced, that they did not feel that the knowledge they had shared in their Customary Ways interviews had been heard! That is, some of the Elders who had given interviews in the 2010 data collection, did not want to participate in further research, until they were satisfied that the stories they had told, and knowledge they had shared, had been listened to, and taken back up in the community.

This dissertation’s overarching question is: How do the Elders of Walpole Island describe their relationship to the land? This dissertation will utilize the methods described in this section (2.2.3) to answer this question in five distinct ways, all co-developed with Clint Jacobs. Clint was very clear that the outcome of this dissertation needed to be useful in identifying the types and ways in which Elder’s described their relationship to the land, and how the community could continue to learn from this knowledge. As a result, we approached answering this guiding question by:

1) First, this dissertation will illustrate how Elder relationships to the land are created through a practice of listening to the land. Clint felt this was an important outcome for the community as this description could further the Heritage Centre’s work of Indigenous Knowledge resurgence. Clint had been developing programmes to
support community members to increase the time they spent on the land, at Walpole, and he felt answers to this question could further this work.

2) Second, this dissertation will seek to understand if there is a relationship between listening and storytelling within the Customary Ways dataset. Clint had suspected that some of the knowledge Elders were sharing in the Customary Ways interviews were linked to the Creation stories about rocks/water; plants; animals and people. He taught me that an important outcome of this dissertation and project could be a demonstration, for the community, about how the traditional teachings in the Creation stories were alive, and continuously used by Elders as the means by which they described their relationship to the land.

3) Third, this dissertation will demonstrate a methodological innovation through the use of storytelling as a means of building an ethical space from which Clint Jacobs and I approached this research. Early in this project, Clint and I recognized that as a white settler scholar, I would need to create a process through which I would become a continuous learner, in order to A) decolonize, disrupt, and identify my colonial privilege and power. B) I would need to take what I learned about the ways in which my colonial positionality created barriers and interruptions in my capacity to listen to the knowledge shared by the Elders, and to do so, I would need to engage in a process of coming to listen, guided by Clint, through an Anishinaabe listening framework.

4) Fourth, this research will illustrate how the use of Natural Language Processing can be used as a means of understanding if the stories Elders tell in the Customary Ways dataset are interconnected at the community level, and if they are, do they form a story network, rather than individual and isolated stories? This use of
method was important to Clint, as it would help us answer an outstanding question he had about the Elder interviews: were there distinct patterns and descriptions about Indigenous Knowledge, ethics and practice that we could see being repeated across the entire dataset? And if so, could we visually map the ways in which the Elder’s stories were functioning as an interconnected network?

5) And fifth, this dissertation will propose that as researchers, we must recognize that when listening to stories, and the ways in which they carry knowledge, one must be mindful of the means (or form)- the shapes stories take on; the decisions of the storyteller in shaping the story- as much as the fact that we must be mindful of what knowledge is carried in that form (the story). Thus, we must begin to recognize stories are both the form of, and the subjects of Indigenous Knowledge.

Clint was hopeful that this outcome might be useful in building capacity in future settler scholars, but also, that in the future, the Heritage Center could use what we learned from this process of research engagement and apply these methods to future projects that the Heritage Centre might engage in with settler scholars.

Clint was very clear that he did not want me to produce a thesis that would sit on the shelves of the Heritage Centre. He wanted me to think about how I could share what I had learned, which is another reason we have used storytelling as part of our methodology. The stories, and story maps (section 3.1.2) you find in this dissertation will be recorded and will be hosted on the website of the Heritage Centre as part of the ways in which we will disseminate the knowledge we have gained through listening to, and making sense of the stories the Elders have shared in the Customary Ways dataset. Some of these stories have also been shared by Clint at Walpole, and with the Heritage Centre.
During the duration of the time Clint and I have been working together, over the past 6 years, he has asked me to write updates on the research, that he could share with community members through the Heritage Newsletter. Clint has also kept community members informed through his knowledge sharing and storytelling in community.

An important aspect of community-based participatory research, and decolonizing practices for settler scholars (Datta 2015, 2017, Tuck & Yang 2012) is a conscious effort to build capacity in the community throughout the research process.

My involvement in this research project was predicated on the fact that the original Customary Ways project became stalled because of a lack of funding. This lack of funding is a far too frequent issue that occurs in Indigenous communities across Canada. This lack of funding often requires Indigenous leaders in community to have to reach outside of the community for support to complete projects that were not funded to completion.

Clint and I recognized that because I was a part-time student, I would most likely not have the time to mentor, or support a broad team-based approach to this project. We recognized, though, that as a support person, I could provide Clint support to finalize the Customary Ways project, guided by his thinking and goals for the project. We also recognized that I had a set of skills I could share, in order to support the community in growing their capacity to secure grant funding.

At the time that I began my research relationship with Clint, I worked in the research office of Western. In this role I mentored and worked on large-scale research grants across disciplines. Based on this skill-set, Clint and I designed a series of grant workshops for the community, where I met with community members at Walpole, who had the goal of writing and securing grant funding. Sometimes these were community
members who wanted to revitalize Indigenous Knowledge, by teaching and supporting
the generational exchange of knowledge through ceremony; beading; moccasin making;
and food preparation.

Sometimes these were community members who wanted to protect the land,
though environmental restoration. And, sometimes these were community members who
held positions within community services (such as the healthcare and childcare centre)
who needed grant funding to support or grow community-based programmes. The
capacity building was successful, and many of the community grants were funded.

Another way in which I supported capacity building through grant writing, was
working, over the last 6 years, directly with the Heritage Centre staff to write, and review
grants that they had identified as being essential to new initiatives and programmes they
wanted to pursue. I also worked with the team in reading research proposals that were
sent to them for review, where there was an ask for a member of the team to be part of
external research. We reviewed the grants together, and read for possible issues related to
how the project would be co-created; how the data would be stored and who would have
access to the data; how the data would be shared with the community, and importantly
how would the Heritage Centre and the community benefit form the research. I was not a
decision-maker: I was a knowledge supporter, sharing my skills of reading research
contracts and grants. I was able to work in a supportive capacity, sharing the knowledge I
had about research ethics and partnered research, to highlight any areas that might be
useful for the Heritage Centre team to ask questions about, so that they were confident
they were entering into research relationships “in a good way.”

The other major way I have worked to increase the capacity of the community,
and the Indigenous student community of Western, was by co-designing the Head &
Heart Programme for Indigenous Student research. The idea for this programme is directly related to my experience of working through the building and practicing of my own decolonial practice as a researcher.

Briefly, the Head & Heart Indigenous Research Fellowship programme offers Indigenous undergraduate and graduate students of Western University the opportunity to engage in a hands-on research experience from a multitude of disciplines. Rooted in Indigenous pedagogy, the fellowship aims to nurture new Indigenous scholars through research work as well as professional development, which is supported through a weekly co-curricular session that fellows attend as they work through their research projects.

In partnership with Indigenous and allied faculty members from all Faculties at Western – Social Science, Education, Arts & Humanities, Information Media Studies, Music, Law, Science, Health Sciences, Engineering, Ivey Business School and the Schulich School of Medicine & Dentistry – Indigenous students will be awarded a fellowship to complete 10 weeks of research on a topic of their interest that will be guided alongside a designated faculty supervisor. The programme is in its fourth year, and continues to grow and expand under the leadership of the Office of Indigenous Initiatives at Western. I have been fortunate to act as a mentor and a research guide for the past three summers, and each time I engage in this capacity building, I am struck by as much as capacity is built in the students I work with, I learn as much, if not more, by witnessing how they approach their research questions; how they think about what Indigenous

15 https://indigenous.uwo.ca/research/head-heart-program.html
epistemologies they will incorporate into their work, and importantly the brilliant and innovative ways the knowledge they produce is expressed.

**Story no 13: Listening to what the plants have to say**

One early summer day I was mowing my lawn and cleaning up my flower beds, which I had neglected because I am not a very good gardener. I love plants and have more house plants than anyone I know. Each of my house plants is dear to me; I talk to them I can tell that they are getting thirsty before they begin to wilt. It would not be an understatement to say that I love my house plants. This affection, however, has not translated to the plants outside my house, that is until I met a very earnest tomato plant.

You see, as I was “cleaning” - in a very Western European way- my garden beds, mostly inspired by the leering eyes of my neighbours, who were not very happy with my rather unkempt flower beds, inherited from the previous owner. And as I was cleaning and cleaning the flower beds, I found a tomato living plant under the cedar bush that runs along the length of the front lawn.

I actually found this tomato plant because I smelled it; that deeply aromatic and earthy smell the leaves give off if they are broken or crushed. It is, to me, an unmistakeable smell, one I came to know sitting in my grandmother’s garden. My grandmother loved tomatoes and grew all sorts. Cherry tomatoes, beefstake tomatoes; plum tomatoes. She would grow them every year, and when I visited her, I would help her tend to her tomatoes. She would often break the leaves and smell them, and this is where I learned the smell of tomatoes. And to this day I cannot smell a tomato without thinking of my Memere, and the hours we would spend in her garden. I can even conjure the image of the bright blue bucket that she had fashioned to cover the bottom of her prized cherry tomatoes. We would pick the tomatoes and eat them straight off of the vines- sometimes adding a dash of salt, “to bring the sweetness out,” she would always say.

So, on that summer day, when I smelled that unmistakeable smell, I knew that there must be a tomato plant somewhere, but to my amusement, I thought, “but I haven’t planted any tomato plants.”

I retraced my steps, and sure enough, there under the cedar row, was a beautiful and well rooted tomato plant. It had found its place just under the shade of the cedar, but not so shaded that it missed the warmth of the sun. The cedar boughs were protecting the plant from busy birds and the family of rabbits that had built a burrow under the boxwoods in the front flower bed. And,
the cedar also seemed to be protecting the plant from any insects that might want to snack on its beautiful leaves or fruit.

My first impulse was to pull the plant out, because my goal that afternoon was to “clean” my garden up. But I just couldn’t do it. I sat on the ground and I looked at the little tomato plant, and I laughed mostly out of pure joy! What a delightful situation, a tomato seed had made its way to my garden and was placed under the beautiful cedar row. I began to count, like I did with my Memere, how many little yellow flowers there were on the plant; then I broke the leaves, out of memory, just like she had taught me. The smell was strong, and she always said that meant the plant was happy.

Every day, when I arrived home from work I would check on this little tomato plant, which was growing to become quite a large tomato plant. The little yellow flowers were, over the weeks, developing into green fruits. And slowly the green fruits were developing into beautiful orange, then bright red fruits! And to my excitement this plant produced over 35 small tomatoes. I enjoyed each and every one. Sometimes straight off the vine, with a dash of salt.

When the fall came, and it was time to rake up the fall leaves, I found the withered tomato plant under the cedar. I cut the plant back and thanked it for choosing to root itself where it did, for the fruits it bore, and the joy it gave. This little tomato plant taught me that plants have wisdom too, that they know where to be rooted, and that if we let them, by learning to listen to them, plants will teach us so many lessons about being of the land.

b) Listening tool no.2: Grounded Theory, Story Mapping and Close Reading

We have chosen a grounded theory approach to frame part of the qualitative analysis, because of the underlying premise, that grounded theory is a “logical set of data collected and analytic procedures aimed to develop theory” (Charmaz 2006, 2004, p.145). Clint and I decided that because one of our aims was to discover and draw out, how Elders described their relationship to the land, we needed to use a method that might allow us to understand if there were patterns in both the structural and content choices Elders were using to describe their relationship to the land. The ability to understand different categories of knowledge, and the ways in which this knowledge interconnects
would be essential for this task (Charmaz 2006, 2004). As such, we did not want to begin our process of making sense of the data with a preconceived idea of what these categories might be, or where the points of connections in these categories might occur. (Charmaz, 2006, 2004). For this reason, we felt that because grounded theory moves from data to theory, rather than from theory to data, that this approach offered us a sound method to begin our sense-making process.

The first step in the data analysis occurred when I listened to the 50 interviews and coded them to understand the ways in which Elders were talking about their relationship to the land. To code the interviews, I drew on work from Aronson and Charmaz (constant comparative models and grounded theory) in order to thematically code the interview data allowing me to draw out recurrent themes that began to tell a coherent story about the dataset in its entirety. I did not collect the original interviews, and therefore part of this dissertation is based on secondary use of qualitative data. Over the course of the analysis of the stories, Clint and I worked back and forth, discussing the categories that were emerging; what I was hearing and how I was learning to listen, and importantly, the story that was emerging from this listening that I would begin to tell as my dissertation. Clint also worked to keep the community updated on the process of listening and analysing the Customary Ways interviews by publishing short updates in the Heritage Centre newsletter.

This grounded theory approach should be considered to be modified to include stories as a legitimate form of data, as this dissertation understands the interviews gathered through the Customary Ways project to contain stories. Building on the work of Leanne Simpson (2011, 2020), John Borrows (2010) Margaret Kovach (2009), and JoAnn Archibald (2008) the theoretical framework of this dissertation identifies storytelling.

As a result, we also needed to utilize story mapping as a means of trying to literally map out the component parts of the stories that Elders were telling about their relationships to the land. In order to construct the story maps, we took the major emergent narrative themes from our grounded theory analysis, and then, using an applied network theory approach, literally mapped the themes and connections that Elders used to weave their stories together.

Building on the story mapping, we also included a close reading of the stories, as a means of better understanding the relationships between the patterns that were emerging from the grounded theory approach and story mapping. As the literature review demonstrates, storytelling is an important feature of Indigenous knowledge systems, and as such, Clint and I decided we needed to better understand the ways in which Elders were telling, or creating their stories. Close reading is a technique borrowed from the Humanities, and allows a reader to really focus on the relationships between structure and meaning in stories, as distinct choices made by the storyteller.

Building on the work of Johnston (2013, 2011), Doerfler, Sinclair & Stark (2013) and in particular the work of Margaret Noodin (2013) and (Garoutte & Westcott, 2013) Clint described to me that a significant outcome of this work for the community and the Heritage Center would be if we could demonstrate (visually and schematically) what Indigenous knowledge does; that is what do stories do (Garoutte & Westcott, 2013)? That is, could we develop a series of scaffolded methods that not only allowed us to uncover the building blocks, or as Heid Enrich describes the “landmarks” embedded in Indigenous
knowledge at the level of each story contained within the Elder interviews, but could we also endeavor to understand if these “landmarks” are repeated across the entire large Customary Ways dataset?

Story 14: Love, it makes a sound you can hear

There is a place I have come to know, where I can hear love. It echoes through the air, and dances in and amongst the branches of the cedar and fir trees and is made tangible in the smooth rocks that line its shores. This place I have come to know has taught me to listen for love; and through this practice of listening I have learned to balance the hopefulness of my heart, with the patience that love requires to grow, and flourish and sing its most beautiful songs.

One fall, I needed a great lesson about love. I was heartbroken. I had recently felt a deep loss of love and was in the midst of learning to walk with a heavy heart. It was nearing the fall solstice, and I found myself on the shores of the great Naadowewi-gichigami. I thought these great waters might take my tears, and help my heart feel lighter. So, I went to the shore, sat on a rock, and dipped my feet into her cooling waters and cried. And cried. And cried. I cried all of the tears I thought I had. I looked at the particularly still waters, and thought to myself “yes, my tears will meet these waters, and I will feel lighter.” But the great waters had another idea.

All of a sudden from the glass still water a wave appeared and broke on the rock I was sitting on. I was soaked! And, just as quickly as the wave appeared, the waters returned to their stillness once more. I looked around to see if anyone had seen this incredible sight; but I was alone and soaking wet. I burst out laughing, wiping the water from my face and eyes, thinking about the event that had just transpired. And, as I sat there, I began to listen to the water. I became mesmerised by sounds that I could hear. Even in the water’s seeming stillness, there was motion. There was a gentle rhythm to the way the water was moving, making room for the rocks, for the plants and the animals at the shore; for my feet.

I thanked the water for making room for me, and for sending my tears back to me, because in that moment, when the wave crashed on me, I realised the waters were not simply a great vast place to send my tears and sorrow, to leave my heartbreak and walk away. The waters were alive, and moving, and did not need my unwanted tears. The waters could not hold this sorrow, as if it were an empty unfeeling vastness, disconnected from my own heart. But the waters could, if I learned to listen, teach me how to move forward carrying my tears.
The next day, I awoke early and decided to go for a long walk along the shores of Naadowewi-gichigami. It was a beautiful day for the solstice, the sun was bright and high; the sky was blue and speckled with white clouds, and in that moment, I was overcome by how gently the sky holds the sun. I set out on my walk. The particular shore that I have come to know is covered with rocks that the great waters have moved and shaped over many seasons. Some are quite large and require an effort to scale; others are small and delicate and can be held in one’s hand.

On this particular walk, I began to listen. I could hear the waters dance in and amongst the rocks, rhythmically wrapping itself around, under and over the smooth surface of the rocks. I could hear the bird songs shift and change with the wind. The trees swayed and beckoned in their own rhythm, as the last butterflies of the season skipped across the water and late summer daisies. As I walked, I started to really watch the rocks beneath my feet, and I began to recognize in their soft and smooth edges, shapes that resembled hearts. I smiled, and took a deep breath, knowing somehow that these small hearts guiding my walk would teach me to carry my own heart.

After a few hours of walking, I sat on a beautiful large rock at the shore’s edge. As I sat, I just watched and listened to all of the activity that surrounded me. And I began to notice something: there was rhythm all around me. The waters moved in a rhythm; the clouds; the butterflies; the birds; the trees; they all had a rhythm to their movement. And in that moment, I had a deep realisation: that we all have a rhythm. That we are all connected by this rhythm. And so, I closed my eyes and listened to the rhythm of my own heart. Softly at first, I could hear it beating deep inside my chest. As I listened, its rhythm grew in strength, until finally it blended into the rhythm of everything that surrounded me, softly blending into this great rhythm until I could no longer hear my heart as separate from the waters or the trees or the birds or the insects.

I let the moment wash over me, and when it had passed, I rose, and began my walk home. As I was nearing home, I began letting my fingers trace the rocks that surrounded my path, and as I did, my hand brushed over the most beautiful rock, and my eyes found the most exquisite sight. In the dark rock, there was a perfect red heart made by a pink quartz rock. And in that moment, I knew that I had been forever changed; that I had learned something very powerful by learning to listen to the rhythm that not only surrounded me, but that I was part of. I had learned to listen to love. The love that is held deeply within all of creation. The love that is held deeply within me. That love is a rhythm too; it ebbs and flows; it changes its shape across and over time, sometimes it has a heavy rhythm that is hard to hold; sometimes it is light and hopeful; sometimes love’s rhythm is full of sorrow, and other times it moves as joy.
On that fall solstice, I learned that if you let yourself become still, you will find love, deeply held, ready to be heard and felt in everything. And the story you learn to tell about this love, by listening to it, is a story about how love draws and connects everything together, and whatever love’s rhythm might be, patience and trust is what you need to hold it, and to hear it.

c) Listening tool no.3: Natural Language Processing

We have used Natural Language Processing (NLP) as an innovative means of coding and making sense of the large amount of data we are working with n= 50 interviews that are on average 2hrs in length; creating a dataset with 335,329 words. We are deploying NLP as a tool to enrich and expand our grounded theory approach, story mapping and close reading to coding and making sense of the Elder interviews that comprise the Customary Ways dataset. Thus, we are employing a mixed-methods approach for the analysis of this very large and complex dataset, and to the best of my knowledge this is the first instance of utilizing grounded theory and NLP in the context of a qualitative dissertation within the field of Indigenous Geography.

Natural language processing (NLP) is a subfield of linguistics, computer science, and artificial intelligence that has as its main focus been “concerned with the interactions between computers and human language, in particular how to program computers to process and analyze large amounts of natural language data”. The goal is a computer capable of "understanding" the contents of documents, including the contextual nuances of the language within them. The technology can then accurately extract information and

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16 natural language or ordinary language is any language that has evolved naturally in humans through use and repetition without conscious planning or premeditation. Natural languages can take different forms, such as speech or signing. They are distinguished from constructed and formal languages such as those used to program computers or to study logic. https://en.wikipedia.org/wiki/Natural_language

17 https://en.wikipedia.org/wiki/Natural_language_processing
insights contained in the documents as well as categorize and organize the documents themselves.

NLP has been taken up in the field of the Digital Humanities, and has been applied in many different contexts as a means for humanists to better understand the relationships and patterns that emerge from how people speak and write in large corpora of text. NLP has supported advances in the Digital Humanities by supporting researchers to uncover cultural networks (Suarez, 2015); genre patterns in story, novel and history (Piper, 2014); new ways of approaching and reading text, that consider the discursive subjectivities of the reader, for instance the development of “distant reading” (Morretti, 2000, Underwood 2017, 2018).

NLP has also been integrated into the daily lives and choices we make through mobile devices, AI algorithms and simple desktop computers. The technology, as it is applied in the Digital Humanities and in this dissertation is not novel, in and of itself. The NLP techniques applied in this dissertation are used as complementary methods and techniques that are used to help learn from, and make sense of the ways in which the Elders describe their relationship to the land of Walpole Island.

Clint had determined that an outcome of the research project that would benefit the community would be a deeper understanding, and visual representation, of the patterns that emerged between interviews, and the knowledge contained in these interviews. That is, Clint suspected that within each interview, and across interviews,

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18 Distance reading is an approach to understanding textual production at the opposite scale of close reading. Where close reading looks intimately at the connection between an author or storyteller’s word choices and semantic patterns, within the bounds of a single text and arguably at the scale of minutes of time; distant reading uses NLP as a means by which scholars can read across texts, uncovering semantic patterns, word choices, and structural textual choices made by storytellers and authors at the time-scale of history, that is across years, decades and centuries of human cultural production. (Underwood, 2018; 2017).
there might be repetition of knowledge, practice and ethics related to the Anishinaabe Creation stories about the rocks/water; plants; animals and people.

As such, in my role as a resource person, I worked with Clint to build a series of listening methods that combined different techniques across the scales of the Customary Ways dataset. That is, our scaffolded methods approached the Customary Ways dataset from the scale of individual words; structural story patterns; and eventually the scale of the entire corpus to understand how the interviews and Elder stories might be connected as a network of stories. We used grounded theory (which would allow us to uncover and piece together patterns that emerged from the Elder interview structures) with techniques from the Humanities (like story mapping and close reading) at the scale of individual interview. We then deployed NLP techniques at the scale of the corpora (the entire Customary Ways dataset) in order to better understand the Customary Ways dataset as an entity, understanding the ways in which patterns from the individual scale might be working at the scale of the entire dataset. We could use NLP in complementary ways to grounded theory, close reading and story mapping, as a means of establishing if the patterns we were hearing in the individual interviews, were being expressed across the dataset.

How then does NLP work? NLP is a computational approach to textual analysis (Jurafsky & Martin, 2009) that is “theoretically motivated [by a wide] range of computational techniques for analyzing and representing naturally occurring texts at one or more levels of linguistic analysis for the purpose of achieving human-like language processing for a range of tasks or applications” (Crowston et al. 2012, p.524). As Mark Steedman noted in his ACL Presidential address, “human knowledge is expressed in language. So computational linguistics is very important” as a tool to make sense of
what people say, and how what they say relates to their knowledge (Steedman, ACL Presidential Address 2007\textsuperscript{19}).

NLP works very effectively to help make-sense of large datasets because the researcher or research team is able to understand the content of the data-set from the ground-up. That is, NLP can be understood as a memory tool: we can start to build out and map the ways in which patterns of concepts within the data start to develop meaning within the datasets, from the data up, using precision in coding that is not possible for human beings. NLP utilises algorithmic rules applied to text ensuring uniformly applied coding across large datasets. NLP also allows researchers to understand the data through different data units, which ultimately allows researchers to empirically test the theories that have emerged from the listening, reading and coding of the data through more traditional approaches to qualitative research, such as a grounded theory approach.

NLP also allows for the creation of visualizations to be produced by deploying network theory on the entities extracted through different NLP techniques, which is another means of unearthing connections within the dataset that the researcher is working to understand.

The use of NLP might also provide Qualitative Methods with an answer to its long grappled with problem of trying to substantiate what would be considered rigour within social scientific methods (Baxter & Eyles 1996). As Baxter and Eyles demonstrate in their seminal article about rigour in qualitative methods, qualitative researchers have spent more time thinking about, and excluding ways in which their research should \textit{not be} evaluated, rather than spending time thinking about how to substantiate rigour in

\footnote{19 https://plato.stanford.edu/entries/computational-linguistics/}
qualitative methods. In response to persistent calls from quantitative researchers, asking for demonstrations of objectivity and reproducibility within qualitative research methods, qualitative researchers have spent time trying to substantiate either reasons why this rigour is not necessary, or they have spent considerable time trying to apply basic statistics to their work (Baxter & Eyles 1996). The problem with applying basic statistics to qualitative data sets, is that historically, qualitative datasets are very small, with constrained sample sizes. Thus, statistical analysis is not a very well applied tool to add rigour to qualitative methods when sample size is small as number does not reveal any statistically relevant patterns when sampling is so limited.

Yin argues that qualitative research is often described as lacking the rigour of positivist quantitative studies because of what he identifies as qualitative methods inherent “subjectivity and its dependence on an investigator’s own style of rigorous empirical thinking” (Yin 2009, p.127). As Baxter and Eyles describe, qualitative researchers have spent the majority of their time defending themselves against this charge, rather than working to elucidate the ways in which qualitative methods themselves can carry rigour (Baxter and Eyles 1996). Qualitative methods have for the last 20 years vigorously argued about its inherent value as a means of understanding social processes, yet the scale at which social processes are understood have remained relatively constrained. One of the limitations that qualitative methods experiences is a lack of rigour- or standardization- which is exacerbated by small sample sizes.

Over the last 15 years, in response to the growing pressure felt by qualitative researchers “a number of software applications” have been created to make “the often-copious amount of data more manageable for the analyst” (Tierney 2012, p.174). What is important to address though, is the majority of these software packages are “mostly
assistive, tracking the assignation of codes and categories to specific entities in the data” and are entirely “dependent on the inferential capabilities of the researcher-analyst” (Tierney 2012, p.174).

Thus, many qualitative researchers have tried to claim an increase in rigour to their coding of data based on the use of these software packages, like Nvivo, when in reality, these software packages simply replicate the same methodological issues regarding the subjectivity of the researcher, and her level of rigour with respect to the reproducibility, reliability and consistency of coding applied to the dataset. Most qualitative data analysis software packages only track the manual conceptualizations and categorization performed by the researcher; they do not assist with the conceptualization process itself (Tierney 2012).

For example, Nvivo takes the researcher’s subjective understanding or coding of the dataset, and then uses that conceptualization as the framework through which the data is sorted. This works very well, if the researcher wants to simply organize their data based on their own subjective understanding of the emergent themes in the data but does nothing to substantiate any real rigour in the analysis of the data because the codification used by the software is only as rigorous as the researcher was when they created the code, or theme from their analysis of the data. Traditional qualitative software merely allows the researcher to create a database, constructed by their own codes or emergent themes, and then allows the researcher to query their data based on these entities. What these assistive programmes cannot do, is draw out emergent patterns or meaning not ascribed by the researcher.

NLP is able to draw out and identify emergent patterns within datasets, because NLP is based on machine learning, which works from the data up, not requiring codes or
categories created by the researcher to make sense of the data. With advances in NLP, we are at a precipice where we might actually be able to create methods that utilize the power of NLP as a tool. Some of the advances we can make within qualitative research methods by using NLP are the significant expanse of sample sizes, and a substantial increase in the rigour associated with building and applying codes, through the use of the advanced analytic capabilities of NLP. Unfortunately, even with for example, Nvivo, human coding of data is tedious and very difficult for humans to do at scale, which is a major factor for constraining sample size within qualitative research. Large data sets “require considerable manual effort to analyze as researchers read and reread the data to locate evidence to support or refute their theories” (Crowston 2010, p.526). NLP has the capacity to reliably code data at scale, and arguably gets more precise as the scale and amount of data increases, because NLP works much the same way human experience (or what we call “lived experience”) works.

The philosopher of language, Donald Davidson, argues that human communication and learning is based on what he calls a prior theory (Davidson 2002). In essence, prior theory is the total combination, and combinatorial effect, of all of the propositional content one has been exposed to over their lifetime. Propositional content, in a social science context, can be best described as lived experience- so one’s prior theory is constructed based on all of the experiences one has had over a lifetime. As we grow, become more curious and are exposed to more experiences, our lived experience deepens and is enriched, challenged, and through this process becomes more complex and interconnected.

NLP works in very similar ways to Davidson’s theory of language and communication- NLP learns and acquires a prior theory based on the data it exposed to;
in this case, the data that NLP is exposed to is analogous to the propositional content or lived experience that makes up a human being’s prior theory. The more data NLP is exposed to, and the larger the scale of the data, the more attuned NLP becomes at detecting patterns and themes within the dataset, just as the more experience or information a human being is exposed to, the more, broad and complex their lived experience becomes. And, the more dynamic, and rich a human being’s knowledge base is, the more skilled they become at making interconnections between ideas, and experiences in their lives.

Thus, using NLP has the capacity to allow qualitative research to not only expand sample size, and approach what might be even population level dynamics, if not at least community level dynamics, but also allows the coding of data with reliability, at a scale never before thought possible within the context of qualitative methods, because qualitative methods has been constrained by human scale, and the human scale ability to interpret; experience; analyse; find and code patterns in rich and complex datasets.

If the researcher begins to find patterns in the data, but the data set is large (50 interviews) NLP can be used to code across the dataset with reliability in a way that a human would never be able to do. So, in essence the researcher uses NLP to substantiate very standard qualitative methods at an advanced scale.

So then, what is the best way to use NLP in qualitative methods? Within my dissertation I have decided to use NLP to cross check themes and ideas that I found emerging from across a subset of the dataset. By querying a subset of interviews (the 13 interviews of 50 with the highest saturation of coded stories) I was able to code emergent themes. I was then able to empirically test these emergent themes by utilizing NLP across the entirety of the dataset to see if my theories were met out across the entirety of the
dataset. That is, I was able to use NLP techniques to find patterns in the data from the ground up studying the ways in which semantic entities like single words, or multiple entities (like bigrams or trigrams) emerged across the entire dataset. I was also able to find patterns in actual word use, for instance, how much of the dataset were verbs, verses nouns or adjectives? What was the frequency in the use of these parts of speech? And how many unique words occurred across the entire dataset in comparison to the total number of words used? What is included and what is excluded from speech tells us a lot about how participants view their relationship to a given topic or circumstance. Yet, human beings do not have the capacity to find these types of patterns across the scale of data that makes up the dataset for my dissertation (335,329 words).

All of these different patterns combine to tell us very important information about the way in which language is used by the storyteller to build narratives. By understanding the 50 interviews in their entirety, I was also able to begin to understand how the stories were interconnected and what their relationship was to one another.

NLP can be utilized to engage in “successively higher levels of linguistic processing,” which ultimately reflects the analysis of “larger units of analysis, as well as increasing linguistic complexity and difficulty in processing” (Crowston et al. 2012, p.526). Crowston argues that the “larger the unit of analysis becomes- i.e., from morpheme (a piece of a word, such as a prefix or suffix) to a word or sentence to paragraph to full document- the greater the potential subtlety in meaning” that emerges through the NLP.

Methodologically, I have consciously chosen to deploy NLP along with qualitative approaches to analyzing the dataset because one of the objectives of this thesis is to understand if these Elder stories can be understood as network of Anishinaabe
knowledge stories in an empirical sense. In order to grapple with the complexity of the interconnectedness of the categories of meaning contained within the interviews, and to understand how these categories of meaning interconnect to possibly build a network of stories, NLP needed to be used because of its capacity to create advanced visualization and mapping of the ways in which meaning is carried across the interview set and between knowledge categories, and stories. Using only a grounded theory approach would never have allowed for the data to be interrogated as a network of knowledge stories.

A key aspect of what we can study using NLP is a network analysis. In its most basic form, a network is a set of two nodes and the connection or connections between these nodes where information travels. To understand nodes and their interconnections, we need to understand the concept of modularity. Modularity is an important term with respect to understanding how we might graph, and then map the internal relationships between words in the Customary Ways corpus.

Modularity is one way to measure the structure of networks or graphs. Modularity was designed in order to measure the strength of divisions within a network into what are called modules (modules may also be called groups, clusters or communities). So then, what are the attributes of a network that expresses a high degree of modularity? These types of networks have very dense connections between the identified nodes within groups but express very sparse connections between nodes in different modules. In the case of the Customary Ways Corpus, the nodes represent the words used by the Elders to construct their stories. And the connections between these nodes represent how frequently those words appear together in the same, or similar semantic contexts. That is, modules in
the context of the Customary Ways corpus, are sets of words that appear together to talk about or describe similar concepts or ideas.

Using traditional approaches to data coding, and analysis, (for instance using NVivo) would have constrained the data to static knowledge categories, not unlike the ways in which Indigenous Knowledge has been described in the literature to date. In order to advance descriptions of Indigenous Knowledge to be understood as a network of knowledge stories, advanced AI techniques needed to be deployed in order to understand the dynamic and interconnected nature of the emergent themes and knowledge categories contained within the interviews, thus allowing us to begin to describe an emergent network of Anishinaabe stories.
3.0 CHAPTER 3: RESULTS: Coming to understand Bizindamaang

So, where and how did I begin to analyse the Customary Ways Interviews data? Early on in the analysis process, after I had listened to the 50 interviews many times (many times while walking in the woods, listening to the interviews as I wandered) I began to recognize that some of the interviews contained sections that, through conversations with Clint, I began to understand were stories, rather than interviews. So, first, working with Clint, through multiple discussions, conversations and emails, I decided I needed to design a mixed-methods approach in order to answer four fundamental questions that this dissertation asks of the Customary Ways dataset:

1a) How do we define a story for the purposes of this dissertation? How do we know we are listening to stories in the Customary Ways dataset?

1b) Are there emergent story categories and patterns that Elders use to construct the stories that describe their relationships to the land in the Customary Ways dataset?

2) What type(s) of knowledge is contained within these Elder stories in the Customary Ways Dataset? Is there a relationship between the types of knowledge contained in a story and its structure?

3) Within the Customary Ways dataset, are the Elders telling interconnected stories, or are these stories isolated from one another? Do these stories work together at a community level, and not just at the level of the storyteller?

In order to get at answering these three questions, I have embarked on a mix-methods analysis that combines grounded theory; story mapping, and Natural Language processing.

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Bizindamaang is the Anishinaabe concept of listening.
in order to establish the various and complex ways in which Elder’s describe their relationships to the land.

I made this methodological decision because this mixed-methods approach using grounded theory, story mapping, and NLP requires that I deeply understand a portion of the dataset, in order to establish emergent themes that I can then test and compare to the themes extracted from the entire dataset using various NLP approaches.

Because the dataset of interviews is so large: n=50 interviews, with a total word count of 335,329 words, I would not have been able to practically code, using grounded theory, and story mapping, all of these interviews, with the rigor needed to attain coherent themes using a constant comparative approach.

I did however listen to all 50 interviews (multiple times over the course of 6 years. On average, I logged at least 3 full listenings of each interview), and from my listening, I anecdotally began to notice a great repetition of story form, and themes across the dataset related to how Elders described their relationship to the land. Once I realized that both content and story form were being repeated, I knew that I needed to expand my thematic coding to also include a literal mapping of the stories that were emerging in these interviews.

It was at this point in my analysis that I decided two very important things: first that in some of the interviews, I realized that I was listening to stories and not traditional interviews; and second, that I needed to find a way to test what I had anecdotally noticed in my listening, against the entirety of the dataset using a methodological approach that could help to substantiate patterns across the 50 interviews contained within the Customary Ways dataset. After some time and research, I made the decision that I needed to learn about and deploy Natural Language Processing approaches as a means of
testing the themes I had coded from the 13 select interviews in the dataset, against the entirety of the 50 Customary Ways interviews.

This dissertation contends that NLP becomes a richer tool if used in conjunction with more traditional approaches to qualitative analysis because NLP cannot and should not be used to understand all aspects of a story. NLP is very well placed as a tool to describe patterns and to describe word use and frequency. NLP is also an excellent tool if one wants to query a large dataset of text to understand the ways in which words or clusters of words are interconnected across a contained dataset, but NLP cannot and should not be used to study narrative or story form. Thus, NLP can be used as a tool in concert with other means of analyzing and understanding large textual datasets.

Because I began to understand that in portions of the interviews, Elders were telling stories, and not giving traditional interview answers, the analysis required an approach that allowed me to understand not only the emergent themes of the identifiable stories, but also the approaches used by the Elders to construct the stories they tell. I used a constant comparative model approach that aims to understand if these knowledge stories have a distinct form or shape, that is developed by the storyteller as well as, identifying whether or not the knowledge within different stories is related to the story shape.

So then, what did I hear in the Customary Ways dataset? In order to describe what I heard I have broken the Results chapter of my dissertation into 4 distinct parts that align with the three questions I am trying to answer. Section 3.1.1, will get at answering question 1a: How do we define a story for the purposes of this dissertation? How do we know we are listening to stories in the Customary Ways dataset? As well, section 3.1.1 will answer 1b): Are there emergent story categories and patterns that Elders use to construct the stories that describe their relationships to the land in the Customary Ways
dataset? In Section 3.1.2, I describe the approach I took to understand the types of knowledge that are contained within the Elder stories within the Customary Ways project, which answers question number 2: What types of knowledge is contained within these stories? Is there a relationship between the types of knowledge contained in a story and its structure?

Section 3.1.3 describes what I was able to understand and hear about the relationships between stories, using NLP, and gets at answering question no 3: Within the Customary Ways dataset, are the Elders telling interconnected stories, or are these stories isolated from one another? Do these stories work together at a community level, and not just at the level of the storyteller? NLP allowed me to understand the ways in which the story structure, or shape, of the Elder stories were related to one another. As well, I was able to establish the relationship of the emergent themes, across the dataset, but also between stories, ultimately, being able to describe the Customary Ways dataset as a complex knowledge story network.

3.1.1 How do we know we are listening to stories in the Customary Ways dataset?

3.1.1 a): How do we define a story for the purposes of this dissertation? How do we know we are listening to stories in the Customary Ways dataset?

As I worked my way through listening to the 50 interviews contained within the Customary Ways dataset, I realized that in certain interviews Elders answered questions, not by giving conceptual answers about Indigenous Knowledge, but instead, answered the questions by telling stories. The stories they told were distinct because they detailed activity. That is, the stories were told through descriptions of doing. These stories did not contain conceptual descriptions of Indigenous Knowledge, like the descriptions found in
chart 2 of the literature review. I noticed that across the interviews there was a very big difference between how an Elder described Indigenous Knowledge depending on whether they were providing a conceptual answer, through a traditional interview response, versus telling a story.

For instance, in interview no. 28, the Elder responds to a question about Indigenous Knowledge related to how people knew when to hunt by stating:

“Everyone was free to hunt. There were not any regulations. We didn’t need to be told what to do...[There was] sharing and collaboration.”

In this response we receive descriptions about the fact there were not regulations, and the Anishinaabe value of sharing and collaboration is mentioned, but there is no description of the practice of these values, or the way in which one might approach the practice or doing of the hunting.

In interview no. 23 the Elder is asked about customary ways, and states:

“The community has moved away from the traditional ways to care for the land. We are losing resources because of this.”

“The highest value we have is working together. No one is better than anyone else. We had a tribal way of working together, [that is] the antithesis to Western hierarchy.”

Again, this Elder gives a very conceptual description of customary ways, or Indigenous Knowledge, and about the how they think about Customary Ways, but this answer does not get at how one practices customary ways and relies on a very abstract
concept of a hierarchy to describe what a “tribal way of working together” is. What is absent in this description, is the practice, or a description of the how, this “tribal way of working together, is practiced.”

In interview no. 23, the Elder, when asked about teaching children about Indigenous knowledge notes, that:

“Children were taught values, love and respect, from the 7 grandfather teachings. They were taught to listen, but now they are encouraged to express themselves. This is the opposite. Listening is a stillness and a peace, and a hyperawareness to change.”

From this answer we understand, in conceptual terms, that listening was taught, and that it has the qualities of stillness, and peace, as well as a hyperawareness to change, but we are not told how to practice these qualities within this description. In Elder interview no.12, when asked about storytelling as a Customary Way, the Elder notes:

“The concept of storytelling has gone down. Our stories were a teaching tool, they hold deep scientific knowledge about processes, like how the world interacts with itself, how people should interact with the world…we would learn from processes that happen in the environment. There is a major need to connect people to the land. The stories will come back. They must be there. We have forgotten them. We need to connect to the land to remember.”
Here again, we have a powerful conceptual description of storytelling as a vital teaching tool. As well, we understand conceptually what type of knowledge is contained within stories, but we do not hear descriptions of stories or of the type of process-based knowledge that the Elder describes in conceptual terms. Here, it is important to note that the relationship is expressed as being to the land.

If we compare these types of conceptual responses to Interview no.9, we begin to see how stories emerge as having different qualities than conceptual answers. When asked about Indigenous Knowledge, the Elder states:

“My grandmother’s log house is slowly fading away there, and sinking and starting to cave in, but we spent lots of time there as kids, you know. And that’s where I learned a lot of stories and heard a lot of the language, from my grandmother. She was fluent in Ojibway. She used to speak the Ojibway language to us all the time and we heard that a lot….There’s lots of stories, she told us lots of stories about animals... She would tell us this, all the grandkids, we would sit there in her house, and tell us that story. In Indian she would tell us who would come [to the story]. Turtles would come, they were talking, and she would call them in. She would call in all the animals. We heard lots of different stories like that. I learned the language that way. By listening to stories. But I have forgotten a lot. I know a lot of
words, but we don’t know how to connect them anymore.”

In this description, the Elder begins to form a description about a specific activity—that of listening to stories and learning Anishinaabemowin. In the description of learning to listen, we find out that engaging in the activity of storytelling was an activity that taught listening, and the learning of Anishinaabemowin. The Elder also attributes the story to a particular person, the grandmother, and begins their story by describing their grandmother’s house, ascribing the story to a very particular place on Walpole Island.

Later in interview no.9, when asked about Customary Ways, the Elder describes that:

“As kids, we had a lot more work than kids to nowadays. We had a lot of things to do. Take care of chickens, eggs and livestock. We had to go look for apples, pears and things. We knew where these trees were. They could be in the bush. They would say ‘go to the eating apple tree,’ and we knew where that was...we walked all through this bush. There was pear trees and things, back there, apples...We’d have to get nuts. Choke cherries and things. Morels in the spring and mushrooms, puffballs in the fall. There’s puffballs now, you know! All that stuff....They were always a treat to get. Because they are only one time a year. It’s a seasonal celebration.”
The Elder does not describe Customary Ways in conceptual terms, but instead, describes the activities that they engaged in, resulting in a deep understanding of the land, to the seasons, and their family’s relationship to the land as means of providing sustenance. Later in the story, the Elder attributes this activity to their mother, and to their father as their teacher of how to live sustainably on the land when they tell a story about fishing and hunting. The Elder begins to draw out connections between activities and coming to understand the land, and only taking what was necessary as a practice they learned from their father:

“We learned to only take what we needed, by foraging, and hunting. When my father hunted he would never kill a baby or a mother, but instead only a stag. You watched the babies and their mothers. We never did anything that would endanger animals...But he [Dad] wouldn’t get those kinds of fish [pregnant fish], because when they would pull in the nets, he could check them out and throw them back, and sort ‘em. They used iron hoops and cotton netting. He [Dad] made his own needles to do that. He [Dad] repaired all his nets and did all that sewing. Now they use those Gill nets, and kill the fish. The seine nets my dad used let them sort the fish. We only took what we needed.”

The Elder continued their story, and connected taking only what you need and the practice of respecting an animal and its life, when they described that:
“Now when we go to the dump, there’s more fish heads and bones and remains than garbage...and I think, that’s such a waste. I find that a waste. I mean there is a purpose for it [the fish heads and bones].”

In interview no.10, a similar pattern emerges. When asked about Indigenous Knowledge, the Elder does not conceptually describe this knowledge, but describes practicing this knowledge and the trust that is developed through this practice:

“We fished everyday. We knew where to go. Now, you need to go further out to the water to fish, we used to be able to fish right along the edge, in ditches, in the river and under the bridge. Trust is directly related to how you live.”

What became clear as I listened to the interviews, was that some interviews provided conceptual descriptions of Elder’s relationships to the land, and some interviews provided a mix of conceptual descriptions, and descriptions that were emerging as something other than traditional interview responses and were much more like stories. I then decided to code the 50 interviews to understand if I could isolate the interviews that provided conceptual responses, versus interviews that provided descriptions of a practice or activities, that told stories about being in relationship with the land that were aligned with the teachings found in the close reading of the Creation stories in the literature review of this dissertation.

Thus, for the purposes of this dissertation, we can begin to understand we are listening to a story when an Elder describes Indigenous Knowledge through descriptions of participating in an activity with the land. That is, we can begin to understand that we
are listening to a story when, through descriptions of activities, the Elder’s relationship with the land emerges. We will not consider descriptions of Indigenous Knowledge or an Elder’s relationship to the land to be a story if it is described in conceptual terms, where no activity description is invoked.

Using this working definition of how to begin to identify we are listening to a story, versus traditional, conceptual interview responses, I created the following chart to make sense of the 50 Interviews, and the number of their emergent stories:

Chart 3: Identified stories/interview

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<tr>
<th>Elder Interview no.</th>
<th>No. of distinct stories/interview</th>
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What emerges from Chart 3, is that, using the emerging definition of a story that was established by listening to the 50 interviews, and identifying the characteristics that emerged between conceptual descriptions of Indigenous knowledge, and descriptions of activities, I coded 305 stories across the Customary Ways dataset. This chart also demonstrates that all of the interviews contained at least 1 story, with the highest number of stories contained in an interview being 20. Across the Customary Ways dataset, the average number of stories/interview is 4.08.

What emerges from this analysis, is that there is a cluster of interviews (bolded in black in the chart), where the number of stories/interview is approximately double the average across all 50 interviews, with the average across this cluster of 13 interviews being 12.46 stories/interview. This cluster of 13 interviews will be analyzed in more detail in section 3.1.2, as these interviews provide the highest number of stories to analyze in greater detail using a variety of qualitative techniques.

Chart 3 demonstrates that the majority of Elders utilize stories, to varying degrees, to construct their answers to what were originally designed as traditional interview questions. Thus, we can begin to understand, that for the Elders of Walpole Island, using stories, is a means by which they describe their relationship with the land.

3.1.1 b): Are there emergent story categories and patterns that Elders use to construct the stories that describe their relationships with the land in the Customary Ways dataset?
Once we established that there were stories that could be identified within the Customary Ways dataset, and what the initial features of these stories were, I wanted to understand if there were common structural choices, used by the Elders to create their stories?

In order to answer question 1b, I conducted a story analysis, where I created a story matrix (Chart 4: Story Matrix) as a means of understanding how Elders constructed stories that described their relationship with the land. The story matrix maps the stories that were contained in the 50 Elder interviews to the 4 major story categories of the Anishinaabe Creation stories that were discussed in the literature review: Water/Rocks; Plants; Animals; Community/People.

Through my listening of the Creation Stories in Basil Johnston’s *Ojibway Heritage* (1976), and through conversations and guidance from Clint Jacobs, I made this decision, because anecdotally, from listening to the interviews, I had noticed a pattern that Elders, when describing activities or practices, were most often broadly describing activities that were related to the water/rocks; plants; animals or people/community.

If in some of the interviews, Elders were in fact describing their relationship with the land through stories, what implications were there for understanding this relationship, and what might this finding mean for how I understood what it means to listen?

As the literature review of this dissertation substantiates, for the Anishinaabe, the Creation stories are considered to be the first stories, and without the first story no subsequent stories could be told or created, and all stories that follow the Creation story are related in some way, to the structure and form of the first stories (Archibald 2008, Johnston 1976, Noodin 2014, Simpson 2010,). As Basil Johnston argues, Anishinaabe stories can trace the origin of their knowledge to the categories described within and
throughout the Anishinaabe creation stories because these essential stories are formed from, and form the land beneath one’s feet, while at the same time, form both the epistemology (the way in which one comes to know the world) and ontology (instructions for living) of the Anishinaabe (Johnston 1976).

The story matrix (Chart 4) that I have constructed builds upon Chart 3, because the anchor for the data contained in columns 1 and 2 of Chart 4, comes from Chart 3. Chart 4 is composed of two distinct features that Indigenous storytellers and Indigenous scholars have noted are integral to creating Indigenous stories: First: attribution.

A critical feature in Indigenous storytelling is that of attribution, that is who told the teller the story, or, how did the teller come to know the story? Second, the structure that the teller uses to construct their story. That is, the way in which the teller utilizes recognizable story structures to tell their story. Thus, within the context of understanding the 50 interviews in the Customary Ways project, I have used the 4 narrative categories from the Creation story as a means of mapping how the Elders construct stories that describe their relationship with the land. Because the original intention of the Customary Ways project was related to understanding how Elders cared for the land, Clint and I decided the Anishinaabe stories we should focus on were the creation stories about water/rocks; plants; animals and people/community, as these stories carry with them instructions for living in a good way or practicing minobimaatisiwin.

Therefore, the story matrix below maps the ways in which the Elders in the Customary Ways interviews utilize the common story categories of Rocks/Water; Plants; Animals; Community/People to describe their relationship with the land, as well as mapping how they came to know the story they are telling.
By building upon the analysis that is captured in Chart 3, which details the number of stories in each interview, Chart 4, analyzes each story at a deeper level, this time, analyzing at the unit of the story, and understanding which story categories are used to create each story unit. One can read the matrix of Chart 4 across the rows to understand the ways in which the Elders combined, or weaved, stories about water, plants, animals and people/community together to create the story they were telling.

Below is an example section from Chart 4, Story Matrix (the full chart is in the appendix).

*Chart 4: Excerpt of Chart 4 Story Matrix*

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<th>GRANDPARENTS</th>
<th>PARENTS</th>
<th>AUNT/JUNICE</th>
<th>WATER</th>
<th>PLANTS</th>
<th>ANIMALS</th>
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When we look at the story patterns that emerge from this story matrix, we uncover some exciting features about the ways in which the Elders in the Customary Ways dataset are telling their stories; in particular with respect to the ways in which they are utilizing the Creation story categories to tell their stories about their relationship with the land.
When I analyzed the entire dataset (50 interviews, 305 story units), I uncovered that the majority (78%) of stories across the Customary Ways dataset utilized all 4 story categories in their construction. This finding is in alignment with findings in the literature review that highlight a critical feature of Anishinaabe Creation Stories is that they are inter-dependent. That is, within the structure of the Creation Stories, one cannot tell a story about each category (water/rocks; plants; animals; people) without telling a story about the categories that rely upon it, for their existence, sustenance and balance. The vast majority of the Elders focused on describing how each story category interacted or was in relationship to another category.

For instance, in an excerpt from Interview no.9, Story 8, the Elder describes practicing controlled burning of the plants (bush, trees) and connects this story to animals (baby animals), People (everyone) and water (wet bags):

“We burned the ground on a small scale. It is how we got rid of what was old. We did it in the season, before the baby animals come. These young guys just think ‘I’ll burn it up!’...They think it will take care of itself. You don’t burn it all up. My dad always told us don’t burn trees. We used wet bags you know, to control the burn and to protect the trees. I see all the trees with their scars, and I think, it’s like a person. It’s a living thing, and I see it as that. And when I see the trees, it would be like you [referring to the interviewer] burned up on your legs, You know? And the branches.”
The Elder continues their story, by connecting the practice of burning, to learning about their relationship to the land and the understanding of preservation when they say:

“You know, the trees clap their hands, in celebration. I see the trees as this big [stretches arms wide] on the outside, but it has to be this much bigger under-ground [stretches arms even bigger to indicate the large expanse the tree takes up under-ground]. The roots. It has life. Why are we killing it? But people have lost sight of how to preserve.”

Below, is an excerpt from Chart 4, detailing Interview no. 9, story 8:

In an excerpt from Story.2, in interview no. 12, the Elder connects the activity of exploring, as being connected to plants (bush, trees), water (being on the water), animals (wild game) and people (dad), when they describe:

“In childhood, I spent most of my time outside, in the bush. I would sit in trees and listen and hear things around me. I got to know the bush by exploring it. I was always on the water and the land.”
The land feels like home. I would be on the land exploring while my dad hunted wild game. And I learned how he watched the wild game.”

Below is an excerpt from Chart 4, that details Interview no. 12, and highlights story 2:

In interview no.16, story 1, the Elder weaves together 4 categories which you can see in the excerpt of Chart 4:

In an excerpt from Story 1, Interview no. 16, we can see how the categories of water (marsh), plants (the bush), Animals (rabbit and pheasant), People (working together) are woven together when the Elder recounts the activity of hunting:
“We had many hours devoted to hunting...in the bush and the marsh... When we hunted Rabbit, we would go out in a group and chase the rabbits out to each other through the bush. We did the same thing with quail and pheasant. We had to work together in the bush.”

In the following excerpt, from Story 4, Interview no.15, the Elder connects the activity of harvesting from the land, to a story how the animals were connected to one another, and cared for one another. The Elder also notes that the land cared for the animals, and begins to draw out a reciprocating relationship between the land and the animals, and the people through their ability to harvest from the land:

“Walpole used to seem like a giant grocery store. I mean any time of the year you could get something to eat. And I remember the water flowing through the ditches, Walpole was a giant nursery for fish, snakes and turtles...Even the bullfrogs singing at night and the snakes and the leopard frogs and even the garter snakes took care of each other.”

We see the interconnection described in story 4, Interview no.15 in an excerpt from chart 4 below through descriptions of water (flowing through the dredge), plants (the land where the animals live, the reference to Walpole, the island), animals (fish, snakes, turtles, bullfrogs, leopard frogs), people (community members):
Another feature that emerges from the story matrix, is that all stories contained a moment when the Elder identified from whom they had learned or heard the story they were about to tell. Archibald, Talaga, Wilson and King all establish in their own work (Archibald 2008, Geniusz 2015, King 2003, Talaga 2018, Wilson, A., 2005), that the veracity of the story, not only at an individual level, but also at a community level, is established through the process of attribution as a central feature of the narrative structure of Indigenous stories.

3.1.1 c) Are there statistical relationships in the Story Matrix Data?

Without exception, all stories I coded within the 50 Customary Ways interviews, and across the 305 Story units, included, as part of the story structure, attribution for the story the Elder was telling. Once I realized the amount of data I had, at the scale of story units, I made the decision to measure, in quantitative terms, the relationships between these variables to understand if there was any statistical significance in the patterns that were forming in chart no.4 the story matrix.

Using SPSS, we first coded, then analyzed the relationships between the variables present in the story matrix.

*Descriptive statistics and cross-tabulation:*
Categories:

- 78% (n=237) of all stories contained all 4 categories (water, plants, animals and people). Only 3.3% (n=10) of stories contained one category. Stories with 2 to 3 categories were similar in representation (2: 10.5% [n=32]; 3: 8.6% [n=26]).

- 10 stories were found to contain one category. Of those 10 stories, 60% are about animals and 40% are about people. There are zero stories of this set of 10 that are solely about water or plants.

- There are 32 stories that use two categories. Less than one percent of these 32 stories contain the category water. Less than 5% of these stories contain the category plants (2.3%). 71.9% of these stories contain the category animals and all stories with two categories contain stories about people.

- There are 26 interview stories that use three categories. More than half of these 26 stories contain the category water (57.7%) and plants (65.4%). 88.5% of these stories that use three categories, involve animals and humans.

The quantitative analysis of the story matrix also draws out some interesting patterns related to attribution, which substantiates the critical importance of transmission of knowledge between generations, as a necessary aspect of storytelling for the Elders of Walpole Island, and is in alignment with the necessity of attribution as a means of providing the veracity of Indigenous stories.

In order to produce the following statistics, a basic crosstab analysis was performed in SPSS. A crosstab analysis allows the researcher to understand the ways in which variables interact with one another, and in particular, the frequency with which they
interact. Using the categorical variables in the columns and the rows of the story matrix, we uncovered the following patterns related to attribution:

**Attributions:**

- 61.6% of all stories are attributed to grandparents.
- 26.2% of all stories are attributed to parents.
- 78.4% of all stories contain one attribution; with 21.3% are attributed to two.
- Of the stories that contain two attributions, 64 of the 65 include grandparents. Similarly, 63 of the 65 include parents.

Because of the fascinating emerging patterns related to intergenerational transmission of knowledge, that emerged in our attribution analysis of the 305 stories of the Customary Ways dataset, we performed a Chi-square analysis, in order to find out if any of these relationships had statistical significance. A chi-square test for independence compares two variables in a contingency table to see if they are related. In a more general sense, it tests to see whether distributions of categorical variables differ from each another.

- A very small chi square test statistic means that your observed data fits your expected data extremely well. In other words, there is a statistical relationship.
- A very large chi square test statistic means that the data does not fit very well. In other words, there isn’t a statistical relationship.

**Chi-square analysis**

When we examined the relationship between attribution (one attribution/ two or more attributions) and the number of categories we uncovered that there is a significant relationship between attribution and category ($X^2 (3, N = 304) = 8.34, p = .040$). That is, we found that stories with more than one attribution were more likely to contain multiple story categories than were stories with one attribution, once again, demonstrating the importance that intergenerational transmission of knowledge has within Indigenous storytelling, and Indigenous communities.
Chart 9: Frequency of each category by attribution

<table>
<thead>
<tr>
<th>Category</th>
<th>Grandparents</th>
<th>Parents</th>
<th>Aunt/Uncle</th>
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</thead>
<tbody>
<tr>
<td>Water</td>
<td>146 (p=.002)</td>
<td>162 (p=.000)</td>
<td>2 (p=.434)</td>
</tr>
<tr>
<td>Plants</td>
<td>151 (p=.003)</td>
<td>166 (p=.000)</td>
<td>3 (p=.351)</td>
</tr>
<tr>
<td>Animals</td>
<td>176 (p=.541)</td>
<td>172 (p=.206)</td>
<td>3 (p=.682)</td>
</tr>
<tr>
<td>People</td>
<td>181 (p=.747)</td>
<td>176 (p=.114)</td>
<td>3 (p=.761)</td>
</tr>
</tbody>
</table>

Chart 9, contains the details of the frequency of each category by attribution. As the category develops (starting at water, moving toward people) we see a great difference in the range of the number of stories attributed to each category between grandparents and parents. That is, our analysis revealed that between water to people there is difference of 35 stories attributed to those categories for grandparents. In stories attributed to parents, the range is much smaller with a difference of only 14 stories between water stories and people stories. Therefore, stories attributed to parents contain a fairly equal representation by category, while we see a high degree of frequency in the water and plant categories, related through attribution to grandparents. We can begin to understand then, within the Customary Ways dataset, Elders attribute their grandparents to the stories they tell about water and plants, whereas they attribute parents telling them stories that were aligned with all four-story categories. This finding signals that there is an importance in understanding the ways that intergenerational transmission occurs in communities and shapes storytelling. As well, this finding signals that we need to listen for the ways in which intergenerational transmission of knowledge was interrupted in communities because of the many different ways that colonization has created processes of dispossession (Richmond & Ross, 2009, Richmond & Tobias 2014).

If story structure is a means of understanding and recognizing a story, then as listeners and researchers, we need to understand how people tell their stories; the
intentional choices they make about how they create the stories that hold knowledge.

After I listened to all of the 50 Elder interviews in the Customary Ways project (multiple times over the last 6 years), the image of a basket became the way in which I began to understand the way in which Anishinaabe Elders in the Customary Ways project created their knowledge stories.

In Anishinaabemowin, the concept of a basket is a verb, makakoke, and not a noun as it is in English. In Anishinaabemowin, makokoke is a special category of verb: a making verb. Once I had completed my story analysis of the 50 Elder Interviews within the Customary Ways project, I began to ask: what does it mean, to make stories, to make baskets that hold knowledge? And what does it mean to engage in this activity as a collective, as a community?

What the story matrix of chart 4, begins to illustrate, is that the Elders are all telling stories in very similar ways; that they are making stories, with very similar structures or forms. Through this story analysis, we can begin to understand that for the Elders telling stories within the Customary Ways project, the structures of the stories are shared between storytellers, and tested, through attribution to their Elders and ancestors. The 305 stories become a means of creating community-level stories that, by utilizing the structure of the Anishinaabe Creation stories, create a collection of stories that carry knowledge about the Elder’s relationships with the land. Thus, within the Customary Ways Dataset, storytelling is a means by which Elders describe and engage in a relationship with the land.

Through this story analysis, we have established that Elders are telling stories within the bounds of the 50 Customary Ways interviews, based on our emerging definition of what a story means, within the context of the Customary Ways dataset.
Thus, we can begin to understand, that within the Customary Ways dataset, a story is understood to be being told when an Elder:

1) attributes the story to someone (grandparent, parent, aunt/uncle);
2) Utilizes a combination of story categories (water, plants, animals, people), that they weave together;
3) They describe participating in an activity with the land.

The story analysis conducted in section 3.1.1 has uncovered the structure and connections between the Elder stories in the Customary Ways Interviews, but we have not yet come to understand what types of knowledge are contained within these stories. We also uncovered that a critical feature of a story, within the Customary Ways dataset, is that Elders described participating in an activity with the land. We need to begin to understand what the connection is between describing participating in an activity with the land, and the type of knowledge that is contained within these stories.

**3.1.2 What type(s) of knowledge is contained within the Elder stories in the Customary Ways dataset? Is there a relationship between the types of knowledge contained in a story and its structure?**

The literature review of this dissertation substantiates that for Indigenous scholars and Indigenous storytellers, a critical component of Indigenous knowledge is that Indigenous Knowledge is activity based, or as Deb McGregor argues, “Indigenous Knowledge is something one does, rather than simply something one knows” (McGregor 2004, pp 391). McGregor’s clear point led me to think that I needed to code the Elder interviews utilizing a framework of understanding these stories as being activity based. That is, instead of listening for how Elders describe their relationship to the land in a
conceptual way, I instead need to ask: how do Elders describe being in relationship with the land?

How do Elders describe activities they engage in with the land as a partner or subject of their stories? How do Elders tell stories about participating in these activities, rather than simply describing the activity in a conceptual way? I wondered, if I listened for how Elders tell stories about activities, would I begin to uncover how the Elders of Walpole Island filled their knowledge baskets? Would I begin to understand how the story structures (form) identified in section 3.1.1 were connected to, and supported stories about activities that occurred with the land (the subject)?

And, if we are interested in understanding how distinctive stories are related to, and intentionally connected to certain activities, then we might also be interested in understanding what types of values or ethics are mapped to these identified activities and stories. That is, if we first understand that Elders describe being in relationship with the land through stories; and second, we understand the story structures they create are intentionally woven together utilizing the four categories related to Anishinaabe Creation stories; then third, we need to understand the ways in which these story structures, or knowledge baskets, are filled.

That is, following the literature, and Indigenous Story tellers, we know that Indigenous knowledge is something one does, and it is through the doing that one learns “instructions for appropriate conduct to all of Creation and its beings” (McGregor 2004 p.393), then we need to begin to articulate how the structure of the story is connected to the activities that are described by Elders in these stories. What is the connection between story structure, activities and ethics, within the Customary Ways dataset?
Throughout section 3.1.2 we will engage in a variety of qualitative approaches to better understand 13 interviews from the Customary Ways dataset. The work of section 3.1.2 is based on an analysis of 162 Elder stories which account for 53% of the total number of stories that I coded in the Customary Ways dataset (162/305). These 162 stories are contained within 13 interviews (9-22); the 13 interviews that had the highest average number of stories/interview (12.46). These 13 interviews represent 26% of the total number of interviews. I have decided to focus on these 13 interviews and their 162 total stories, as this sample is the most saturated by stories, and presents itself as a rich subset of interviews to perform various qualitative methods, which will help us to uncover the connection between the structure of the stories the Elders tell, and the type of knowledge that they contain.

3.1.2 a) Story Mapping

Another critical feature of the framework through which this dissertation understands the construction of Indigenous stories, is that Indigenous Knowledge functions as a system, or a network. That is, as the literature review demonstrates, Indigenous Knowledge works as a system of interconnected knowledge. Therefore, in order to understand how Elders, tell their stories about being in relationship with the land, and what types of knowledge Elders fill their knowledge baskets with, I mapped 13 interviews (no. 9-22) and their 162 stories, as story maps or story systems (Story Maps 1-13 in the appendix). That is, I used a technique based on network theory to try to understand two important features of the Elder stories:

1) Were there themes or patterns that emerged across these story maps with respect to the types of knowledge Elders included in their stories about their relationships with the land?
2) Were there patterns about how activities and ethics were connected within these stories?

The story maps were constructed using the following logic:

1) Each map utilizes a design that positions the 4 story categories that emerged through the story analysis (water; plants; animals; community) as nodes of each story.

2) Each story node is first mapped with an attribution line that emerged from the narrative analysis in 3.1.1.

3) Each story node is then coded with two themes that emerged from the literature review as being essential components to the description of Indigenous Knowledge: an activity and an ethic. That is, within each story node, I coded the stories the Elders were telling by listening for what types of activities were co-located with each distinct story structure. I then listened to understand if a distinct ethic was connected to each activity.

It should be noted, that this analysis process occurred as a listening exercise, first, and a reading exercise second. As part of the process of understanding these stories, I listened to them as a means of constructing these story maps. I made this choice for 3 important reasons:

a) First, I wanted the process to be dynamic, and reactionary to what I was hearing. I wanted to focus my capacity to listen, as the guide for how I would understand the connections between the activities the Elder’s described and the ethics they attributed to these activities.

b) I wanted the process of capturing the motion of the stories to be represented in the maps that emerged. For this reason, I have made the decision not to re-do these maps as electronic reproductions. I understand this might create some issues for readability, but, after creating these maps I realized, in conversation with Clint, that their power is not necessarily found in being able to read each discrete word on the page (because I account for this data later in section 3.1.2 c), but rather, the power is found in understanding the topography that emerges within each map; understanding where story themes begin to emerge and cluster; and how activities and ethics create their own topographies too.
Once I completed the mapping, I then triangulated my listening by re-reading transcripts, this time using the technique of a close reading, to ensure I had heard the Elder’s stories correctly, while I engaged in the story mapping process.

Below is an example of a story map (Figure 1: Story Map 3), which maps the stories told within Interview no.11. The remaining story maps can be found in the appendix, listed as Story Maps 1-13.
Figure 1: Story Map 3, Interview 11
When we look at the topographies that emerge from the Story Maps, as seen in story map no.3 above, and in story maps 1-13 (in the appendix), we begin to understand that each interview, contained a series of interconnected stories, that utilized the four-story categories, that emerged in the analysis in section 3.1.1. What the story maps do, as an analysis tool, is build-on, and demonstrate visually, the incredible level of complexity and interconnectedness of these stories that the Story Matrix, Chart no.4 cannot capture. The story maps, because of their dynamic creation process, and basis on network theory, are able to begin to map the ways in which the Elders connect the activities they engaged in, with the land, and the ethics they learned through these activities, which begins to establish, that the story structure, or knowledge baskets, woven by the Elders of Walpole Island, literally hold and describe the motion of the land.

You can read these story maps by visually appreciating the immense interconnection of the stories the Elders tell; and the ways in which this knowledge is distributed. You will notice that there are hard lines, and dashed lines in each map. The hard lines refer to the direct subject of a given story. The dashed lines represent the sub-themes that are related to the major story theme. As Story Maps 1-13 demonstrate, every story told in this subset of 13 interviews, utilized all 4 story categories to weave together the stories.

In each Story Map, each story is numbered, and corresponds to the number of stories that are coded in the Story Matrix (chart 4 in the appendix). Each numbered story also details the activity being described and is connected through a series of labeled circles. These circles represent the ethics that are attributed to a given activity within the Elder story. In some cases, there are multiple ethics, in some cases there is only one ethic mentioned.
Each Story Map also identifies a cumulative list of activities that are mentioned across all of the stories told; the total number of stories; and the number and type of ethics that are mentioned across the stories attributed to each interview.

All 13, interviews, and 162 stories that I story mapped emerged with similar patterns and themes. Each of the interviews contained stories that utilized all four-story categories that I had coded in the story analysis, found in Chart 4. And each story structure had a distinct attribution line, in some cases, as was described in section 3.1.1, there were multiple attribution lines. And, as the statistical analysis in section 3.1.1 demonstrates, there is a statistical relationship between the number of story categories an Elder uses to construct their story, and the number of attribution lines, this was also uncovered through this story mapping. That is, within each of the story maps, we can see that the Elder attributed the knowledge and the story they were repeating to a defined person (mother/father; grandfather/grandmother; uncle/aunt).

Another consistent feature of the coding from section 3.1.1, is that every story utilizes a structure where an activity is connected to an ethic. That is, within each distinct story, there are story components where Elders describe participating in an activity with the land, and from this activity an ethic is an emergent feature of the activity.

3.1.2 b) A Close reading:

In order to synthesize the topographies and connections in these Story Maps (1-13 in the appendix), I then engaged in a close reading of the transcripts, as stories. That is, I read them not as transcripts, but as stories. Most often, when we read transcripts, we are looking for themes or patterns that emerge from answers that participants give. We try to understand how all of the participant’s answers might come together to create themes
within groups of answers, but we do not (usually) pay very close attention to the structure of these answers, because it is understood that transcripts are the literal transcription of what a person said. We might note a person’s affect (scared, agitated, happy) but we rarely give interpretations of transcripts that discuss the connection between form and content.

But, when we think about stories, we need to be very mindful of structure, because storytellers make choices! And their choices are an integral part of how we come to understand the knowledge that stories carry. The technique of a close reading is borrowed from literary studies and is based on the practice of examining certain passages, usually very short, in minute detail, in order to appreciate two major things: the structure of the passage, and how the structure supports the meaning of the passage. That is, a close reading, can help us to understand the relationship between form and meaning/or subject, which is essentially the question we are asking in section 3.1.2: *what is the relationship between the types of knowledge contained in a story and its structure?*

A close reading also allows the listener to explore what meaning making they have been able to do as they have engaged with a story, and what have they come to understand? Where can they understand connections between the way a story is woven together (its structure) and the type of knowledge that is contained in the story (its meaning or subject matter)?

If we look at Interview 22, story map 13, and we look at the **Plant node**, in particular, we uncover important patterns in the way Elders describe the ways in which they engage in activities on the land, with plants, and how the ethics of *Wisdom, Knowledge, Responsibility* and *Respect* emerge across these stories. The Elder describes
the activity of picking Sweet grass, in great detail. Through these descriptions, they
describe that through picking sweet

Figure 2: Detail of Story Map 13, Interview 22

got a real respect for ceremony,” because “my grandmother taught me I had
to really pay attention to the land, and how we picked the sweetgrass.” The Elder notes
that their grandmother taught them that “we had to pick the sweet grass the right way.
And with sweetgrass, you know, we were taught to go inside there, you go inside there,
and you just pull it out like that….the kids don’t pick the sweet grass right. In time we
ain’t going to have no sweet grass cause they are taking the whole root.” The Elder notes
that this was not how they were “taught when we were younger.” This Elder then
describes that the activity of picking sweetgrass was a way of practicing respect, that is,
the picking of the sweetgrass became a way of literally practicing the ethic of respect
because they were taught “you had to be respectful,” of the sweetgrass.

Through the process of learning to pick sweetgrass with their grandmother, the
Elder describes gaining the ability to not only understand what it means to be respectful
of the sweetgrass plant, but also, the Elder describes learning to practice respect through
how they engage in the activity of picking sweetgrass. The Elder details that they also learn wisdom and a deeper knowledge about the sweetgrass plant, because they note that their grandmother taught them that to respectfully pick sweetgrass meant that they had to “leave the root,” so that the sweetgrass could grow again. Leaving the root was an important way of showing respect for the sweetgrass, and honouring it’s spirit, and its life. Through the Elder’s description of the activity of sweetgrass picking, we also learn that the Elder gained a sense of responsibility for the plant when they say that “everyone was taught to be respectful. No one abused things. From a young age we were all taught by learning in the bush. There were no rules. But we were taught to be respectful,” by watching and learning from our grandparents and how they “only took as much as they needed,” they all “worked together to keep the prairie alive.”

In Interview 20, Story Map 11, a similar pattern emerges between how activities on the land are connected to emergent ethics. For instance, when the Elder tells their story about the activity of hunting ducks (in the animal node of story map 11), we learn that the Elder has learned about how to practice the ethics of Respect/sharing and Wisdom of life cycles. Through telling a story about learning to hunt ducks with their father, this Elder describes that the activity of duck hunting taught them respect for the animals and the ethic of sharing, because “when you hunted, you know, you only took as much as you needed and left the rest.” “The hunting was good back then. Because we only took what we needed. We didn’t abuse the animals. And we shared what we didn’t need. We share with one another.”
In interview no. 9, story map 1, the Elder describes how the activity of hunting teaches the ethics of *Respect, Sharing and Love* (which we see emerge in the *water node*, and the *animal node*, of story map 1). First, this Elder describes that when they would hunt with their dad, they would learn that “we only took what we needed. There was no slaughtering. We didn’t kill babies or mothers. Only the stags. So that we always had food, and the deer could go on with us.” Through the activity of hunting, this Elder also learns not only to respect the animals, and to take only what is needed, but also a great wisdom about the life cycle of the deer: the importance of honouring the mother and babies, and that to sustain the community, only the stags would be hunted so that the food source remained healthy and was sustained.
This Elder also describes that the activity of hunting deer, (seen through stories that are connected in the animal node of story map 1), taught them about the ethic of wisdom and love, because “all hunters would share meat. There was always sharing. We always took care of one another. There were no food shortages. We shared in the community.” The activity of hunting, then is connected for this Elder to the ethic of sharing and love/caring because they watched how their father and their community
members cared for one another by always sharing the meat they gathered through hunting deer.

This Elder also describes making the seine “nets by hand,” because then you could protect the “resources and make sure they grew again” because the seine nets didn’t kill the fish, but allowed them to stay alive, and be sorted. The sorting was important because it allowed pregnant fish and babies to be thrown back into the water, “protecting all the fish.” They also describe how they learned the ethic of responsibility by using all parts of the fish “for fertilizer in the garden” which taught that there is a “purpose to everything,” and that “everything is connected to each other.”

In interview no.21, Story Map 12, we learn from the Elder that the ethics of trust and wisdom are learned through the activity of weather prediction. “Way back nishinaabs did not use thermometers or barometers because they could predict weather,” but instead they had to learn to know the land by recognizing they were of the land, developing a deep trust in the land by learning to “read the signs of nature.” The Elder, describes this process of coming to know the land, through the activity of learning Anishinaabemowin because they note that the “the knowledge of the world around us is embedded in our language,” which you can see emerge in the community node, related to storytelling and language.

In story 4 and 6, in interview no 10 (story map 2), the Elder goes on to describe the relationship between trust, and sharing in the activity of gathering medicine and gathering cattails, which emerges in the Plant node. In these stories, they describe that their “mother-in-law used to always remind us that we did not need to go to the pharmacy because our medicines were in the woods and in the swamps.” And that this trust in the land and the medicines was learned because their Elders “used [their] traditional
knowledge to heal us when [we] were sick, to maintain [our] mental, physical and spiritual well-being.” This story also connects the fact that activity-based learning and ethics occur not only with the land, but with an Elder, that is, in story 4 and 6, we understand how attribution plays a role in shaping not only the story that is told, but also the learning, when the Elder describes that their Elders taught them the “skills that gave us confidence and helped us through hardship and adversity. We learned to persevere, to never take things for granted.”

They continue to tell a story about the ways in which learning is connected to ethics, when they tell a story about being young and “sometimes things were challenging but even the hardships were learning experiences....The times the harvest was late (story 5, gardening), times in the winter when the rivers and lakes were jammed up with
ice...these experiences taught us the value of patience” and a deep respect for the cycles of the land and the seasons.

In Interview no. 11, Story Map 3, of the Water node, this Elder recounts stories about the activity of fishing and playing in the marsh and the waterways, and through these stories (17, 18, 19), we learn that the Elder learns respect for the power of water, trust for the water, and a sense of responsibility to care for the water. Through the activity of playing and fishing in the water the Elder recounts that you learn that you are “from the Earth. When mother gets sick. You get sick” and that “water is the veins of the mother, and her health is our health.” They go on to say that “Indigenous knowledge is lived, you know. People do things. They don’t write it down.” This Elder further describes the relationship they built with the land through these activities as reciprocal, by “doing” or participating in activities on the land as a “kind of communication” that you learned to understand by being “continuously in the bush.” This Elder describes that this continuous communication with the land taught them, that “if you respect everything around you, it will be there for you,” that the land will be there and provide for the community, but that this would only occur by reciprocating the relationship through “living by utilizing what was needed to survive,” and that the activity of sharing “these stories with our people is important”, because sharing the stories (story 19, story map 3) teaches “[us] who we are.”
Figure 6: Story Map 3, Interview 11
This Elder took a great deal of time to tell stories about hunting, which you can see building in the Animal node of story map 3. In particular, this Elder told stories about the activity of Muskrat hunting (story 14). In their story about the activity of Muskrat hunting we learn that this Elder learned about the importance of community, and caring for community, because they were “taught by my dad when I was on the land. He wouldn’t say much. But he taught me by showing me,” how to hunt Muskrats. Through the activity of hunting muskrats, this Elder also demonstrates how hunting is connected to community when they tell a story about the activity of hunting muskrats and that when the land was healthy, and there were a lot of “rats, people would come together. Friends would come over and skin rats together.” The collective activity of preparing the meat from the hunt became an expression of communal cooperation, that re-enforced to everyone involved that we only need to “harvest hat we need to support ourselves” (story 3, story map 3).

The stories this Elder tells about the activity of hunting (story 16, story 14, story map 3) also teaches about the ethic of respect, when they note that being “outside and doing something you shouldn’t. You learn about respect,” because the ethic of respect for this Elder “refers to everything. The environment too.” Respect isn’t just for “people close to you.” For this Elder, they describe that by being on the land, and participating in activities on the land they learned that respect is an ethic you practice with “Everything, the trees too. There is spirit there. There is life there. The ancestors knew it.” And they describe through their story about hunting that it is through participating in the activity of hunting that you “start to understand your true connection to the land.”

Through stories about the activity of Duck Hunting (story 16, story map 3) we also learn about the ethic of respect and responsibility, when the Elder connects that the
“stories and teachings about hunting teach you if you abuse something it will leave you.”

Their story about the activity of duck hunting is built out of questions that say you need to ask “why are you shooting the ducks? Is it because you are hunting to eat? That is okay. If you are hunting for pleasure? Then you aren’t showing respect.” We come from a “culture that lived respect by how they acted”.

This Elder then recounts a very important point about the ways in which activities on the land and ethics are connected to storytelling when they say that stories taught “the grandfather teachings in a really elegant way.” They note that “now people talk about the 7 grandfather teachings [Truth/Humility/Respect/Wisdom/Love/Bravery/Generosity] but if you “talk to older people (referring to Elders in the community) they say ‘I never heard it like that before,’” because “they acted them out instead,” the “values were still there,” but they were in the “stories and the way you were on the land together” (story 15, story map 3).

In Interview no 11, in story 5, in the community node of Story Map 3, we can hear the emergence of the relationship between storytelling when the Elder tries to get at what they mean “by acting out” the values or ethics, rather than simply defining them with words when they say: “How do you teach love?” Zaagidiwin is a verb, and this Elder demonstrates that you learn Zaagidiwin by practicing it, when they describe that they learned Zaagidiwin “when [my] grandmother embraces [me]. You get to feel. You get to experience the feeling of Zaagidiwin. That’s how you get to learn the true meaning of the concept of love.”

In the stories the Elder tells about Plants (see Plant node, Story Map 3), we learn that the activity of gardening (story 9, story map 3) taught people to “share and empowered the people through growing and tending and preparing the food together.”
The importance of storytelling as an activity is linked for this Elder in story 1, story map 3, with speaking Anishinaabemowin. This Elder describes that the stories are in “blood memory. They are there. In the land. We need to remember them to understand who we are as Anishinaabe.” They then ask: “What does it mean to be Anishinaabe?” For this Elder a critical component is telling the stories learned from practicing activities on the land, “based on the teachings,” you learn “on the land.” “Language,” this Elder recounts, is “the root of everything,” and the basis “of who we are,” because “language is the foundation of our culture.”

For this Elder, their story of the activity of Muskrat hunting (animal node, story 14 & 15, story Map 3) is deeply connected to the importance of language when they describe that “ashashkw (muskrat) is what it is,” and that you do not really begin to understand the concept of ashashkw, until you start to understand the activity of hunting ashashkw, because, to describe ashashkw, really requires that you understand that “the land connects all the words.”

If we look at what happens to the word wazhashkw (muskrat) (which is a noun in this form), when it is transformed in Anishinaabemowin into a medial verb, ashashkw (the tense the Elder used in their description above) we begin to understand the profound ways in which Anishinaabemowin acts as the connector between the Anishinaabe and the land.

In order to describe the activity of hunting muskrat, one needs to transform the concept of a muskrat from a static noun, first into a medial verb. Medial verbs are not part of the English language but are an important part of speech in Anishinaabemowin because they are a special category of the active voice used to create what we can begin to think of as miniature stories within Anishinaabe concepts.
That is, Anishinaabemowin functions by building concepts from parsing and recombining Anishinaabe words together into complex and compound words that carry within them miniature stories. One way this is accomplished is by utilizing the medial voice. When one uses the medial voice, one becomes both the subject and the object of a concept. So, when one says *ashashkw*, in Anishinaabemowin, one is both the muskrat and one’s self at the same time, held in motion in the concept of *ashashkw*. Thus, we can begin to think of saying the word *ashashkw*, as the beginning of building a miniature story; it is the story of being both one’s self and being the muskrat at once; that is, when one utters *ashashkw*, the speaker holds the subjectivity of both the muskrat, and one’s self, in that dual role.

The medial verb, or voice, is a necessary component of the full word *noodazhashkwe*, which translates into English loosely as the concept of *hunting muskrat*. In Anishinaabemowin, *noodazhashkwe* is an animate intransitive verb that describes pursuing, *nood* (intransitive tense) + *ashashkw* muskrat (medial voice). The medial voice located within the concept of muskrat is important to note in this word, because it is the medial voice of the word muskrat which makes the verb *nood* - intransitive. That is, in this complex concept (or miniature story) the action or verb, is intransitive and does not require an object to “transfer” the action to, because both the object (muskrat) and subject (the person speaking) are incorporated into the complete meaning of the concept *noodazhashkwe*.

Thus, when one speaks the word *noodazhashkwe*, the speaker necessarily engages in a type of participatory subjectivity that is developed through the construction of the complex concept of being both the subject and object of the concept at the same time, connecting both the speaker and the muskrat together in a narrative of motion all within
the bounds of the concept of *noodazhashkwe*. Thus, we might begin to understand that even Anishinaabe concepts are story based because Anishinaabe concepts animate the ways in which subjects and objects and nouns are in the process of *being in* relationship with one another.

The example of the complex and delicate ways in which the concept of *hunting muskrat* is woven into the concept of *noodazhashkwe*, illustrates what Margaret Noodin argues is one of the central features of Anishinaabe stories: “Anishinaabe literature is that memory of collective motion shaped by the place which it originates … the land, like truth, is always shifting, as our language teaches us, to live is to be in motion” (Noodin, 2014 p176, 177). And to speak the word *noodazhashkwe* literally inscribes the speaker with the action or motion of the word, as well as being literally woven into the complexity of holding both the responsibility of enacting the action, and being the subject of that action, in one complete concept.

Thus, the word *noodazhashkwe* and the Elder’s story 14, story map 3, about *noodazhashkwe*, illustrates that, like Noodin argues, in “most Anishinaabe stories the action is the character,” and therefore, the action or the motion *is* the ethic (Noodin 2015 p.176). Thus, the Elder story about their relationship to the land describes not only an activity, but an action, compounded into one concept that is inextricably tied to the land. For Noodin, Anishinaabe stories are “that memory of collective motion shaped by the place which it originates” (Noodin 2014, p.176).

The complexity of the concept of *noodazhashkwe* (hunting muskrat) is best described by the Elder in story 14, interview no.11, when they note that “*ashashkw is just what it is…if you ignore the language,*” and you describe these activities in English, “*then*
you are just going through the motions,” because the language comes from the land, “and the land connects the words to our values” (interview no.11).

By being both object and subject, one learns through the telling of the story of hunting muskrat that you are at once the hunter and the muskrat, which in turn, teaches one a deep understanding of “our true connection to the land. That we are from the earth” (interview no.11).

The Elder who gives interview no.11, also takes time to tell stories about the community. In the community node stories, we learn about the ethic of respect. The Elder describes that community feasts (story 4) were a way in which one learned the “act of sharing” and that sharing was a “common practice, it was a living ethic back then.” The act of sharing, in this Elder’s stories teaches the importance of “fellowship,” that was created through “sharing stories and laughing.” This Elder also describes that community feasts taught about wisdom and respect for seasons because the feasts “acknowledged each season” and brought the community together to celebrate and “care for one another (interview no.11).”

Ultimately, the Elder in Interview no.11 tells 20 stories that describes that “Indigenous knowledge is a living ethic,” and that it is by practicing activities on the land like hunting, fishing, gathering medicine, gardening, community feasts, that one learns to come to know the land, and that by telling stories, and speaking language one practices these ethics.

In interview no.19, story map 10, the Elder tells 19 stories that connect the activities that they engage in with the land, with ethics, in essence describing, through story the “living ethic” that the Elder in story no. 11 describes.
Within Interview 19, through the stories about the activities of hunting and fishing, (captured in the **animal node** of story map 10) the Elder describes that through these activities you “learned respect for plants and animals” and how they are connected, because you needed to understand how to “sustain our wildlife by respecting it. You only took what you needed. Then you could always rely on the land.” Further, this Elder describes that you didn’t learn the concept of respect in one “particular moment,” but instead you learned respect by for instance, by the way in which you fished. That is, when you fished on “Walpole you used to put no more than three lines in the water at a time, just to get what you need.” Then, you “would go home and eat it all (interview no.19).”

![Figure 7: Detail of Story Map 10, Interview 19](image-url)
In story no 11 and 12, interview no.19, story map 10, describe that one would learn respect by how one chose to hunt. That is, first one learned to respect the seasons by observing the environment during the activity of hunting. The activity of hunting taught both wisdom and respect for the seasons because the “Animals yeah, in the springtime, growing up I know that there were some people that felt they had the right or needed to shoot wildlife anytime during the year, I believe the seasons are put in place and being aboriginal shouldn’t exempt us from that, it’s out of respect for wildlife (interview no. 19).”

The Elder connects the season with the ethic of wisdom, and respect, because for this Elder, the activity of hunting teaches the connection between seasonality, and respectful hunting that allows the land to remain in balance. For this Elder, their story about the seasons and the connection to respectful hunting teaches that knowing when to hunt, is a means of protecting the life cycle of animals. “When I see a person shooting a deer in the springtime, right after they have had their young, I don’t see us being a community that needs food bad enough you got to shoot a deer that’s mothering her offspring. So those are the times of the year we have to practice respect (interview no.19).”

In this story we learn that the seasons are “in place to respect wildlife.” If you learn to hunt by the seasons, you could show the muskrat and rabbits respect by only hunting in the “wintertime. You don’t hunt them in the summer. We never hunted them till after the first snow and then we would stop hunting them, come March, because they go through changes in their physical bodies too, that tells us that we shouldn’t be eating them at that time.” For this Elder, learning about the cycles of an animal’s life, and gaining wisdom about and how life cycles are connected to the seasons is the connection
to being able to hunt respectfully. Because, in this story we learn that “ducks you leave them alone during summer and let them have their young and raise them and stuff like that. You observe the bush.” By respecting the seasons, you respect the animals because “everything is connected.” The Elder also notes in their story that there were “no specific rules. You “learned Minobimaatisii through what you learned” by participating in these activities on the land.

Interview no 19, also has descriptions related to what types of ethics can be learned when participating in activities that are related to community (in the community node of story map 10). For instance, the ethic of cooperation is described as being essential to the health of the community, when the Elder tells a story no 4, about the fact that community needs to understand that everyone plays a role “because what they do out there will affect us. One way or another we need to co-operate.” The Elder goes on to tell stories about feasts that “brought community together,” and that by participating in these feasts, as a child, they learned that “sharing was part of life” (story no 1 and 4, story map 10).

Figure 8: Detail of Story Map 10, Interview 19
With respect to stories that were structured through narratives about Plants (plant node story map 10, interview no.19), the Elder details that “caring for the land” occurred as a “community,” and was not done by individuals alone. They tell a story that illustrates this point, when they detail how learning about the activity of “caring for plants” happened through learning about “burning” the land as a means of “ensuring new growth.” The activity of burning taught “respect for the land” and taught us to “cooperate, to care for the land as a community.” “You can’t just set a fire and let it go. You have to control fires,” and that “takes everybody working together” (story no. 9, story map 10).

Learning when and how to gather sweetgrass was an activity that was connected to teaching about respecting the lifecycles of wildlife and plants because “we would gather the sweetgrass in the spring” so you “can’t be burning the fields because of the wildlife are having their young and you got people who have areas they pick sweet grass
in.” The activity of gathering sweetgrass (story no. 10, story map 10) was also connected to an understanding of when and how to burn; and the wisdom of knowing when and how to burn in a controlled way was also connected to hunting because “you don’t hunt in the spring when the wildlife have their young.” Thus, the activities of hunting; sweetgrass gathering and burning were interconnected to practicing the ethics of wisdom about the seasons; respect for seasons and animals; and a responsibility to care for the plants and animals.

3.1.2 c) Using grounded theory: Mapping themes

In the following section of our analysis, we are going to take what we have come to know about the stories that Elders are telling in the Customary Ways dataset and understand if there are emergent themes or patterns across the stories. In this section, we will use a constant comparative analysis, using the emergent themes and data that have come from sections 3.1.1 and 3.1.2a) and b) to try to establish if patterns emerge from the stories in the 13 interviews used to build the story maps, with respect to ethics and activities.

To code the qualitative data contained in the 162 stories in interviews 9-22, I drew on work of Aronson and Charmaz (constant comparative models and grounded theory) in order to thematically code the interview data allowing me to draw out recurrent themes that began to tell a coherent story about the dataset in its entirety. For the purposes of charts 5 and 6 below, I used the broad unit of analysis as the interview, in order to understand between interviews, if were there similar themes amongst the stories contained within the interviews. In comparing interviews, I could begin to understand if
there were common themes amongst storytellers, rather than stories, and I could then begin to understand, at the scale of the community, if there were an emergent set of community held ethics and activities that Elders were describing in their individual level stories.

First, I wanted to understand if there were recurrent themes related to activities between interviews. We have established that in each of the Elder stories, contained within the interviews, they described their relationship with the land, utilizing a pattern of telling stories about activities that were practiced with the land, or through objects gathered from the land. And, throughout the 13 interviews, and the 162 stories contained within these interviews, I uncovered that there were dominant activities that emerged as the basis through which Elder’s described being in relationship with the land.

*Chart 10: Interviews and their emergent activity themes*

<table>
<thead>
<tr>
<th>Interview no.</th>
<th>Hunting</th>
<th>Fishing</th>
<th>Playing</th>
<th>Medicine</th>
<th>Gathering</th>
<th>Gardening</th>
<th>Foraging</th>
<th>Feasting</th>
<th>Storytelling</th>
<th>Bees</th>
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<tbody>
<tr>
<td>9</td>
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</table>
Chart 10 illustrates that some of the activities were more dominant than others. For instance, in all 13 interviews (100%), there were stories that described the activity of hunting, with 11 out of the 13 (84%) interviews, containing stories that described the activity of fishing. 11 out of the 13 (84%) interviews contained stories that described different types of bees, which are collective community led activities such as woodcutting bees, sewing bees, canning bees and animal skinning bees. 10 out of 13 (77%) interviews contained stories that described the activity of gathering medicine, and 9 out of 13 (69%) interviews had stories that described the activity of foraging for food. 10 out of 13 (77%) interviews had stories that described the activity of feasting, and 9 out of 13 (69%) interviews contained stories that described the activity of gardening. 9 out of 13 (69%) interviews contained stories that described the activity of storytelling. The description of the activity of playing was also dominant and 8 out of 13 (62%) interviews contained stories that described playing. Together these 9 activities emerged as the dominant activities that Elder’s utilized to tell stories about their relationship with the land across the 13 interviews that had the highest number of stories (interviews 9-22 in Chart 4).

In the story maps 1-13, and the close readings that were aligned with the story maps, we saw the emergence of the ways in which Elders connected ethics with certain activities. Below, building on the activities that emerged as dominant categories in chart 5, I have mapped chart no.6, which illustrates the emergent ethics that were aligned with activities in the stories contained within interviews 9-13.
Chart 11: Activities and their relationship to ethics

<table>
<thead>
<tr>
<th>Ethic</th>
<th>Colour Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENEROSITY/SHARING</td>
<td>Red</td>
</tr>
<tr>
<td>RESPONSIBILITY</td>
<td>Yellow</td>
</tr>
<tr>
<td>COOPERATION</td>
<td>Blue</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethic</th>
<th>Colour Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPECT</td>
<td>Blue</td>
</tr>
<tr>
<td>WISDOM</td>
<td>Orange</td>
</tr>
<tr>
<td>LOVE</td>
<td>Purple</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethic</th>
<th>Colour Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMILITY</td>
<td>Green</td>
</tr>
<tr>
<td>TRUST</td>
<td>Purple</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergent Activity Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunting</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>9</td>
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</tbody>
</table>
Chart 11, illustrates that each of the nine emergent activities that Elders used to describe their relationship to the land, are linked to an ethic, or in many cases multiple ethics that were learned and practiced through the described activities which we saw mapped in the story maps (story maps 1-13, section 3.12a) and in the close reading (in section 3.1.2 b)).

The ethics that were mapped in this exercise and emerged from the Elder stories in the Customary Ways project, align with the seven grandfather teachings, with the addition of three ethics: cooperation, trust and responsibility.

The concepts that work together to create the seven grandfather teachings are all verbs in Anishinaabemowin, which is an important feature to draw out if we begin to understand that within Indigenous Law, or Customary Law, one practices ethics, one does not think about ethics as a set of ideas. In English the translation of these seven teachings become nouns. In Anishinaabemowin this series of ethics are in motion, because they are all verbs; in their English translation they become nouns, losing their motion.

For the Anishinaabe, the seven grandfather teachings represent a set of participatory ethics, that are enlivened through storytelling, because when they appear in stories they are inculcated through the description of an activity that engages the land, and together the activity and the ethic become activated though story, and describe “much of what defines the central Anishinaabe concept of Minobimaadizi (living well).”

The seven grandfather teachings, or seven principles for living well are:

- Minwaadendamowin – Respect
- Zaagidiwin – Love
- Debwewin – Truth
- Aakodewewin – Bravery
- Nibwaakawin – Wisdom

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21 https://ojibwe.net/projects/prayers-teachings/the-gifts-of-the-seven-grandfathers/
• Miigwe’aadiziwin – Generosity
• Dibaadendiziwin – Humility

Within the 162 analyzed stories, across interviews no.9-13, just as with the activities, there were a dominant series of ethics that emerged as being connected to the activities used to structure the Elder stories about their relationship to the land. For instance, the activity of hunting was connected to the ethic of respect in 12 out of 13 (92%) interviews. The ethic of wisdom was connected to the activity of hunting in 9 out of 13 (69%) interviews. The activity of fishing was most often connected to the ethic of respect in 7 out of 13 (54%) interviews, and the ethic of responsibility was connected to the activity of fishing in 6 out of the 13 (46%) of interviews. The activity of playing was connected to the ethic of wisdom in 8 of the 13 (62%) interviews, while the activity of medicine gathering was most often connected to the ethic of trust, in 6 of the 13 (46%) interviews.

The activity of gardening was most often connected to the ethic of sharing, in 6 out of 13 (46%) interviews, with the ethic of wisdom was most often connected to the activity of foraging in 8 of the 13 (62%) interviews. The activity of feasting was connected to the ethic of sharing in 6 of the 13 (46%) interviews, whereas the activity of storytelling was most often connected to the ethic of responsibility as demonstrated in 6 of the 13 (46%) interviews. The activity of participating in different types of bees were connected to multiple ethics: respect 7 out of 13 (54%) interviews; and cooperation 7 out of 13 interviews (54%).

When I analyzed the frequency of telling stories that had a connection to each of the 8 listed ethics, a trend emerged demonstrating which ethics could be considered emergent across the 13 interviews. The ethics that can be attributed to the stories Elder’s told to describe their relationship to the land were:
The means by which Elders described their relationship to the land in the Customary Ways project, was by telling stories that described their relationship with the land by linking an activity or series of activities to an ethic, or ethics. In each story, the activity and the ethic required a connection to the land of Walpole Island in order to be put into motion, as moving or animate descriptions of how the Elder activated their relationship with the land.

The seven grandfather teachings are a series of seven functional Anishinaabemowin verbs that many Anishinaabeg Elders and storytellers consider to collectively represent what is needed for community vibrancy, because as John Borrows notes, these ethics are the basis for living life in a good way. That is, for Borrows, Indigenous Law or Customary Law, must be understood as a complex and nuanced relationship between the people, the ecology and the activities that the people engage in with ecology, because the laws, or ethics “flow from the people and the ecology” (Borrows22). This

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22 https://www.youtube.com/watch?v=sNuityUXV0&t=172s
interrelationship, for Borrows, becomes a means of “organiz[ing] life in accordance with Minobimaadiziiwin, which means to try to live well in the world” (Borrows\textsuperscript{23}). For Borrows, Indigenous or Customary Law is “a structure of behaviour, a pattern of living that tries to inculcate ways of living a good life,” and that pattern of behaviour is best described as “a practice,” and not as a static “idea” (Borrows\textsuperscript{24}).

Thus, Elders describe their relationships to the land through stories; stories that are intentionally woven into a defined and recognized narrative structure that, as Margret Noodin argues, carry within them, “earth histories.” These defined narrative structures become a type of “narrative anarchy with a geographic centre,” because as we can see in the stories the Elders tell in the Customary Ways project, it is through the telling of these stories that the “land, water and sky are memorialized in story” woven into the structure of the narrative invoking the motion and cycles of the land into the very fabric of each story (Noodin 2014, p.182). The narrative structures that the Elders of Walpole island create in the Customary Ways project are an “inheritance, a duty an explanation and a series of questions” that connect the storyteller to the land (Noodin 2014, p.182). And, it is through the activity of telling the story that an animate connection to the land is created within the framework of the story, connecting the storyteller to the ancestors that told the very same stories; stories of the land, and from the land.

Thus, when Elders describe their relationship to the land through stories, they are putting into motion a “record of relationships always being recalibrated, recalled, reconstructed and revitalized” because the process of carefully assembling stories is the process through which the Elders of Walpole Island weave “what we call history, and

\textsuperscript{23} https://www.youtube.com/watch?v=sNuityiUXV0&t=172s
\textsuperscript{24} https://www.youtube.com/watch?v=sNuityiUXV0&t=172s
geography together” in order to animate the community’s relationship with place (Noodin, 2014, p.182).

Once we recognize that the way in which Elder’s describe their relationship with the land is through the weaving of defined story structures, we might begin to appreciate that these story structures skillfully hold the complex layering of the activity and motion of being of the land within the fabric of the story. And, that it is through participating in this motion, and hearing this motion retold in story, that one begins the process of weaving a series of deeply held ethics within the fabric of their own stories; the stories one learns to tell once one learns to listen and hold the stories contained within the Elder stories that are connected to your own.

3.1.3 Natural Language Processing Analysis: Anishinaabemowin dances with the cycles of life.

After I had completed the story analysis (section 3.1.1), and the story mapping (3.1.2 a), close reading (3.1.2 b) and constant comparative thematic analysis (3.1.2 c), I noticed an interesting feature begin to emerge from the stories the Elder’s told in order to describe their relationship to the land. As charts 4-7, and story maps 1-13 demonstrate, there is a great deal of repetition between the 162 stories that are contained within interviews 9-13. Regardless, of the methods employed, repetition across the different stories emerged. There was repetition between stories related to the activities that were used to tell stories about the Elder’s relationship with the land, just as there was a high degree of repetition related to the ethics that the Elder linked to the activity used within their knowledge story.

A second feature that began to emerge across the 13 stories that I analyzed was the idea that the stories, when mapped to understand the relationships between the story
structures and the types of activities and ethics that were connected through these different story nodes, began to form networks. That is, when I mapped the stories by hand, I began to notice that there was repetition of the activities not only across the stories, but within the individual stories. For instance, the activity of hunting emerged as being related to the story category of community, plants, animals and water. The activity of fishing, demonstrated a similar pattern, in that this activity was attributed to water, animals and community both across interview, but also within individual stories. Across interviews 9-13 (story maps 1-13) that I mapped there was not a single story that did not display this emergent internal complexity, in that activity and ethic categories were repeated across multiple story structures within each story told by the Elders (see story maps 1-13).

I began to wonder what this internal complexity and repetition might mean with respect to how Elders told stories about their relationships with the land? And further, I wondered was there a way in which I could test the emerging theory that the Elder stories about their relationships with the land were: a) internally complex, and b) built upon repeated activities and ethics, both within each story, but also across the entire set of Customary Ways Project stories.

I began to wonder if the reason for the repetition of both emergent activities and ethical themes and narrative structures had to do with the fact that the Elders were not telling their own individual stories, but instead, by telling stories about their relationships with the land, they were working together in some way; working together to tell the original stories, the stories of their ancestors? I began to wonder: Were the Elders working together to tell collective, community level stories?
In order to answer the first question, of whether the repetition and complexity I uncovered in the mapping of the 162 stories contained in interviews 9-13 was representative across the entire set of stories that comprise the Customary Ways Project, I have deployed a basic Natural Language Processing technique that identifies the ways in which words are expressed across the entire corpus of 305 stories, or 50 interviews. In order to answer the second question of whether these Elder stories were working together, to tell a collection of community held stories, and not individual level stories, I have employed an advanced Natural Language Processing technique called network analysis.

3.1.3 a) Basic Natural Language Processing:

Understanding the ways in which words work together across this very large corpus of stories could give us another means to understand the ways in which Elders construct the story structures that support the stories they tell. Words are important to understand in relationship to Anishinaabe storytelling, because as Margaret Noodin argues, “Anishinaabe is a language where most words are verbs, including the nouns,” and as a result, it is easiest to understand the stories, and “the characters, through what they do” (Noodin 2014, p.176). That is, the structure of Anishinaabemowin impacts the ways in which Anishinaabe stories are told- and therefore understood. The verb basis of Anishinaabemowin creates stories that focus on outcomes, and these outcomes are enlivened through a constantly moving and shifting language, or as Noodin describes, Anishinaabemowin is a “river of meaning combining ideas of motion and presence” (Noodin 2014, p.174). She notes that “from and Anishinaabe perspective, Indigenous literature is that trace of words, the circle of story, the lyric of image of a nation
connected by memory to space,” so much so that for Noodin, Anishinaabemowin is a reflection of the land, which is always in a state of motion (Noodin, 2014, p.174).

Running a simple NLP analysis across the entire corpus of 50 interviews uncovered some very exciting patterns of word use, which substantiate the patterns that emerged from the in-depth and more traditional approach (story maps; Story Matrix; close reading) to understanding the Elder stories contained within the Customary Ways dataset.

For instance, the entire corpus of stories contains 335,322 words. This number tells us that we are working with a very large corpus, with a great number of words per story. On average each story is roughly 6500 words. But what happens when we interrogate this complement of words further? We can write a query to better understand how this corpus functions if we ask, of that total word count, how many total words are there if we remove stop words? Stop words are considered frequently used parts of speech like “the”, “a”, “an”, “in”. In order to exclude stop words, we write a code in python that allows the search engine to ignore or exclude these words both when indexing entries for searching and when retrieving them as the result of a search query. The reason we would want to exclude stop words is to get a better sense of how words that carry meaning are operating across the corpus, and how many meaningful words occur in the entire corpus.

In the Customary Ways corpus there are a total of 142,548 total words, excluding stop words. If we then query the total number of words, excluding stop words, we uncover an exciting feature of the entire corpus: there are only 11,693 unique words used across the corpus of 142,548 total words (that excludes stop words).

What this means, is that only 8% of the total words (excluding stop words) are unique, which means that within the Customary Ways story corpus, Elders are repeating
words at a very high frequency. And, from this rate of repetition, we can begin to conjecture that with such a high frequency of word repetition similar stories and themes within stories would also be repeated across the entire corpus. Thus, this basic NLP query allows us to start to make sense of the entire corpus and substantiate some of the findings that emerged from the sample set of 13 stories across the entire Customary Ways corpus of stories.

Using NLP, we also ran a very simple query where we wrote code to retrieve and index the 100 most frequently used words. When using NLP, this can be a good first technique to better understand what types of words are being used, and the frequency with which they are being used across an entire corpus, or dataset.

For the purpose of better understanding how Elders describe their relationship with the land through stories, it would be a meaningful exercise to understand what the most frequently used words were across the corpus, and then try to uncover what that might mean in relationship to the patterns that emerged in both the story analysis (3.1.1) and grounded theory/story mapping analysis (3.1.2).

Below, captured in Chart 13, is the list of the 100 most commonly used words across the corpus of Customary Ways Stories (utilizing the total word count excluding stop words). In order to work with this list of words, I first coded the words as being either: verbs, adverbs, adjectives, or nouns:

**Chart 13: 100 most Frequently used words**

<table>
<thead>
<tr>
<th>Top 10 most used words</th>
<th>100 most Frequently used words</th>
</tr>
</thead>
<tbody>
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<td>('like', 2817),</td>
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</tr>
<tr>
<td>('know', 2450),</td>
<td>('yea', 2440),</td>
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<tr>
<td>('people', 1995),</td>
<td>('yeah', 1924),</td>
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<tr>
<td>('go', 1883),</td>
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</table>
Top 50 most used words

<table>
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<tr>
<th>Word</th>
<th>Frequency</th>
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<td>1537</td>
</tr>
<tr>
<td>'uh'</td>
<td>1517</td>
</tr>
<tr>
<td>'think'</td>
<td>1465</td>
</tr>
<tr>
<td>'things'</td>
<td>1404</td>
</tr>
<tr>
<td>'well'</td>
<td>1390</td>
</tr>
<tr>
<td>'back'</td>
<td>1364</td>
</tr>
<tr>
<td>'got'</td>
<td>1273</td>
</tr>
<tr>
<td>'going'</td>
<td>1250</td>
</tr>
<tr>
<td>'hmm'</td>
<td>1245</td>
</tr>
<tr>
<td>'way'</td>
<td>1204</td>
</tr>
<tr>
<td>'lot'</td>
<td>1182</td>
</tr>
<tr>
<td>'right'</td>
<td>1116</td>
</tr>
<tr>
<td>'could'</td>
<td>990</td>
</tr>
<tr>
<td>'something'</td>
<td>930</td>
</tr>
<tr>
<td>'see'</td>
<td>905</td>
</tr>
<tr>
<td>'say'</td>
<td>856</td>
</tr>
<tr>
<td>'use'</td>
<td>839</td>
</tr>
<tr>
<td>'come'</td>
<td>818</td>
</tr>
<tr>
<td>'good'</td>
<td>812</td>
</tr>
<tr>
<td>'thing'</td>
<td>787</td>
</tr>
<tr>
<td>'around'</td>
<td>771</td>
</tr>
<tr>
<td>'said'</td>
<td>766</td>
</tr>
<tr>
<td>'us'</td>
<td>741</td>
</tr>
<tr>
<td>'oh'</td>
<td>706</td>
</tr>
<tr>
<td>'community'</td>
<td>689</td>
</tr>
<tr>
<td>'water'</td>
<td>677</td>
</tr>
<tr>
<td>'really'</td>
<td>673</td>
</tr>
<tr>
<td>'went'</td>
<td>664</td>
</tr>
<tr>
<td>'stuff'</td>
<td>656</td>
</tr>
<tr>
<td>'always'</td>
<td>643</td>
</tr>
<tr>
<td>'even'</td>
<td>639</td>
</tr>
<tr>
<td>'take'</td>
<td>633</td>
</tr>
<tr>
<td>'laughs'</td>
<td>631</td>
</tr>
<tr>
<td>'fish'</td>
<td>624</td>
</tr>
<tr>
<td>'little'</td>
<td>598</td>
</tr>
<tr>
<td>'kind'</td>
<td>596</td>
</tr>
<tr>
<td>'put'</td>
<td>585</td>
</tr>
<tr>
<td>'big'</td>
<td>577</td>
</tr>
<tr>
<td>'recall'</td>
<td>545</td>
</tr>
<tr>
<td>'hunting'</td>
<td>535</td>
</tr>
<tr>
<td>'um'</td>
<td>520</td>
</tr>
<tr>
<td>'never'</td>
<td>519</td>
</tr>
<tr>
<td>'want'</td>
<td>516</td>
</tr>
<tr>
<td>'make'</td>
<td>509</td>
</tr>
<tr>
<td>'still'</td>
<td>489</td>
</tr>
</tbody>
</table>

Words 51-100

<table>
<thead>
<tr>
<th>Word</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>'years'</td>
<td>483</td>
</tr>
<tr>
<td>'today'</td>
<td>483</td>
</tr>
<tr>
<td>'old'</td>
<td>477</td>
</tr>
</tbody>
</table>
When working with this list of 100 most frequently used words, I also cleaned this list by removing 7 words that appeared on the list, that for the purposes of understanding word use, did not present any inherent meaning, as they act as colloquial stop words:
“yea,” “yeah,” “uh,” “hmm,” “oh,” “um, and “eh,“ which brings the total word count to the 93 most frequently used words across the dataset.

You will notice that the words “like” and “fish” are both highlighted in blue. That is because both words hold multiple parts of speech within the corpus of stories. That is, the word “like” can be a noun, a verb, a preposition, a conjunction, an adjective or an adverb. Thus, I have not coded it as a singular entity because of the number of ways that it can be reflected in speech, which is most likely accounted for by the fact it is the singularly most used word, with a frequency count of 2817. The word “fish” is also highlighted in blue, because within the Customary Ways corpus the word is used as both a noun, as in the sentence “there were a lot of fish in the water;” but, the word “fish” is also used as a verb within the corpus of stories, as in the sentence “I fish the waters.” Therefore, I have not classified the word “fish” as a singular part of speech because it occupies multiple parts of speech within the corpus of stories.

One of the first things we do when using NLP on a large corpus of data, in this case stories, is that we try to understand what parts of speech the speakers, or writers or storytellers are using to build the sentences that make up the narratives of each story. In the case of the Customary Ways corpus an exciting and interesting pattern of word use emerges: if we focus on the first 50 most frequently used words, which accounts for frequencies of use above 489, we notice that 52% of the words used are verbs. If we focus on the 10 most frequently used words, which have a frequency of use above 1537, we notice that 70% of these words are verbs (including the multi-modal word “like”). What is fascinating about this finding is that if we look at the word use in this corpus, it is clear that the stories are being told with a greater frequency using verbs, than nouns. If we analyse the parts of speech that make up the latter half of the most frequently used words,
this pattern is replaced, and almost inverted, as nouns comprise 69% of the words in the
latter half of the 100 most frequently used words, with verbs only making up 12% of this
list.

In order to make sense of this finding, that the Customary Ways stories have a
pattern of verbs ranking as the most frequently used parts of speech across the corpus, we
need to compare this finding to other studies about what is called parts of speech use in
English. We will use an English language comparative study to begin, as all of the
Customary Ways stories are told in English, with some use of Anishinaabemowin. There
was only 1 story that was told with large sections spoken in Anishinaabemowin, but I did
not map this story as too much of it was in Anishinaabemowin and prevented my ability
to understand the story as it was told, in its original audio recording.

Chart 14, below, demonstrates that most Elders noted within their stories that they
did not consider themselves fluent speakers, but instead had a working knowledge of
Anishinaabemowin, or knew words and phrases, but not a fluent use of the language.

*Chart 14: Elder use of Anishinaabemowin in Customary Ways stories*

<table>
<thead>
<tr>
<th>Interview no.</th>
<th>Story told in Anishinaabemowin</th>
<th>Working Phrases of Anishinaabemowin in story</th>
<th>Use of Anishinaabemowin in story</th>
<th>No Anishinaabemowin use recorded in story</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17/18</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>ONE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In order to compare the pattern of word use that emerges in the stories Elders tell to describe their relationship to the land, we will use a seminal text in the field of computation linguistics: *37% of Word Tokens* are Nouns, published in the journal of the Linguistic Society of America in 1994. In this article, Richard Hudson establishes noun use in the English language based upon two seminal early computational corpus studies: The Brown Corpus (BC) which studied 1M English written words gathered from various printed material, which was completed in 1982, and the Lancaster-Oslo-Bergen Corpus (LOB), which was completed in 1989, and also studied a corpus of 1M English written words from various media.

For perspective, it is important to note that the Customary Ways corpus is about 1/3 the size of these seminal corpora studies, and therefore provides a rich opportunity to use NLP as a tool to better understand the words, and word uses that comprise this complex corpus of stories in relation to the more traditional qualitative approaches used to make-sense of the Customary Ways stories.

In comparing both the BC and LOB data, Hudson was able to assert that word-tokens, or used parts of speech, within both corpora was about 37%, and comprised the majority of word use (Hudson, 1994). Linguists have established that within the English language, nouns comprise the largest class of words, with verbs comprising the second largest class of words (https://plato.stanford.edu/entries/linguistics/). But, until the advent

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25 A token is an instance of a sequence of characters in some particular document that are grouped together as a useful semantic unit for processing. In this case, a token is representative of a class of words, nouns.
of computational linguists and corpora studies, what we did not understand was what typical patterns of word use from these classes of words looked like in the English language (Hudson, 1994, p.331). There had been historical debates by linguists about these patterns of word class use, but as Hudson notes, the title of his article “is a generalization that may strike readers as a joke,” because although his statistical assertion of 37% of word-token use were nouns, he notes that he was as “reluctant as any linguist could be to believe it; after all, the choice of word-classes in a text depends on a myriad of variable influences, from the message conveyed to the style of the author” (Hudson 1994, p.331).

What Hudson uncovers in his work on the BC and LOB is that regardless of the type of English literature source (he looks at Informational sources like newspapers/magazines versus Imaginative sources, like fiction or short stories) the word-token frequency for nouns remained stable at about 37%. His study did uncover, however that there was some variability in this percentage of word token use when related to different sources. For instance, Hudson found that interviews produce more nouns (common and proper nouns) overall, while play produces more verbs and pronouns in the corpus (Hudson 1994, p.338).

If we compare the patterns of word classes that emerge as a standard in Hudson’s work against the patterns of word classes that emerge in the Customary Ways corpus an exciting finding emerges. Even though the majority of Elders telling the stories that comprise the Customary Ways corpus are English speakers (Chart 14), and the majority of Elders telling stories in the Customary Ways corpus do not speak fluent Anishnaabemowin, they are telling stories about their relationship with the land as if they were speaking Anishnaabemowin. That is, they are speaking English using word patterns
that are far more closely connected to the construction of Anishinaabemowin than English, as we have established that Anishinaabemowin is a verb-based language, unlike English, where the largest class of words is nouns.

Within the Customary Ways corpus, 52% of the first 50 most frequently used words are verbs, and this drops to 12% in the 50-100 most frequently used words. So, when we ask the question, what does the list of most frequently used words establish we begin to uncover two very important features of the word use: the storytellers are building stories with verbs; verbs form the basis for how the knowledge contained within the stories is described; and the most frequently used verbs from the top 10 most frequently used words are: would (2627), know (2450), go (1883), used (1824) and remember (1549). The only nouns used in the top 10 most frequently used words are: people (1995), one (1702), and time (1537).

Another way in which we can deploy NLP as a sense-making tool, to better understand the ways in which the words the Elders choose to use to tell the stories within their knowledge baskets is by understanding what we call parts of speech tagging. Parts of Speech tagging is an NLP technique that across a corpus of data tells us how individual words are used within parts of speech, or sentences. For instance, by using particular algorithms developed through the field of computational linguistics, we are able to understand the ways in which words are used related to their grammatical usage. That is, parts of speech tagging, is able to identify how words are used by speakers or writers, such that we can understand if a word is being used in its noun form, or verb form within a part of speech within the corpus.
Part of speech tagging works in very similarly to early grammar lessons taught in school, where the student is asked to parse a sentence to uncover how words are being used by classifying their usage within a particular sentence, underlining whether a word is a noun, verb, adjective or adverb.

By conducting a Parts of speech analysis of the Customary Ways corpus further validates the hypothesis that Elders were telling their stories by utilizing verbs in their sentence construction, at a much higher rate than is typical for English speakers when compared to word lists in the computational linguistics work of Leech, Rayson and Wilson (Leech, Wilson and Rayson, 2014). If we look at the POS word list below, chart 10, we notice that the most frequently used verbs from the top 10 most frequently used words list are all not only structurally classified as verbs but are being used as verbs at an exceptionally high rate across the corpus. The POS analysis (Chart 15, below) also shows that the nouns in the 10 most frequently used word list, are also being used as nouns across the corpus:

**Chart 15: PoS TAG NOUNS AND VERBS (MODAL VERBS INCLUDED IN THE VERB LIST)**

<table>
<thead>
<tr>
<th>PoS Tag Nouns and Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>would</td>
</tr>
<tr>
<td>--- total: 1934</td>
</tr>
<tr>
<td>--- (verb: 1934)</td>
</tr>
<tr>
<td>know</td>
</tr>
<tr>
<td>--- total: 1891</td>
</tr>
<tr>
<td>--- (verb: 1867)</td>
</tr>
<tr>
<td>--- (noun: 24)</td>
</tr>
<tr>
<td>people</td>
</tr>
<tr>
<td>--- total: 1362</td>
</tr>
<tr>
<td>--- (noun: 1358)</td>
</tr>
<tr>
<td>used</td>
</tr>
<tr>
<td>--- total: 1308</td>
</tr>
<tr>
<td>--- (verb: 1307)</td>
</tr>
<tr>
<td>one</td>
</tr>
<tr>
<td>--- total: 1236</td>
</tr>
</tbody>
</table>
The rate of verb use across the corpus further substantiates that the Elders are telling their stories using a grammatical structure that mirrors the ways in which Anishinaabe stories would have been told in Anishinaabemowin, as the Elders are telling stories not only about motion, but, these stories are literally in motion through the utilisation of verbs across their stories.

If we make sense of the patterns that emerge in our basic NLP analysis in section 3.1.3 a) in relationship to the analysis conducted in section 3.1.1 and 3.1.2, we see patterns emerge that make sense when related back to the emergent trends found in sections 3.1.1 and 3.1.2. First, the high degree of repetition that were uncovered in the analysis conducted in 3.1.1 and 3.1.2 are substantiated within the NLP query that demonstrates that there is only a very small percentage of unique words that appear in this large corpus. That such a small (8% of the total words are unique words) percentage of the words used by Elders across the corpus are unique words confirms the emergent
patterns found in the in-depth analyses conducted in sections 3.1.1 and 3.1.2 of this dissertation: that Elders are using a highly similar structure to the stories they are telling.

By triangulating the findings from the story matrix analysis (3.1.1); the story mapping exercise (3.1.2 a); the close reading (3.1.2 b) and the grounded theory/constant comparative analysis (3.1.2 c) of the Elder stories, with the NLP analysis across the corpus of the Customary Ways stories, we are able to establish that the Elders are in fact telling versions of the same stories across the entire corpus. And further, the Elders are using the same types of words to tell these stories. When we compare the length of the stories, they remain stable, with an average of 6500 words/story, which further indicates that the small emergence of unique word use demonstrates that the stories and ideas are repeated across the entire corpus of Customary Ways stories.

Second, when we compare the word classes that emerge in the 100 most frequently used words, in comparison to the finding that emerges in section 3.1.2, that the Elder’s construct their stories about their relationships with the land by linking and activity that takes place on the land to an action that encompasses and ethic, we see alignment.

That is, the story matrix analysis, story mapping, close reading and grounded theory/constant comparative analysis established that across the 13 interviews analyzed in detail, Elder’s focused on telling stories about doing; about being on the land; and what they learned through this process of participating in activities on or related to the land. This analysis uncovered that the result of this storytelling technique is that an action is described; that the Elder’s describe their relationship with the land as an action- and connected to that action is a deeply held set of ethics that are set in motion through the act of storytelling.
In order to describe such activity, one would need to rely on verbs in order to carry the meaning and structure of such a story. If we look at the findings from the NLP word analysis, where 52% of the most frequently used words are verbs, and 70% of the 10 most frequently used words are verbs, we find that this is exactly what is occurring across the Customary Ways corpus.

That is, across each story, the Elders of Walpole Island are telling stories that describe their relationship with the land as action: as participatory motion. In fact, we might conjecture that the Elders are basing the linguistic structure of their descriptions of their relationship with the land based on traditional Anishinaabe stories that would have been told in Anishinaabemowin, which, as Basil Johnston establishes, is a verb-based language of motion (Johnston, 2003, Noodin, 2014).

As Margaret Noodin has established, Anishinaabe stories are structured such that they are the “memory of collective motion shaped by the place from which it originates… in most Anishinaabe stories the action in the character,” that is, the motion and activity of being on and engaging with the land (its cycles; its ebbs and its flows), woven into the narrative of a story, produces a description of an action based on one’s relationship with Creation (Noodin 2014, p.176). And, it is the act of telling a story, in animating the action through language, that the ethic becomes a living and breathing entity within the story structure, and, in the way one describes the participatory activity of being in relationship with the land, rather than one’s passive and conceptual relationship to the land.

In essence, the Elders describe what they know, and how they come to know, as an emergent process of participatory knowledge, not conceptual knowledge. And this makes a great deal of sense, when we think about how one teaches or describes motion. One cannot functionally describe a knowledge of and in motion through nouns, or
abstracted concepts. If we think about the fact that the 7 functional verbs that construct the 7 Grandfather Teachings are all verbs, and not nous, the impetus and need to describe those verbs, those very ethics and concepts that are in and of motion require a means of carrying that \textit{knowledge in motion}. Thus, the Elders, within the Customary Ways corpus animate and describe this \textit{knowledge in motion} through the active and participatory voice that emerges through the act of storytelling.

3.1.3 b) \textit{NLP Graph Analysis}:

The outstanding question left with respect to the Customary Ways corpus is: whether or not the Elder stories that comprise this corpus were working together, to tell a collection of community held stories, or are the Elders telling individual stories that exist in isolation from one another, and only refer to their own individual life experiences?

In order to answer this question and building on the story mapping completed in the analysis in section 3.1.2, I have deployed an NLP technique that is a statistical analysis of the relationships between words within individual stories and in relationship to the entire corpus of stories. I have utilized a graph analysis as a tool to make sense of the corpus of stories that belong to the Customary Ways project.

We can think of graphs as a statistical means of representing entities (objects, phenomena, occurrences, words) and their connections as they behave in reality. The graph is a tool that allows us to make sense of the relationships between these entities, allowing us to begin to measure, using statistical models, how closely related entities are within defined parameters. That is, a graph analysis is a way of understanding to what extent entities (words, objects, phenomena) behave like a network.
Essentially, we will use NLP graph analysis to uncover if the Elder stories that comprise the corpus of the Customary Ways dataset behave like a network of stories, or, if they behave as individual entities that have no modularity or interconnection.

We need to use the tool of NLP graph analysis to answer these questions because of the large size of the Customary Ways corpus. With over 355,000 words, the corpus of stories is simply too large to analyze using traditional qualitative techniques, because the more advanced analytic techniques available to us through, for instance, programmes like NVivo, do not allow us to understand the data from the ground up.

That is, NVivo behaves like a database, and very much works in similar ways to how I manually mapped the stories in 3.1.2 producing Story Maps 1-13. In those Story Maps, I followed a series of logically predefined steps, and then coded the information as I followed these steps. I set up a framework and parsed the data to see if it aligned to the pre-determined set of logical principles. This is just one way to make-sense of stories, but there are limitations to using the tool of story mapping, as there are with any tool use.

For instance, I was only able to map 13 interviews, with 162 stories; and I was not able to map all of the ways in which the stories had endogenous and exogenous complexity or interactions. Humans just aren’t very good at identifying patterns across large amounts of information. That is, our capacity to find patterns at the scale required to understand the Customary Ways corpus is not as refined as the capacity of artificial intelligence. NVivo has the same limitations as humans in that NVivo is only set-up to search for patterns under a pre-determined set of parameters which are decided by the researcher. So, NVivo can look for those patterns at a scale greater than the researcher’s capacity, but, NVivo cannot find new patterns, or patterns that might exist outside of the parameters that the researcher set.
The second limitation in the story mapping I conducted is that I imposed the framework from the top down, and so, there is no way that I can objectively test whether or not there were other patterns within the stories, unless I created an entirely new set of parameters, or framework to test emergent patterns from. In many ways NVivo creates the same issue, because it works from the perspective of utilizing a top-down parameter, and in so doing creates what we might call observation bias, in that the programme will only search for and find patterns that the research has predetermined they want to search in the dataset.

By using an NLP graph analysis, I am able to do two important things:

First, I am able to test whether or not the patterns I saw emerge from the story mapping, narrative analysis and grounded theory approaches to coding, in sections 3.1.1, 3.1.2 are viable across the entire corpus of Customary Ways stories, but I am able to do so in a much more objective way. Using NLP, I am able to graph the interrelationships between words (or entities) without first imposing what I think those relationships look like, or, behave like. I am simply asking the graph to show me the multiplicity of ways the entities (words) within the stories interact, without first determining these relationships. Second, depending on the outcome of the graph analysis, I can then either confirm the hypothesis that my grounded theory, story mapping and narrative analysis produced, or, I will be given information that requires me to re-tool my hypothesis developed from this traditional qualitative approach.

By using NLP graph analysis as sense-making tool, I intend to be able to answer the following two questions about the stories that comprise the Customary Ways corpus:
1) *Is the internal complexity that was observed within the individually mapped stories consistent across the entire corpus?* and

2) *Can we establish that the Elders are telling interconnected stories? That the stories Elders are telling function as a network of knowledge stories?*

So then, what did we discover by graphing the Customary Ways corpus of stories

*A beautifully alive network of stories in motion!*

---

![NLP Graph Analysis of the Customary Ways Corpus](image)

**Figure 10: NLP Graph Analysis of the Customary Ways Corpus**

I contended that using NLP as a tool for sense-making would allow us to understand if the internal complexity that was observed within the individually mapped
stories (Story Maps 1-13 in the appendix) was consistent across the entire Customary Ways corpus?

Figure 10 does two important things in helping us answer this question. First, the graph analysis demonstrates that we have a network that behaves with a high degree of modularity in two distinct ways: first- there is a high degree of modularity between individual words, but also, between concepts. That is, if we look at the graph and appreciate the number of connections between words, we can begin to understand how deeply interconnected the words and ideas are that form the Customary Ways corpus.

Second, we can look at another feature of the graph, which shows us the clusters or nodes that emerged as being the most connected. If you look at the graph, and you study the size of the circles that are attached to certain words, you will begin to appreciate that these words are the most connected concepts across the dataset.

What is fascinating about this feature of the graph, is that we can compare these concepts to the narrative structure that was uncovered in section 3.1.1. In section 3.1.1, I had a hypothesis that the Elders were telling stories using a story structure that could be linked to the creation story structure. That is, the Elders were telling stories about the land by building narratives that aligned with the creation story narratives: stories about water/rocks; plants; animals; people.

Figure 10 demonstrates that the hypothesis that emerged from the story matrix analysis in 3.1.1 is correct and that it can be measured across the Customary Ways corpus. That is, if we look at the size of the circles, we learn that the Elders were telling water stories by talking about the (water/marsh/river) they were telling Plant stories by talking about the (Bush/Plants/Trees) they were telling Animal stories by talking about (fish/Muskrat/Deer/Ducks) and they were telling stories about the community by talking
about (Dad/Kids/Grandparents/Elders). And if you look at the size of these circles and their modularity, a hierarchy emerges that replicates the hierarchy of the Creation stories: Water is the most important element of Creation, because water and rocks can survive with no inputs. Plants are the next most important element of creation, because they only require water and sunlight to survive; Animals are the next most important element of Creation as they require both plants and water to survive, and the Anishinaabe are the most dependent element of Creation because they require Animals, Plants, and Water to survive. And, it is this knowledge, the knowledge that each element of Creation is connected, and that each element of Creation has its own spirit and motion, that the Creation stories teach us.

It is through the understanding that the land is in motion and that the Anishinaabe are in conversation with the land; that is, if you learn to live by listening to the land, through activities, then you learn that the land has the capacity to listen and speak in its own way, through its own language - a language delicately built with motion.

Another exciting feature to understand from this graph, is that the even distribution of the networks tells us that the repetition we theorized was occurring across and between the stories, through the analysis in 3.1.1 and 3.1.2 is occurring across the entire corpus. Figure 10 demonstrates that the Elders were telling the same versions of stories; they were expressing similar ideas and using similar words and pairs of words to do so. This graph allows us to understand this feature of the corpus because it measures semantic similarity, which tells us how often words appear in similar semantic settings.

This should not be confused with semantic similarity in a word’s meaning. That is a different measurement altogether. In this graph, we measured the similarity in how Elders were deploying words within their stories. And as you can see from this graph-
across the entire corpus of stories there was a high degree of semantic similarity. The way in which we know this, is that there isn’t clusterization of nodes- instead the connections are evenly spread across the entire graph, illustrating a degree of modularity across the entire corpus, not just in certain sections, or within certain stories.

When we measure modularity, we look for mathematical outcomes that put the percentage of modularity above 10%. This indicates that we have a best fit and that the modularity is both high and replicable. If you notice, 50% of the nodes have a modularity higher than 10%. And, if we look at the red and orange nodes, we can read them together, as they are both related to plants.

The modularity of this network also shows how the main thematic clusters of the Elder stories, which are built using narratives that can be attributed to the Creation stories, have an internal semantic structure that demonstrates that words in the same modules (colours) create a family of concepts. For instance, if we look at the pink cluster, we notice that the family of concepts is organized by connecting the concepts of Water, Marsh, River, Dad, Kids, Lake, Grandparents, among others. We can hypothesize that with some variation, that these are the critical concepts that will always appear when the Elders tell stories about water and Walpole Island. That is, these essential connected concepts become the map of community held knowledge, derived from the participatory knowledge they practice with the land. We also know from our quantitative analysis in section 3.1.1, that grandparents told a high number of water stories, which is born out in figure 10, as well.

We used an NLP graph analysis in order to establish if the Elders were telling interconnected stories? Wondering if the stories Elders are telling function as a network of knowledge stories? This graph demonstrates the Elders are in fact producing a network
of knowledge stories that work together to create a singular corpus of community knowledge that is interconnected to such a high degree that the 305 stories contained within the 50 interviews are told with such similarity, we are able to map it as a highly modular network of stories.

**Story no. 15: Telling Stories puts us in motion together**

As I sit at my desk, and I contemplate how to tell you the last part of this story, I will ask you only one thing: that through your own listening, you make this story your own; that you take what you have heard and what you understood and make it into a new story. That you connect me to you, by retelling this story. That we tell a story together. Because the truth about stories is that once you have heard a story, you can never be the same again, because once you tell a story “it cannot be called back,” once you tell a story, be it good or bad, we become forever connected, because the other “truth about stories is that that’s all we are” (King 2003).

What I have learned from Thomas King, is that when you hear a story, you have a choice, you can take that story in, and let it change you and become part of who you are, or you can try to ignore the story, and go about your life. He implores us all to remember that if we need proof that the “truth about stories is that that’s all we are” all we have to do is recognize that once we hear a story “we don’t say in the years to come that [we] would have lived [our] lives differently if only [we] had heard this story,” because “you have heard it now” (King 2003).

So, what did I do after I heard the elder stories in the Customary Ways interviews? I began to tell new stories that connect me to these storytellers and the storytellers that came before them, and the storytellers that came before them, because I took these stories deep into my heart, and in doing so I learned to listen to the world around me differently and tell new stories that connect me to the land beneath my feet. The land that I am learning we are all so deeply connect to. Here is part of that story that I am still learning to tell.
4.0 CHAPTER 4: Making Baskets: *Ezhianishinaabebimaadiziyang mii sa ezhianishinaabeaadisoyang* 26

What has become clear to me, as I look back over the journey of learning and co-creating this dissertation with Clint, is that this is fundamentally a dissertation about listening, in practical, methodological and metaphoric terms. This is a dissertation about what it means to listen to the land under one’s feet and what it means to tell stories about that listening within the context of Walpole Island First Nation.

As a result, the listening and learning that occurred through the scaffolded approach to understanding the stories that the Elders of Walpole Island told, about their relationship to the land, in the Customary Ways dataset, suggests that current definitions and practice of what constitutes listening, need to be questioned. That is, we have learned, by listening to the stories in the Customary Ways dataset, that a local description of both the practice of listening and also a local description of Indigenous knowledge, as it relates to the Elder’s relationship to the land, begins to emerge.

We have learned, that if we pay attention to the ways in which the content of Indigenous Knowledge is bound within the intentionally woven form of the stories that Elders tell, we recognize we need to approach this knowledge in new ways. Ways that allow for the exploration of how these stories are constituted by the storyteller, and how these choices of form are in relationship to the content (or knowledge) they hold.

In particular, though, *I* have learned that this is a about the connection between the activity of listening and telling stories, and how, within the context of Walpole Island

26 The way in which we live, that is the way we make stories
First nation, these two activities are not separate but intimately connected activities that enliven and strengthen one another, producing stories that are animate, mirroring the participatory knowledge of motion that they describe. Thus, at Walpole Island, we begin to learn, that like the scholars in the text *Centering Anishinaabeg Studies* describe\(^27\), knowledge stories about the land are both the form **and** subject of this participatory knowledge of motion. And that, “stories themselves are governance; in an Indigenous context it is not necessary to distill these into abstract policy statements. Rather, the laws embedded within the stories can be directly interpreted and re-enforced in the daily practice of each individual (McGregor, 2010 p.113)

Within the corpus of Customary Ways stories, what we see is that the connection between listening and telling stories creates a complex network of living stories that are shared within the community. That is, within the corpus of Customary Ways stories, no story exists in isolation, instead, each story can be mapped into a network of stories that are interrelated and connected creating both an epistemological and ontological framework for how one both listens to the land, and tells about what was heard. And, it is precisely through the act of the telling, that the listening is made animate; that the ethics learned and apprehended through the listening are put into motion through the activity of telling stories.

In the introduction of this dissertation, I stated that the objective of this thesis, based on one of the goals of Clint Jacobs and the work of the Heritage Center, was to understand *How do the Elders of Walpole Island describe their relationship to the land?*

\(^27\) In particular here, I am referencing the work of Basil Johnston; Heidi Erdrich; Margaret Noori (now Noodin); Eva Marie Garrotte & Kathleen Delores Westcott; Thomas Peacock; Jill Doerfler; Melissa Nelson; Kimberly Blaser; Leanne Betasamosake Simpson with Edna Manitowabi and Lindsay Keegitah Borrows.
First, by listening to the Customary ways dataset, as a corpus of stories, and then working, by using a mixed methodology of Grounded Theory Analysis, Story Mapping, Close Reading, and NLP word use analysis and NLP graph analysis we were able to uncover that our initial question was positioned incorrectly. That is, this thesis has demonstrated that the Elders of Walpole Island, in the Customary Ways dataset, do not describe their relationship to the land, as we had first proposed, but instead, the Elders of Walpole Island tell stories that are about being in relationship with the land.

That is, the literature review of this thesis demonstrated that scholars both Indigenous and non-Indigenous have spent a great deal of their time working with Elders to categorize and describe what was referred to broadly as Indigenous Knowledge. The first wave of these scholars used primarily interview methods with Elders, seeking to uncover only the knowledge that they deemed to be useful to their larger projects or contexts, and the result was the creation of a disconnected, static and universal set of principles that were called Traditional or Ecological knowledge within the literature.

Indigenous scholars argued that these early descriptions in the literature did not and could not adequately describe the knowledge that Elders were describing, and instead worked to describe what they termed Indigenous Knowledge in conceptual terms. These scholars worked together to describe the conceptual qualities of what they described as Indigenous knowledge. And they did so by primarily trying to understand the ways in which Elders described their relationships with the land. This work was important as it gave us the first clues that what was described as Indigenous Knowledge was a much more dynamic and complex way of knowing the world than the early disconnected and abstract descriptions within the literature accounted for.

But, many Elders and Indigenous storytellers still contested that the descriptions
of Indigenous Knowledge that is found within current literature fully captured what they were describing. I began to wonder why this was; what were we missing as settler scholars that the descriptions of Indigenous Knowledge were not entirely describing what Elders were telling us? It wasn’t until I read Thomas King’s (2003) Massey Hall lecture the *Truth About Stories*, that I began to wonder if what we were missing as scholars was two important things:

1) As geographers, in particular, we were relying on methods that understand knowledge as an abstract and conceptual concept, and therefore we both talked about and asked questions about knowledge as being a conceptual construct;  
2) We were not recognizing that Elders were describing knowledge through telling us stories, and as a result, we needed to employ techniques from other fields, like the humanities, that have spent their time thinking about how you go about understanding the knowledge that is embedded in stories.

As a result of this thinking, I went back to my roots, as a humanist, a scholar of English literature, a poet, and a Visual Artist, and I thought about how I could deploy everything that I knew about listening, writing and learning from stories, and develop a listening methodology to better understand, and learn from the ways in which the Elders of Walpole Island were telling stories, how they constructed these stories and what kind of knowledge they filled their stories with, as a means of helping to answer the questions that were important to Clint.  

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1) First, this dissertation will illustrate how Elder relationships to the land are created through a practice of listening to the land. Clint felt this was an important outcome for the community as this description could further the Heritage Centre’s work of Indigenous Knowledge resurgence. Clint had been developing programmes to support community members to increase the time they spent on the land, at Walpole, and he felt answers to this question could further this work.  
2) Second, this dissertation will seek to understand if there is a relationship between listening and storytelling within the Customary Ways dataset. Clint had suspected that some of the knowledge Elders were sharing in the Customary Ways interviews were linked to the Creation stories about rocks/water; plants; animals and people. He taught me that an important outcome of this dissertation and project could be a demonstration, for the community, about how the traditional
If we understand that what the literature has worked to describe as *Indigenous Knowledge*, as a conceptual construct, at Walpole Island, within the Customary Ways dataset, may be more accurately described and thought of as a *poetics of motion*, we may begin to understand that Elders are telling stories, and the ways in which they tell these stories—*the very intentional ways in which they use language and story structures to tell these stories*—is vitally important if we are to begin to describe how Elders account for being in motion with the land. Then, we might be able to offer a more holistic descriptions of the process-based knowledge contained within the stories Elder’s tell, and we might begin to understand why the Elder’s of Walpole Island, weave their knowledge in such a way that their stories, about their relationships with the land, contain what we might more accurately describe as a *participatory knowledge of motion*. The motion that is beneath their feet; the very motion of the land contained in Elder *stories that are about being in relationship with the land*.

4.1.0 The beginnings of a theory of a poetics of motion
What is a poetics of motion? The term *poetics* is borrowed from Aristotle, who famously wrote a poetics, which is considered the very first instance of literary theory. That is, Aristotle took great time to try to create a theory of how poetry was created, how the intentional decisions about form and content created great works of poetry, and how different forms of poetry had similar patterns or forms. By understanding the similarities of form, Aristotle was able to uncover the ways in which poets were able to embed important social, political and importantly, ethical ideas within the form of their poetry.

Within the context of the Customary Ways corpus, I began to wonder if, in order to understand the knowledge embedded in the local stories Elders were telling about their relationship with the land, we could co-develop a set of principles, not unlike a poetics, that could begin to describe the ways in which the form and the content of the Elder’s knowledge stories worked together to literally weave together baskets that hold knowledge.

Margaret Noodin argues that to really understand and make sense of Elder knowledge, researchers must begin to work to understand this knowledge as carried in stories, and thus, these stories must be first approached by understanding them through, what Margaret Kovach calls a “round dance of Indigenous inquiry,” that demands the researcher take seriously the fact that “language can shape narrative and leave traces of that shape long after it has been translated” (Noodin 2014, p Xvii).

She argues that Anishinaabe Elder stories need to be understood as literature, and that to really uncover the ways in which both “stories and language are woven together” one must utilize an analytic approach that understands that a combination of an analysis of Anishinaabemowin (word level) along with an understanding of the patterns of
narrative composition are the way in which scholars might produce an account of the full power of Anishinaabe stories (Noodin 2014, p Xxii).

Basil Johnston argues that we must appreciate Anishinaabe stories as a form of conscious production, that is, we must remember that “Anishinaabe stories are as broad and deep in meaning and mystery are the tales, legends and myths of Greek, Roman Egyptian and other peoples” and as such “time and deliberation are required for adequate appreciation” (Johnston, 1967, p.7).

Thus, the first step in describing, what we might call a poetics of motion was to understand the form of the local Elder’s stories. From the story analysis conducted in section 3.1.1 of this dissertation, we have created the first step of describing a poetics of motion by uncovering principles of local, Walpole Island knowledge basket creation.

4.1.1 Principle 1: Baskets are made from weaving distinct and recognizable parts together into a structure.

If we understand that baskets are inherently woven together from smaller parts, or materials, then we must understand the function and structure of the component parts if we are ever going to understand the entirety of the basket. With respect to Anishinaabe stories, and narratives, we need to understand the words, or the language, if we are to ever understand the shape and purpose of the basket, because it is the words and the language that are woven together to form the story that becomes the physical form (knowledge holder), or basket of the story.

There is an intimate relationship in Anishinaabemowin between language, the world it describes, the narrative the language constructs, and the knowledge that is held within that narrative structure. Words are chosen by storytellers with purpose because words
matter; in Anishinaabemowin words “are connected to worldview” (Noodin 2014, p.3). Verbs, for instance are not simply, “classified into two categories; they are ‘infused with spirit’” and it is that infusing of words with spirit that connects language to the world (Noodin 2014, p.3). Mary Young asserts that Anishinaabe language describes the ways in which all living things have spirit, and that for the Anishinaabe, there is not a worshiping of this spirit, but rather, the Anishinaabe, through their language and the stories they tell with Anishinaabemowin, create a relationship with all parts of creation, and through this relationship, develop a deep and reciprocating respect (Young, 2005 p.139).

4.1.2 Principle 2: Baskets have recognizable shapes at both an individual and community level.

If we carry the metaphor of the basket forward as a means of understanding the Anishinaabe stories, the Elders of Walpole Island tell in the Customary Ways dataset, we must also understand that baskets are made following recognizable shapes or forms. That is, because baskets serve a purpose, to hold something, baskets, regardless of the material or the individual basket-maker, have common and identifiable features that distinguish the community to whom the basket making tradition belonged. In this way, the form, or the shape of the basket was a signal about where the basket came from, if it could be trusted, and what purpose the basket carried.

Anishinaabe stories can be understood in very similar ways. Consistent narrative structures are a key feature of Anishinaabe stories, that link not only the story, but the storyteller to their community. It is the linking of the individual story to the greater community knowledge that establishes its veracity (Johnston 1967, 2011, 2013, King 2003, Einrich, 2013, Borrows, 2015).
JoAnn Archibald (2009, p.81-82) describes the relationship between the storyteller and the listener when she argues that within Indigenous oral traditions “no-one had the whole story. Eventually, they got the whole story pieced together, but it went through a...transition of convincing each other that their particular part of the memory was valid. It didn’t matter if they didn’t know all of it. Once they put it back together it became a whole story” in the new context it was told, under the scrutiny of the lived experience of both the storyteller and the listener. Thus, storytelling was a communal activity, that required storytellers and listeners to verify not only the narrative structure of the story, but also the knowledge contained within the story. As such, the narrative structure, like the structure of baskets, had to be recognizable to the community of listeners if the veracity of the knowledge was to be tested, accepted and then cared for within the broader collection of community stories.

Angela Wilson begins her chapter on Okicyyaka Uniyanki (Oral Tradition) by explaining that the process of engaging with oral tradition is not a passive activity but one that requires a relationship to be created between the speaker and listener (Wilson, A., 2005). Cruikshank notes that attention should be paid to how “narrative frameworks are shared by a narrator and his or her listeners and the ways in which shared metaphors are mutually understood and reproduced through the practice of oral tradition” (Cruikshank 1994, p.152). Cruikshank also argues that the “meanings of oral narratives are not fixed: they have to be understood in terms of how they are used,” and by explaining past events in “ways that are intellectually consistent with the framework, oral tradition has long provided...a complex relationship between words and events” (Cruikshank 1994, p.162).

Johnston argues that *Indigenous Knowledge*, is found deeply woven in the frame of a narrative, and that Indigenous knowledge is “deposited in myths, legends, stories and
the lyrics of changes that make up a tribe’s literature (Johnston 2011, p.90). And for Johnston a critical feature of Anishinaabe literature is that the structure of these stories are communally understood and cared for (2011, 2013).

Margaret Noodin, in her remarkable text, *Bawaajimo: A Dialect of Dreams in Anishinaabe Language and Literature* (2014) argues that for far too long, Anishinaabe knowledge shared by Elders through story, dance and song has been analyzed as data— that is, what the Elders are saying has been analyzed through a lens that values the words as data- in and of themselves- disconnected from their source: stories (Noodin 2014, p. xx). She argues that a “particular problem in postcolonial communities is the duality of existing always either as an untranslated identity or as an assimilated translation of one’s self” (Noodin 2014, p.xx).

Basil Johnston cautions that not enough time has been spent by scholars really listening to the stories that Elders share within research. He encourages scholars to spend time really listening to the Elder stories in their entirety, because for Johnston, knowledge is carried within story. That is, until scholarship is focused on understanding the stories, which for Johnston all Anishinaabe knowledge emanates from, the “Anishinaabe people and their teachers [will not] fully understand the philosophy and the philosophic basis for their institutions” and most importantly, “[will not] be able to transmit them to their children,” through stories (Johnston 2011, p.51).

Basil Johnston also notes that Anishinaabe stories need to be understood not as data, but as literature full of the power of narrative and composition, when he argues that “Language is a precious heritage; Literature is no less precious…as rich and as full of meaning as may be individual words and expressions, they embody only a small portion of the entire stock and potential of tribal knowledge and wisdom,” for Johnston, the real
power of Anishinaabe knowledge is located once the reader, or listener understands that stories carry knowledge through the power of narrative (Johnston, 2011, p.90).

Noodin argues that readers or listeners of Anishinaabe stories should listen/read these stories “through the reality of the Anishinaabe language and storytelling culture,” and that in so doing one is afforded the opportunity to learn to listen in a new way, through an Anishinaabe framework, that offers the listener “a new way to turn over a new leaf and see the stories in the trees” (Noodin 2014, p.xx). When “language becomes literature,” and is understand as more than data (that is more than discrete phrases or words) but is understood as narratives that are complete and purposeful, then “theories of meaning and interpretation are possible” (Noodin 2014, p.xxii).

A critical component of this emerging theory of a local *poetics of*, is that if we were to develop a theory of form and content about the Customary Ways corpus, we needed to fundamentally understand first that Elders were creating Indigenous knowledge stories about their relationship with the land, that behave like knowledge baskets, woven together with identifiable and recognizable story forms. Second, we would need to better understand the content that is held within these story forms. In order to do this, we have asked: *what do Elders fill their baskets with? What type of knowledge or content do these carefully woven stories hold?*

In order to understand the content of the Elder’s knowledge baskets in the Customary Ways corpus, we used a series of scaffolded methods, to listen to, understand and learn what patterns we could identify with respect to the content the Elder’s of Walpole Island filled their knowledge baskets with, and ways in which they used language to do so, when describing their relationship with the land.
4.1.3 Learning to Listen differently: *Mikojjinaang debwemigad nikanananig giishpin bizindamaang*²⁹:

The first important learning from this scaffolded analysis was that Elders were filling their knowledge baskets with descriptions of activities that they participated in *with* the land. That is, through the story mapping exercise and close reading of the Elder stories in section 3.1.2 a) and the grounded theory constant comparative analysis of section 3.1.2 b) we were able to identify that Elders were filling their baskets with stories that described both activities and ethics in their stories about their relationship with the land of Walpole Island.

This mixed-methods listening (analysis) identified that each story carries a distinct form that is filled with stories that describe an activity or activities and that these activities functionally create an ethic(s) or ethic in motion---that is, we have learned that by telling stories that interweave activities and ethics, produces principle no. 3 of the local, Walpole Island poetics of motion.

4.1.4 Principle 3: Knowledge Baskets are filled with descriptions of listening to the land

What does it mean to listen to the land? What we have come to learn is that listening to the land is a process that occurs when one participates in activities that take place in relationship with the land that allow the participant to take in sensory knowledge about the ecosystem, about the creation that surrounds them, when they are with, or in activity with the land.

John Borrows³⁰ states that to understand where Customary or Traditional Law comes from, one needs to “listen to the birds, and the ways in which the deer cross the

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²⁹ We sense the truth in our bones/if we listen. From “Listening” by Margaret Noodin (Weweni, 2015, p.3) ³⁰ [https://www.youtube.com/watch?v=sNuityiUXV0&t=172s](https://www.youtube.com/watch?v=sNuityiUXV0&t=172s)
earth. One needs to pay attention to changing weather patterns,” and through our scaffolded listening (through the mix-methods deployed throughout our analysis), we have learned that the ways in which the Elders of Walpole Island acquire this type of knowledge about the ecology is by participating in activities with the land; and that these activities are a form of listening. That is, these activities can be understood as a complex practice of listening to the land. In this way, this learning challenges that listening is an activity that occurs only through one’s ears; that listening is an activity that only occurs by taking in information as sound.

What we learned from the analysis in section 3.1.2, is that when the Elders of Walpole Island fill their knowledge baskets with stories about activities they participate in with the land, they are in effect describing the practice of listening to the land.

Thus, within the stories the Elders of Walpole Island tell, about their relationship with the land, the activity of fishing is listening to the land; the activity of weaving baskets is listening to the land; the activity of gathering medicine is listening to the land; the activity of wood chopping bees is listening to the land; the activity of sewing bees is listening to the land; the activity of foraging for food is listening to the land; the activity of gardening is listening to the land; the activity of hunting muskrats is listening to the land; and the activity of hunting deer is listening to the land. All of these activities are a process of listening because of the diverse types and material and spiritual qualities of the information that is gathered about the ecosystem, and Creation, through the Elder’s participation in these activities.

What we learned from the analysis in section 3.1.2, is that through the participation of listening to the land, through different activities was also always tied to an ethic. That is, through listening to the land, an ethic was attributed to the listening and
the sensory information that was uncovered through the act of listening.

But, how is this listening activated? How are ethics and listening connected? This question can begin to be answered through Principle 4, of the local, Walpole Island poetics of motion.

4.1.5 Principle 4: Activities and ethics are transformed into actions through the telling

In the emerging local, Walpole Island poetics of motion, the connection of the content (descriptions of activities and ethics) of the stories about the Elder’s relationship with the land, are connected through form. That is, activities and ethics are transformed into an action through the telling of what one learned or experienced through the activity they participated in. Thus principle 4 of the local Walpole Island, emerging poetics of motion is activated through the telling. The motion that is central to the activity of listening to the land is made animate through the mirrored action of telling these stories.

It is by connecting the motion of the land, which is perceived by listening to the land- the way the seasons change, the way birds sing, the way puffballs taste in the fall; how sweetgrass smells in the spring; the ways in which deer meat tastes in the winter; the way pregnant fish float into one’s net in the spring time; the way geese fly through the sky in the fall, and the ways in which frogs sing their songs in the early springtime - by learning to listen to this motion through the participation in activities- hunting, foraging, fishing, medicine gathering- one learns to live the Anishinaabe ethic of living well in the world: minobimatswiin.

But how do we account for the fact that our analysis (3.1.1, 3.1.2, 3.1.3) of the stories that comprise the Customary Ways corpus demonstrated across all of the different methods used (story analysis; story mapping; close reading; grounded theory analysis;
NLP word analysis and NLP graph analysis) that the Elders were telling the same, or highly similar stories; that the Elders were repeating not only form, but also content?

4.1.6 Principle 5: Elder stories weave a community basket that contains the instructions for answering: Anishinaa bimadzii (how are you living)?

Across the analyses (3.1.1, 3.1.2, 3.1.3) of this dissertation, we learned that the 305 stories, contained in the 50 interviews of the Customary Ways corpus, were utilizing similar story structures. The NLP (3.1.3) analysis of word usage and position of speech analysis demonstrated that not only were Elders telling stories primarily using verbs, but that they were repeating the same words at an exceptionally high rate because of the difference between the total words and the total unique words. When one thinks about what it means to teach participatory knowledge, it makes a great deal of sense that the Elders of Walpole Island would utilize stories as the means by which they described their relations to the land. That is, if epistemology, ontology and axiology are predicated through an understanding that the world is in motion, and that the ethic of minobimatswiin (living well) in this world of motion requires that you understand both your connection to that motion, and living in motion yourself, and with your community, one would need to animate this knowledge. One would need to account for this participatory knowledge of motion through the telling; because the telling of stories, is one way that the motion of the world can be made animate, mirroring this participatory knowledge of motion. And thus, we begin to appreciate that, for the Elders of Walpole Island, stories are both the form of, and the subjects of the Indigenous Knowledge that is contained in the stories they tell about their relationship with the land.

We further learned, by utilizing an NLP graph analysis that across the entire Customary Ways corpus the story structures were not only using the same words, but that
the Elders were using words in such similar semantic ways within their stories, that together they generated a network of community stories. That is, together the Elders were weaving a knowledge basket of community held knowledge. If when we look at the NLP graph analysis and the network it produces, we can begin to understand that the community held stories that the Elders worked together to weave into a community knowledge basket, might hold part of the complex answer related to a central ethical question of *Anishinaa bimadzii* (how are you living)?

Part of the complex answer to this central ethical question is provided through the *telling* of stories, but not just any stories: Stories that were learned by listening to the land, and then put into motion through the *telling*. And, not just *telling* about what was learned by listening to the land in any way, but by intentionally weaving knowledge baskets, with defined forms that were understood and replicated across the community, which were then filled with similar content (the descriptions of activities and ethics).

Ultimately, the Elders of Walpole Island, participate in a *poetics of motion* that allow them to begin to provide an answer for the community: *Anishinaa bimadzii* (how are you living)? through the *telling of stories about being in relationship with the land*, that animate the *participatory knowledge of motion* contained within the answer of *Mino Bimadzii* (I am living well)! Because one of the ways to demonstrate that one is *living well*, is the through the testimony given when one embodies:

*Ezhianishinaabebimaadiziyaaang mii sa ezhianishinaabeaadisoyaaang.*

Because, we learn from the Elders of Walpole Island that it is through the *telling* of stories, about their

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31 The way in which we live, that is the way we write/make stories.
relationship with the land of Walpole Island, that one is able to mirror the motion of the world, into the participatory motion of one’s life.
Story no. 16: Learning to live in stories

Over the course of six years, I have learned to listen. And I have learned to listen by quieting my mind and opening my heart to an understanding that the only way one can really describe the process of coming to know the world, through an Anishinaabe epistemology, is by learning to tell stories. But not just any stories. Stories that are held deeply within the land, stories of the land. And by learning to listen, I am learning to also find my voice, who I am in relationship to this shared knowledge and to these stories I have been so fortunate to listen to. In listening to the stories of Elders, I have learned to practice walking in the woods, and in my life, in a new way, and I would like to tell you the story of this walk, because in learning to walk differently, I have learned to listen differently.

I have always loved to walk in the woods and be in the woods. I am lucky to live only a few blocks from a beautiful stand of Carolinian forest, and I walk with my children there often. Six years ago, I would walk in the woods and enjoy the surroundings, the colours and smells, but I did not feel particularly connected to these woods. I did not yet understand how deeply connected I could become to these woods. I did not know that six years later I would come to both love and hear love within these woods.

How did this change happen? It happened through the process of learning to listen to the Robin and the bumblebee, the tomato plant, the great waters, and countless other parts of the world around me. And I learned to listen this way, because I listened to the ways in which the Elders in the Customary Ways interviews described being of and listening to the land. At first, this practice seemed foreign to me, it went against every way I was taught to be in the world. My head was loud at this point, and not well balanced with my heart. My head would plod forward so loudly telling my heart that it was so silly to think it could find meaning and spirit in the land, in the trees and flowers, birds and woodland animals I would come upon during my walks. My head would say: prove it! Only later, after much time, did I come to know the “proof” is in what you hear; the proof is how well you are able to listen; the proof is in how you walk differently; the proof is in who
you become; but mostly, the proof is in learning to tell the stories of what you heard, and felt.

Over the course of the last six years, I have slowly learned to quiet my mind, and as I did this, my heart began to open, and as my heart began to open so did the ways in which I fell in love with the land. I fell in love with the land, by learning to tell the stories that connect us all. Now, when I walk through the woods, I do not see a birch tree; I hear the story of how the Anishinaabeg discovered how to tap the birch for sap by watching woodpeckers drill holes into its trunk. Now, when I walk by the Cedar, I stop and say hello, and especially after long days at work, when I need to clear my head, I now ask Cedar if I can take a small piece of its bow to rub it between my fingers, knowing the smell that is about to fill my spirit, connecting me to the earth that helped Cedar grow. When I pass by the brambles of the wild roses, I think of Waabooz, and how important it is to understand my place within this beautiful and interconnected world. When I pass by the beautiful Tamarack tree, I think about how I have learned that Tamarack is a strong healer, with many medicinal properties, and so I feel that Tamarack must be a gentle and caring tree, and that it looks and feels the way a whisper feels against my ear; how it sways so delicately in the wind, with its feather-like needles. And when I pass the beautiful old Hemlock, I think about porcupine, because I have been taught by Elders that porcupines love the salty and acidic taste of Hemlocks; I cannot think about Hemlock without also thinking about porcupine. When I see the many different birds that fill the forest with their songs, I think about how they are part of the story that makes this particular set of woods alive, and how we all work together to ensure it remains in balance.

I now know the places the yellow finches like to duck and dash as they fly through the sky with such spirit when the spring warmth arrives. And I know just where to sit, so as to not disturb them, but to watch them, and listen to their songs. I know the tall reeds that the redwing blackbird nests in, and I know how sweet their spring song sounds when my eyes are closed, and my ears are opened to their call. I know the bend in the river the beavers use to make their spring dams, and I know how lush the forest floor will become as they flood the plain, making the forest floor poised to welcome the most beautiful lily
pads, dragon flies and frogs. I can tell the story of these woods, because I have learned to listen to how all of creation works together to make and maintain this beautiful place. When I walk in the woods now, I walk through a living story; I hear the story of all of these beings; and when I speak of these woods, I tell that story.

And, by telling the story of these woods, I have come to understand one of the most important things: that it is in the telling of these stories that one’s heart opens and extends in ways I never knew were possible. It is through the process of listening to the beauty of a water lily, or, watching the delicate way a lady slipper blooms in the spring, or coming to know the smell of the earth that my heart has learned a deep appreciation and way to practice being in love. Because, when you are able to sit quietly in the woods and recognize the miraculous and awe-inspiring connection you have to the smallest ant or the most majestic deer, you fall in love; you fall in such deep love because you have learned to live your life through stories. The stories of the land beneath your feet; the stories of the land that connects your feet to everything around you. The stories that are there, of the land, if you are only willing to listen.
5.0 CHAPTER 5: KEY CONTRIBUTIONS

Section 1: The Findings:

1. The analysis in section 3.1.1 a) demonstrated that the 50 interviews of the Customary Ways dataset are not interviews, in the traditional sense of how social scientists describe interviews. Instead, what section 3.1.1 demonstrates is that the Customary Ways Dataset is a collection of 305 stories. The contribution to the field from section 3.1.1 is that as scholars, we must take seriously the fact that when asked to describe customary or traditional ways of caring for the land, Elders, within the Walpole Island context, tell stories as the means by which they describe being in relationship with the land. That is, their stories are the means by which they tell about the ways in which they engage in a relationship with the land, and the means by which they describe the ethical boundaries of that relationship. This finding should serve as a guide to future research conducted with Elders, identifying to scholars that Elders may be telling stories, and not interviews and as such, our research methods must be reflective of the form and content of what Elders tell us when they agree to participate in research.

2. Section 3.1.1 b), the Story Matrix (chart 4), demonstrates that there is a specific way in which these 305 stories are constructed: First, the stories utilize the 4 story categories from the Anishinaabe Creation stories (stories about water/rocks; plants; animals; people/community). Second, these stories utilize attribution as a means of creating veracity and trustworthiness of the story told and knowledge contained therein. Each of the 305 stories relied on at least one attribution line, and as the statistical analysis of section 3.1.1 c) demonstrates, that across the dataset, there was
a statistical relationship between the number of attributions a story had, and the number of story categories the Elder utilized: the higher the number of categories, the more complex and detailed the story becomes. The contribution to the field from section 3.1.1 c) is, therefore, a quantitative description of the importance of intergenerational transmission of Indigenous Knowledge.

3. Section 3.1.2 a), Story Mapping (Story Maps 1-13), we begin to see how stories carry knowledge. That is, we see the emergence of the relationship between how the Elder’s stories utilize the description of an activity and the relationship of that activity to an ethic. In section 3.1.2 b), using a close reading technique, we see the ways in which Elders bind the description of activities to ethics through the telling of their stories, and in section 3.1.2 c) using a constant comparative, grounded theory approach, we were able to define the ways in which activities and ethics were bound together within the structure of the stories Elders told. The contribution of section 3.1.2 is that is demonstrates that knowledge is carried within the structure of Elder stories, by connecting descriptions of land-based activities to the ethics one learns, and then lives, by participating in that activity, and then telling about that interconnection through stories.

4. A result of understanding the relationship between describing the participation in land-based activities and ethics is that a new definition of listening emerges. A contribution that this thesis makes to the literature is that within the context of Walpole Island, listening is a process that occurs through land-based participatory activities. That is, hunting is listening; basket making is listening; gathering medicine is listening; fishing is listening. And what is common across all of these forms of listening is that this listening is what informs the Elder’s relationship with the land.
What becomes clear in this thesis is that Elders listen to the land, through a series of land-based activities, and, that this listening forms the basis of a relationship with the land, and that in this relationship the land listens, and speaks, too. For Elders, this reciprocal listening occurs through the engagement of the activities with the land, and a highly attuned set of ethics that allows the Elder to observe and understand how the land has responded.

5. This thesis demonstrates that it is the connection between listening to the land through activities, and the ethics that are enacted through this listening, that allows Elders to literally live through stories. That is, by telling stories, about the activities and the ethics that emerge through this listening, Elders are able to live this set of ethics through storytelling. A contribution that this thesis makes to the field is the recognition that listening to the land and telling about it are an intimately connected processes that activates one another. That is, for the Elder’s of Walpole Island, who contributed to the Customary Ways dataset, we learn that without telling about what one has heard, the act of listening is incomplete, and the relationship with the land is also incomplete. The Elder relationship to the land is activated when they are able to:

1) engage in a land-based activity; 2) observe the outcome of that interaction through a series of ethics; 3) tell about that experience of listening to the land (hunting, fishing, gathering medicine) as a means of being in a continuous relationship with the land.
Section 2: Conceptual Tools:

The previous findings begin to ask that we think about how to describe the Indigenous Knowledge that emerges from the Elder stories that are told about their relationship to the land at Walpole Island. If we are to adequately describe the complexity of both the form and the content of the stories Elders tell in the Customary Ways dataset, we need to think about how we might begin to describe the knowledge these Elders share when they describe their relationship with the land of Walpole Island.

1. Participatory Knowledge of Motion:

First, within the context of Walpole Island and the Customary Ways dataset, a more accurate description of the knowledge Elders weave into the fabric of their stories might be understood to be described as a knowledge of participatory motion. That is, a knowledge that is both form (structure or shape of the story) and the content (the binding of activities and ethics) at once. We might begin to understand that a participatory knowledge of motion has as its aim an important feature that emerges from the Customary Ways dataset: the maintenance of a relationship with the land. We learn in the Customary Ways dataset that the Elders recognize that they are living a relationship with land, and that the land is living a relationship with them. The reciprocity of that living relationship occurs by telling stories that describe the motion of life that connects the Elder to the land (activities), and the land to the Elder (observation through ethics). That is, for the Elders of Walpole Island, it is through the telling of these stories, the Elders are able to mirror the way in which they live to the way in which they tell stories, that they become one in the same.

Second, stories are built through descriptions of activities and their relationship to ethics because this is the only way in which one can capture the innate motion that is
contained within all parts of creation. The motion of life, for the Elders of Walpole Island cannot be described in conceptual terms, but is instead, described as a living and breathing act of participatory knowledge, that can only be captured through the weaving of stories.

2. Principles of Basket Making:

This dissertation contributes an emerging, local, Walpole Island, principle of basket making (story construction), related to how the Elders in the Customary Ways dataset describe their relationship to the land. In section 4, the 5 principles of basket making that emerge from the analysis of the 305 stories that comprise the Customary Ways dataset are:

*Principle 1*: Baskets are made from weaving distinct and recognizable parts together into a structure.

*Principle 2*: Baskets have recognizable shapes at both an individual and community level.

*Principle 3*: Knowledge Baskets are filled with descriptions of listening to the land.

*Principle 4*: Activities and ethics are transformed into actions through the telling.

*Principle 5*: Elder stories weave a community basket that contains the instructions for answering: Anishinaabimadzii (how are you living)?

Section 3: Methodological Tools:

The findings of this thesis demonstrate that the 305 stories the Elders tell in the Customary Ways dataset are not isolated and disconnected stories, but instead, act as a network of stories that mirror one another in both form and content. This means that the set of 305 stories should also be considered as a larger corpus of storytelling and knowledge that presents two very distinctive features: a) these stories are a collection that does not end with this specific set, and b) they have an intergenerational, temporal
dimension beyond the present time in which they are told. To capture these two dimensions, we have deployed Natural Language Processing techniques (NLP)\(^{32}\).

NLP works very effectively to help make-sense of large datasets because the researcher or research team is able to understand the content of the dataset from the ground-up. That is, NLP can be understood as a memory tool: we can start to build out and map the ways in which patterns of concepts within the data start to develop meaning within the datasets, from the data up, using precision in coding that is not possible for human beings.

The connectedness with the land that the Walpole Island Elder storytellers live through, is reflected in the networked structure of both the whole corpus of stories, and each of the stories individually. To better understand this networked structure, we have deployed graph (or network) analysis, a tool that allows us to understand interconnections across the corpus of data, on top of the entities and relations found across the corpus via NLP. The result is an accurate picture of the intricate, and flexible relations between rocks/water, plants, animals, and people/community reflected in the language of the stories, and in the ethics that these stories carry in them.

Using both NLP and network analysis in combination with other methods of inquiry (such as close reading, story mapping, constant comparative analysis) has proven the most fertile way to accurately learn from and uncover the nuanced and complex nature of Indigenous Storytelling woven from this participatory knowledge of motion.

To conclude, this dissertation has learned, and contributes this learning to the field, that the deceptively simple question, *Anishinaa bimadzii* (*how are you living*)? can

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\(^{32}\) Note that this type of analysis has been described by literary scholars as ‘distant reading’ (Moretti) and complements the close reading I have performed and referred to previously.
begin to be answered through the power of telling stories about the participatory knowledge of motion that the Elders of Walpole island live their lives through, captured in the stories they tell about their relationship with the land. And critically, we learned that it is through the creation of community level knowledge baskets, that each individual story contributes to, that the efficacy and resiliency of this community held participatory knowledge of motion is captured and reinforced.

We learned that it is through the act of storytelling, of living one’s life through stories, that captures the participatory motion of the land, that one can begin to answer: *minobimazdi* (I am living well). The modifier *well*, in this answer can only be described through a demonstration of that ethical quality this modifier requires. We learn that for the Elders of Walpole Island, one of the ways they can demonstrate that they are living *minobimazdi*, is to tell stories that demonstrate that action. Minobimazdi is not a concept. Minobimazdi is a practice. And it is a practice that is enacted through storytelling. We learn, that at Walpole Island, for the Elder’s that shared stories about their relationship to the land, the Indigenous Knowledge, that these stories carry, is a lived, participatory knowledge of motion, that is enlivened through the process of *telling* about it. It is in the *telling* that the ethics are activated, as the storyteller demonstrates the ways in which one can approach living well, in relationship *with* the land. And it is in this way that storytelling *is* listening to the land, which allows the Elders of Walpole Island to work together, collectively, to practice *Ezhianishinaabebebimaadiziyaang mii sa ezhianishinaabeaadisokeyaang* (the way in which we live, that is the way we write/make stories).
This thesis demonstrates that, settler scholars (and settler Canadians!) must learn to listen to the poetry of motion that is contained in the world around us, and learn to tell about it.

What I learned, as a settler scholar, through the process of coming to listen differently, and learning from the Elders of Walpole Island and the stories they allowed me access to learn from, is that if we want to live in a future that upholds the ethics required to build equitable, sustainable and creative communities, we need to begin to tell stories to one another. We need to ask ourselves what stories will we tell our children about the future; what world will we be brave enough to create for them, through the stories we tell?

In order to accomplish this, I have learned, that as settlers, we must ask, what stories does the land tell us? What stories would we come to understand that the birds or insects, or trees tell, if we were to only listen? What stories would these relations tell our children? What sort of ethics would our children learn if they practiced telling the stories they came to know by learning to listen to the land beneath their feet? What stories could our children begin to tell if they understood that by telling these stories they were kin-making; that they were kin to the ecology that they are deeply part of?

And finally, I learned, as a settler scholar that we must engage in a shared reciprocity with one another as community members, reaffirming for one another the ethics we agree to live by, through the stories we tell and share. Because, we take on the qualities of the stories we hear, and we are shaped by, as much as we shape, the stories we tell.
For the Elders of Walpole Island, through the stories they tell, about their relationship to the land of Walpole Island, they live their ethics through the stories they learned to tell, from the practice of listening to the land. Through deep observation and recognition of the fact they are deeply part of the cooperative balance of creation, the Elders tell stories that allow them to collectively create an Anishinaabe world; a world that is constructed with the reciprocity and participation of the plants, animals, rocks and waters. It is through these very stories that the Elders literally give life to their political and social systems. And, this is what is at stake when the Elders tell the stories of the worlds they hope to live within, and the communities they hope to create, because “the stories are in the blood memory. They are there. In the land. We need to remember them to understand who we are as Anishinaabe” (Interview no.11, story no.9).
6.0 CHAPTER 6: FUTURE DIRECTIONS: The Fourth Hill

6.1.0 Future Direction number one: Understanding the Interrupters to listening
The Customary Ways corpus of stories is rich with descriptions of listening, but what was also clear as I began to work with these stories, is that they also give many clues about what types of processes seem to disrupt or interrupt the Elder’s abilities to tell stories about being in relationship with the land. Thus, a future direction for research is to develop a methodology to uncover the ways in which Elder’s describe the interruption to their listening to the land, and how these interruptions have changed or disrupted the stories they are able to tell.

6.1.2 Future Direction number two: Youth Learning to make baskets
Working with Clint Jacobs, we intend to take the findings of this dissertation to create a programme for youth to:

1) Learn to listen to the land;
2) Learn to tell stories about that listening;
3) Learn to share their stories with their community.

We intend to create a youth programme, guided by Elders at the Heritage centre that is based on the concept of making baskets, carefully. In doing so we will be able to meet one of the goals of the Customary Ways project, which is to preserve Indigenous knowledge and Customary Ways, of the community of Walpole Island for future generations.

Second, by understanding, from this dissertation, which activities emerged as the most repeated and highly connected to different ethics, might allow for future land-use
planning. That is, the activities that emerged as the functional ways in which Elder’s described listening to the land could be used as guides for preserving the land and areas of the territory so that these activities can continue into the future.

6.1.3 Future Direction number three: Indigenous Research Sovereignty

The methodology Clint and I developed, relating the listening methods developed as well as the decolonizing methodology we developed to situate me as a learner, and support person, can be extended further. The methods we developed together can be used by the Heritage Centre and community to engage in future research projects, where settler scholars are involved, and can be redeployed as a means of supporting the intellectual, research and knowledge sovereignty of the community. That is, a future extension of this work, is the development of a series of best practices on decolonization methods for settler scholars, and descriptions of how settler scholars can actively take-up the role of support people within the context of Indigenous Research. This extension should also take seriously the need for support people, and the best practices for support person roles, to include community directed capacity building as an essential component of decolonizing practices.

As well, an extension of the listening and decolonizing methods developed for this dissertation, could be a clearly articulated set of best-practices that takes seriously the idea that Lee (2013) argues, that rigour in Indigenous Research is based on collaborative relationships- and that rigour is defined as the quality of these relationships, not only with the community, but also, with the ecology involved in the research. Thus, another extension of the methodological contributions of this work is to think seriously about environmental dispossession as a form of un-rigorous research, and, that within new
models of community-based research, environmental repossession should be position as a
demonstration of impactful, rigorous research that supports Indigenous intellectual
sovereignty, and capacity building.

6.1.4 Future Direction number three: Testing the poetics of motion

An outstanding question emerges from this dissertation: is the poetics of motion
that emerged from the Customary Ways corpus a type of universal poetics of motion that
can be used to help describe Indigenous knowledge and storytelling? Or, are poetics of
motion contextual and related to the land in such unique and exquisite ways, that each
community of storytellers produces their own unique poetics of motion that guide the
ways in which they construct stories (form) and the type of knowledge that these forms
hold (content)?

In order to answer this question, a future direction of this work could include
building a partnership with a new community; collecting a corpus of stories, and using the
same methodology used to understand the Customary Ways corpus of Walpole Island
first nation, within the context of another community.

Some attributes that might be interesting to include, in order to uncover if poetics
of motion are universal or contextual, would be to gather a corpus of stories from a
geography unlike they geography of Walpole Island in order to understand the ways in
which the land mediates the ways in which Elders construct their knowledge stories. As
with geographic difference, language difference would be of vital importance too, as
conceptually the literature has established that the connection between language and land
is of vital importance for Indigenous peoples the world over, and one can hypothesize that
an understanding of the language that would be used to construct stories, would have
dynamic and exciting implications to the form and content of the stories Elders tell.

Story no. 17: This is the story I choose to tell you

   Margaret Noodin encourages that all listeners or readers of Anishinaabe stories,
regardless of ancestry should be “invited to unravel the web of knowledge contained in
Anishinaabe words,” and that “poets can learn how to carry the language and images
forward” (Noodin 2014, pp XVii). And so, I want to tell you one last story, a story I have
learned to tell by learning to listen to the motion of the land that surrounds me; of
learning to participate in the listening and the telling of that motion. By creating this series
of poems, I hope that in some small way, I too, have learned to carry that motion forward
to you.

   **Love sits in Places**

   I imagine,
   that if asked,
   the sky would not know
where she ends,
and the land
begins.

   That she would say:
this is a question only useful
for those who have not dared
to live their lives through stories.

   Because,
   had they been brave enough,
   had they trusted their heart,
they would know

   that her infinite expanse
is only made knowable

   when she dances,
   where the land
dreams.
Now I am of this earth

The fire crackled,
casting its force
across the earth

an erasure of the past.

And in this shadowed silky dust
I rose,
naked

disrobed of moments
that had
given voice
to my story.

Courage became
my flesh,
as I walked,
rounded face forward,
tears washing away what little remained

of before.

And there,
on this earth
now of this earth,
I was renewed.
To dance with you

I watch in wait:
What is it I have found
in your winged offering?

Tilting my head,
heart still,
as if to announce possibility.

And you,
stand there entirely alone,
bravely holding the weight of hope
upon your feathered breast.

All the while,
trusting in

this enduring
dance
that begins
beneath the
waning forest light.

Incantations

In the early softness
of the morning light,
I walked,
listening to the birdsong
and I found you

there,
where the clover
bends
and
beckons
meeting your light.

And the ordinary, is
for these brief moments
transformed,

into a devotion
that only a soul
might speak.

Morning Recitation

When I listen to the hope
of a water lily,
I am reminded of the delicate story the
lady slipper tells
as she blooms
in the cool spring air.

Through the tall prairie grass, dawn emerges
and she is awed
by the joy
held within each
rounded
droplet
of morning dew,

gathering gently upon her
verdant breast,

in that fleeting
of moments
when she greets
the first morning light.

And this is life.

Give me your heart. Place it in my palms, soft, and wanting,
so that I may begin to tell you the story
of how I will embrace it forevermore,

uncovering all that I might keep veiled and in secret,
I give to you, now,
blessed and hopeful that you might see
how much intention it takes for the river to carve rock.

And that under this weight, I transform
into salt and calcined earth.
Tears streaking hot flesh, slapped, and worked,
open handed until we are eutectic, you and, I.
Will you let me love you,  
until this practice draws to a close?  
Until our bones are washed and cleansed of this life;  
returned once again, to the depths of the earth  
revealing the way time shapes words.  
And this life.

This is the story I tell you

There are love stories  
held deeply in the  
birch, and cedar’s bows;  
in the way the tamarack dances with the wind,  
her whispers held upon feathery needles.

And, in the places where  
the yellow finches  
duck and dash  
through the sky,  
their courage welcoming  
the warmth of spring.

These, my love  
are the stories of the land beneath your feet;  
the stories that connect  
your feet to everything around you.

When I walk in the woods now, my love  
I listen to a love story.

When I speak of these woods now, my love  
this is the story I tell you.
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Appendix

Research Ethics Board Approval:

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| NMREB Initial Approval Date: July 22, 2015 |
| NMREB Expiry Date: July 22, 2016 |

Documents Approved and/or Received for Information:

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The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the NMREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number [REDACTED]

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Western University, Research, Support Services Bldg, Rm. 5150
London, ON, Canada  t: 519.661.3556  f: 519.850.2466  www.uwo.ca/research/Ethics
### Chart 4: Story Matrix

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Story Map 2
Story Map 4

Activities
- Planting
- Hunting
- Fishing
- Bees
- Storytelling
- Cleaning
- Feeding

Ethics
- Respect 4
- Wisdom 4
- Courage 2
- Responsibility 6
- Trust 3
- Honesty 2
- Hearing 2

Water
- Plants
- Animals
- Community

Interview No. 2

Plants
- Flowers
- Ground
- Leaves
- Seeds
- Roots

Animals
- Birds
- Bees
- Insects
- Fish

Community
- People
- Families
- Neighbors
- Elders

Trees
- Playing
- Shelter
- Food
- Medicine

Overall
- Respect for the land
- Healing
- Connection
- Celebration
- Education

Total No. of Stories 6
Story Map 9

ACTIVITIES
Playing on Mounds
Turtle Race
Beach Activities
Fishing
Hunting
Gardening
Hiking
Scavenging
Owning Pets
Petting Animals
Observing Wildlife
Science Projects
Studying Nature
Exploring Nature
Making Observations
Writing About Nature
Interviewing Community Members
Teaching Your Community
Responsible Use of Natural Resources
Observing and Documenting
Photographing Nature
Drawing Nature
Collecting Specimens
Identifying Plants and Animals
Identifying Birds
Identifying Flowers
Identifying Fungi
Identifying Insects
Identifying mammals
Identifying Reptiles
Identifying Amphibians
Identifying Fish
Identifying Plants
Identifying Trees
Identifying Shrubs
Identifying Weeds
Identifying Moss
Identifying Lichen
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Story Map 10

Activities
- Scenic Hiking
- Paddling
- Playing
- Hunting at the Ice House
- Bike Riding
- Snowboarding
- Snowmobile Riding
- Hunting
- Snowmobile Riding
- Hunting
- Fishing
- Ice Fishing
- Sticks Making
- Sami Culture
- Basket Making
- Bow
- Silting
- Fishing
- Peeling

Ethics
- Respect
- Tread
- Traditions
- Midwives
- Respectivity
- Consecration
- Sharing
- Carving

Total No. of Stories: 19

Huner, Erin
Huner, Erin

Story Map 11

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Walking</td>
</tr>
<tr>
<td>Core Heating</td>
</tr>
<tr>
<td>Reading Science Textbooks</td>
</tr>
<tr>
<td>Math/Art Learning</td>
</tr>
<tr>
<td>Field Work</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stages 1</td>
</tr>
<tr>
<td>Stages 2-3</td>
</tr>
<tr>
<td>Stages 4</td>
</tr>
<tr>
<td>Stages 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wildlife</td>
</tr>
<tr>
<td>Plants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reptiles</td>
</tr>
<tr>
<td>Amphibians</td>
</tr>
<tr>
<td>Birds</td>
</tr>
<tr>
<td>Mammals</td>
</tr>
</tbody>
</table>

| Total No. Of Stories: 9 |

- 10
Story Map 12

**Activities**
- Hunting
- Stining Nuts
- Fishing
- Mixing Medicine
- Feats
- Bees
- Sweets Spices gathering
- Storytelling

**Values**
- Respect
- Trust
- Wisdom
- Responsibility
- Sharing
- Cooperation
- Unity

**Interview No. 31**

**Community**
- Respect
- Trust
- Cooperation
- Unity

**Animals**
- Respect
- Trust
- Cooperation
- Unity

**Plants**
- Respect
- Trust
- Cooperation
- Unity

**Water**
- Respect
- Trust
- Cooperation
- Unity

**Storytelling**
- Respect
- Trust
- Cooperation
- Unity

**Respect for Nature Series 12**

| Huner, Erin |

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CURRICULUM VITAE

Erin E. Huner

EDUCATION/ACADEMIC AWARDS

2021 PhD  
2013-2020 PhD Candidate, Health Geography, Department of Geography, Western  
(Defense: June 2021)
  - 2014 CIHR Institute for Indigenous Peoples’ Health Scientific Director’s Award  
http://news.westernu.ca/2014/09/phd-research-looks-to-make-traditional-knowledge-accessible/
  - 2013 Completed Comprehensive Examinations with Distinction

2009 MEDes.  
Master of Environmental Design, Urban Planning History and Policy, University of Calgary, (with Distinction)
  - 2010 First Place “Inside the Box” Design Competition, Scribble Product Design, Calgary AB
  - 2007 Stantec Award in Advanced Environmental Design Practice, University of Calgary
  - 2006 First Prize, Closing the Loop, National Design Competition

2003 M.A.  
Master of English Literature, University of Victoria, Department of English  
(with Distinction)
  - 2003 University of Victoria, M.A. dissertation Award of Distinction

2001 B.A.(H)  
Bachelor of Arts (Honours) The University of Western Ontario, combined English Literature and Visual Arts
  - 2001 Award of Academic Excellence, University of Western Ontario
  - 1997 Award of Academic Excellence, University of Western Ontario

PROFESSIONAL EXPERIENCE

STUDENT AFFAIRS & UNIVERSITY RESEARCH ADMINISTRATION LEADERSHIP

Over the course of the last 11 years of my career, I have cultivated expertise in the following areas related to the administration and strategic planning of Post-Secondary Institutions across both Student Affairs and Student Experience and Research Administration:
  - Equity Diversity & Inclusion Programming, Survey Design and Impact Analysis
  - Gender-Based Violence Educational Programming, Survey Design and Impact Analysis
  - Strategic Planning & Strategic Initiatives
  - Programme Evaluation and Assessment
  - Research Administration

1. EQUITY, DIVERSITY & INCLUSION and GENDER-BASED-VIOLENCE PREVENTION (GBV): 2015-present
Gender-Based Violence Education Prevention Programming: 2018-present
I led the development and research design, as well as the programme assessment of the following GBV Educational Training Programmes:

- **Upstander: Rethinking GBV Education: 2018-2019**
  Upstander Training aims to develop a culture with the necessary skills to compassionately look out for one another on college and university campuses. It is rooted in bystander training programs, which teach people how to be proactive in helping others in need. This program aspires to create safer and more supportive campus communities. This training program is focused on using Upstander skills to help prevent gender-based sexual violence and constitutes just one component of a full campus gender-based violence prevention and response plan. The Upstander programme can be included in a variety of campus learning initiatives, including orientation week, first year courses, staff and faculty training, student organizational development and team building, and other gatherings of campus community members.

  With the generous support from both internal and provincial partners the Upstander Project has now been successfully introduced to campuses across Ontario and the accompanying videos have been used internationally. To date eight train-the-trainer sessions have been offered to over 20 institutions and 20,000 + students have engaged with the Upstander program content. With such success Student Experience has committed to further enhancing this program and are rolling out a robust research project to further test the efficacy of this program and its components.

- **RE-SHAPE: Digital GBV Educational Modules: 2020**
  This e-learning module provides an introduction to gender-based and sexual violence; situates this discussion in the context of combating rape culture; and outlines Western’s Gender-based and Sexual Violence Policy and process for responding to disclosures. Students have opportunities to contribute to, and view, collective ideas and knowledge through word gardens; be asked to complete small activities to further explore these ideas; and, complete reflection questions that are designed to not only provide spaces and prompts for practical and personal application of the activity, but to enhance social emotional awareness.

- **Gender-Based Violence Framework: 2019-2020**
  I co-led the design and writing of Western’s first GBV Educational Framework. I also co-chaired the institutional committee that provided feedback on the GBV Educational Framework. The Framework is set to be released in early 2021.

  The GBV Framework is an educational tool that is used to inform the creation and delivery of programming across the institution by helping programmers address the root causes of gender-based violence. This might include programs focused on wellness & well-being but should also be used to inform broader programming and social events to address embedded culture that normalizes gender-based violence. An innovation of Western’s GBV framework, is that we take a Public Health approach to GBV education, understanding that GBV is an issue of Public Health, and therefore requires upstream preventative approaches to GBV education.

- **MINDS EXPERT BRIEFING: Department of National Defence: November, 2019**
Based on our approach to Gender Based Violence Education Prevention and Western’s GBV Education Framework, I was invited to give an expert briefing on the GBV Education and Prevention at the Department of National Defence.

**Talk title:** *Educating in the Grey Zone: Connecting Explorations of Healthy Bodies, sexuality and communication as the bases for GBV prevention.*

- **Western Sexual Violence Policy Review: 2019**
  In the spring of 2019, the Provincial Government mandated that Universities review their Sexual Violence Policies. I led the development, design and implementation of Western’s Sexual Violence Listening Sessions, as well as the design and analysis of the Sexual Violence Policy Review Survey. I also led a team that was responsible for the creation of an institutional report based on the findings from the Listening sessions and the online survey related to the Sexual Violence Policy Review process.

- **Safe Cities Advisory Committee: 2019-present**
  As an expert in GBV Education, I sit on the UN sponsored Safe Cities Advisory Committee. As a committee we are currently writing a Strategic Framework that will be presented to City Council in February 2021. Our Strategic Framework sets forward a vision that London is a safe city where women and girls access public spaces and participate in public life without fear or experience of sexual violence. Our strategic framework utilizes a system change approach that uses a deliberate process to transform individual, organizational, and system level behaviours in order for individuals, organizations, and institutions to establish new, sustainable patterns. The strategic framework will be made public once it is presented to City Council.

- **Gender Based Sexual Violence Institutional Board of Governor’s Report: 2019-2020**
  I led the development and writing of the Provincially mandated Board of Governor’s Report on Gender Based and Sexual Violence. This report details Prevention Education efforts; Responsive Care Plans; Formal Complaints and Investigations, as well as Next Steps in Western’s ongoing commitment to address GBV and Sexual Violence. This report is formally presented to the Board of Governors.

**GBV Institutional Reports:**

- Western Board of Governor’s Gender Based Sexual Violence Report 2019, 2020
- Gender-Based Violence Framework: Rethinking Principles, Priorities and Approaches for Gender-Based Violence Prevention Education at Western University. 2019
- Analysis of the Draft Sexual Violence Policy Review Survey and Community Consultation Focus Groups (Report 1 & 2) 2019
- Upstander: Analysis, Impact and Findings 2019

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**ii) Equity Diversity and Inclusion: Research, Survey Design, and EDI Planning Implementation: 2016-present**
• **Anti-Racism Working Group Climate Survey:** 2020
  I led the consensus-based co-design with the ARWG members, implementation, and analysis of Western’s Anti-Racism Working Group Campus Climate Survey, which was a critical input to the ARWG Final report, presented to the President in April 2020. I led the team responsible for the analysis of the ARWG Campus Climate Survey, as well as the writing of the ARWG Campus Climate Survey findings. [https://president.uwo.ca/pdf/arwg-final-report-to-president-shepard-fnl.pdf](https://president.uwo.ca/pdf/arwg-final-report-to-president-shepard-fnl.pdf)

• **Demographic Panel Survey:** 2020-present
  Currently, I am part of a working group that is designing Western’s first Demographic panel, that will be released in the Spring of 2021. Alongside, Dr. Nicole Kaniki, Special Advisor to the President on EDI, I lead the working group that is designing the survey instrument in collaboration with the University of Calgary.

• **Data Analysis and Impact Measurement:** Office of Indigenous Initiatives: 2019-present
  Working closely with the Acting Vice-Provost Indigenous Initiatives, I developed a series of surveys and data analysis for the office of Indigenous Initiatives.

• **LGBTQ+ Provincial Thriving Advisory Committee:** 2018-present
  As an expert in the field of EDI, I sit on the SSHRC funded, Provincial LGBTQ+ Thriving Study Advisory Committee. Informed by our various perspectives and areas of expertise, committee members help to facilitate the study’s successful implementation by providing their feedback to the research team. Also, they help to interpret and disseminate the findings, including informing the development of recommendations to shape policies and programs tailored to the needs of LGBTQ2S+ students. [https://lgbtq2sthrivingoncampus.ca/en_ca/advisory-committee/](https://lgbtq2sthrivingoncampus.ca/en_ca/advisory-committee/)

• **EDI Research Grant Plans:** 2015-2018
  In my roles as a Research Development officer and as the KEx manager in the Office of the Vice-President Research, I was responsible for the creation of EDI plans for all institutional level grants. In order to create these plans, I worked collaboratively with the office of the Vice-Provost (Academic Planning, Policy and Faculty). The plans created include in-depth analysis of faculty EDI representation, as well as student EDI representation across fields and disciplines. In-depth analyses were also made utilizing external availability rate data from Statistics Canada, as a means of establishing baseline data from which EDI targets were set. These plans have received excellent feedback from various funding bodies such as the Tricouncil.

  I also co-created with Dr. Nicole Kaniki, an EDI best practices guide for letters of support for the CRC programme in consultation with the Vice-Provost (Academic Planning, Policy and Faculty).

• **EDI Institutional Reports:**
  ARWG Campus Climate Report 2020
  *Indigenous Student Needs Report* 2020
  *Indigenous Student Data Report* 2018, 2019
  *EDI Best Practices for Writing Letters of Reference Report* 2017
2. STRATEGIC PLANNING & STRATEGIC INITIATIVES PROJECT MANAGEMENT: 2015-present

i) Strategic Planning: 2017-2020

Key Accountabilities:

- Led the design and writing of the WSE strategic Plans: AVP Office Plan; Pillar 1, 2, 3 Plans.
- Led the Design Thinking and Appreciative Inquiry based approach to consensus-based strategic planning.
- Led the project management of the Strategic Planning process from inception, to design, to writing to implementation (18-month process).
- Led the partnership development and stakeholder engagement planning and workshops.

- **Western Student Experience Strategic Plan: 2018-2020**
  As the Director of Research, Assessment and Planning I was responsible for the design, and writing of the Western Student Experience Strategic Plan. The Strategic Plan was created using a combination of Design Thinking and Appreciative Inquiry approaches to consensus-based planning. The strategic plan details: the organization structure of the portfolio; the strategic initiatives of the portfolio, as well as each department; and the Key Performance Indicators (both lead and lag) of the Portfolio, as well as the departments. The strategic plan also details the continuous improvement cycle, which I oversee in my role as Director Research, Assessment and Planning.

  An overview of the strategic plan was released in 2019
  [https://studentexperience.uwo.ca/docs/WSE%20Vision%20of%20Thriving%20202019%20v7.1%20DIGITAL%20VERSION.pdf](https://studentexperience.uwo.ca/docs/WSE%20Vision%20of%20Thriving%20202019%20v7.1%20DIGITAL%20VERSION.pdf)

  Strategic Planning Institutional Reports:
  AVP Office Strategic Plan 2020
  Pillar 1: Sport and Recreation Strategic Plan 2020
  Pillar 2: Leadership & Learning Strategic Plan 2020
  Pillar 3: Wellness & Wellbeing Strategic Plan 2020

- **Office of the Vice-President Research Knowledge Exchange & Translation Strategic Plan: 2017-2018**

  In my role as the Knowledge Exchange & Translation Manager, I collaborated with the VPR, AVP Research and various stakeholders across the Institution and extant to the Institution over a 14-month period in order to create an innovative strategic Knowledge Exchange and Impact plan. Part of this strategic planning process involved my leadership in the development, implementation and evaluation of a quality improvement and change management plan that identified strategic pathways across the research support services provided by the VPR’s office and other units on campus, such as Western Libraries as a means of implementing change across the complex institution. The ultimate goal of this strategic plan is to increase our institutional capacity to create leading-edge research measurable through quality impacts and outputs that we translate, disseminate and engage with our stakeholders and research partners at the regional, provincial, federal and international level.
Institutional Report:
- KEx Strategic Plan 2018
- KEx Implementation and Action Plan 2018
- 2018 Federal Government Engagement Report
- 2018 Industry Engagement Report
- 2017 Knowledge Exchange & Stewardship Environmental Scan

ii) Strategic Initiatives Project Management: 2016-present

- **Western Student Experience: Parr Centre for Thriving: $10M Gift from the Parr Family**

  **Key Accountabilities:**
  - I supported the AVP WSE and the Advancement and Giving team by preparing briefs; and developing Impact measurements for the Parr Centre for Thriving.

  The Parr Centre will provide the opportunity to integrate research and practice across Western University and promote collaboration among a variety of campus partners. In order to create learning spaces –both within the classroom and outside of it –that allow students to understand the vision of thriving, gain knowledge and skills that will contribute to their overall success, and use these strategies to reach their fullest potential, intentional investment must be made in creating a culture on campus among staff, faculty and students where there is a common language related to strengths-based education and thriving. With this foundational knowledge in place, thriving practices can be meaningfully embedded into academic and co-curricular learning experiences to support students in optimizing their well-being and development.

- **Western Student Experience: Centre for Applied Psychological Science: 2019-2020**

  **Key Accountabilities:**
  - I led the project management of the Clinical Proposal Development.
  - I led the strategic management and stakeholder engagement.
  - I led the development of the Institutional Proposal for the CAPS clinic, from vision, to service delivery planning, to budgeting.

  The Centre for Applied Psychological Science (CAPS) clinic will strengthen Western’s current approach to mental healthcare, by expanding Western’s current stepped-care model. The CAPS will enhance stepped-care by providing evidence informed, innovative treatment interventions for students who require more intensive care and monitoring, allowing more efficient access to our existing clinical setting for students with episodic and crisis-based intervention needs. In partnership with the Department of Psychology and the Clinical Psychology Programme, the CAPS clinic will provide cutting-edge, empirically supported psychological treatment and assessment for Western students, as well as the best graduate student clinical psychology training available based on current psychological science. Equally important, this clinic will be a valuable resource for scientists at Western seeking research participants for studies of the etiology and treatment of psychopathology.
The CAPS clinic proposal was presented to the Provost and was successfully granted the ability to proceed forward to plan for the implementation of the proposed clinic. The CAPS clinic is slated to open in January 2022.

Institutional Report:
CAPS clinic proposal 2020

3. PROGRAMME EVALUATION: 2018-present

As the Director of Research, Assessment and Planning, at WSE, I lead the design and execution of a six-year Council for the Advancement of Standards in Higher Education (CAS) external review process. The CAS external departmental reviews follow international standards, established by the CAS. These rigorous standards allow Western Student Experience to evaluate our departments using externally validated measures, and through the expertise of recommendations provided by an external review committee. These CAS external evaluations are both internally and externally driven, increasing the robust data we acquire. The results of these evaluations are used to innovate our programming and adjust our programming when necessary, allowing us to remain agile and proactive to the changing and diverse needs of our students.

Key Accountabilities:

• Lead the project management of the CAS review process, which takes ~10 months from initial consultation with department stakeholders, to the completion of the review process.
• Lead the creation and writing of the CAS External Terms of Reference documents.
• Lead the development and design of the external evaluation guides. I lead the team that develops and contextualizes the external standards to be used to evaluate WSE departments during the CAS process.
• Lead the analysis of the CAS evaluation data. I lead a multi-disciplinary team of researchers to analyse the data gathered through the CAS evaluation process. We utilize quantitative techniques (i.e. SPSS), qualitative analysis (i.e. grounded theory analysis) and Machine Learning (i.e. Natural Language Processing (NLP) and Network Analysis).
• Led the writing of the Western Student Experience CAS review Guide, and all CAS teaching materials.
• Lead the writing of the final CAS External Review Reports that are sent to the external reviewers and all stakeholders.
• Lead the organization and planning of the external review stakeholder engagement sessions.
• I am the lead evaluation facilitator and interface with the external review experts, prepping them for the review and answering any questions that emerge throughout the process.
• Lead the creation of the CAS Action and Implementation plan once the review process is completed.
• Manage the CAS review budget.
• Lead the Knowledge Exchange and Translation of the CAS review data and findings.

Stakeholders Engaged:
Internal Partners: Western’s Provost; Western Student Experience AVP, Directors, and Staff; Centre for Teaching and Learning; Western Libraries; Western Faculty Stakeholders: Deans, Associate Deans, Staff; Western Students: University Students’ Council, Society for Graduate Students.
External partners: Affiliates (King’s, Brescia, Huron Universities); The City of London; Industrial Partners; Ministry of Colleges and Universities; External Reviewers (National and International Experts in the field of Student Affairs)

Evaluation Tools:
Programme Evaluation Guide 2019
Programme Evaluation Planning tool 2019
CAS Evaluation Training Video 2019
CAS Evaluation Glossary 2019
Programme Evaluation Action & Implementation Planning Tool 2020
Programme Evaluation Research & Practice Planning Tool 2020

Evaluation Institutional Reports:
Programme Evaluation Guide 2019
Accessible Education CAS Review Report 2020
Learning Development and Success CAS Review Report 2020
The Writing Centre CAS Review Report 2020
Western Sport Department CAS External Review Report 2020
Community Connections Programme Evaluation Report 2020
Undergraduate Summer Research Internship Programme Evaluation Report 2020

Forthcoming Institutional Reports:
Academic Success Programme, Programme Evaluation Report 2021
Student Support and Case Management CAS Review Report 2021
Careers & Experience CAS Review Report 2021

4. PROGRAMME ASSESSMENT: 2018-present
As the Director of Research, Assessment & Planning at Western Student Experience (WSE), I use my expertise as an Evaluation Scientist, and lead the Signature Programme Assessment of the Western’s co-curricular student programming. I have developed a three-year assessment cycle that informs the continuous assessment of all programs, resources, and supports provided by Western Student Experience. I work closely with my team, in collaboration with the Directors and Programme leads in WSE to create Assessment Plans that map out the programme goals; learning outcomes; assessment tools; assessment population; and data gathering plan. Each signature programme in Western’s co-curricular programming has an assessment plan, and unique assessment tools that have been built using evidence informed, and validated measures, in order to understand the impact that our diverse set of co-curricular programmes have on our student’s experience at Western.

Key Accountabilities:
- Lead the project management of the programme assessment of Western’s co-curricular programming.
- Lead the design and development of the programme assessment plans for Western’s co-curricular programming.
- Lead the design and development of assessment tools that are used to gather data for Western’s co-curricular programming.
- Lead the analysis of the programme assessment data.
- Lead the writing of all programme assessment reports.
• Led the writing of the Western Student Experience Programme Assessment Guide and all teaching materials.
• Lead the Programme Assessment Committee and Community of Practice.
• Lead the design and creation of all Programme Assessment Action plans.
• Lead the Knowledge Exchange and Translation of all Assessment Plan and Report outcomes.

**Stakeholders Engaged:**

**Internal Partners:** Western’s Provost; Western Student Experience AVP, Directors, and Staff; Centre for Teaching and Learning; Western Libraries; Vice-President Research; Western Faculty Stakeholders: Deans, Associate Deans, Staff; Western Students: University Students’ Council, Society for Graduate Students.

**External partners:** Affiliates (King’s, Brescia, Huron Universities); The City of London; Industrial Partners; Ministry of Colleges and Universities; Pillar.

**Programme Assessment Tools:**
- Programme Assessment Guide 2019
- Programme Assessment Planning Tool 2019
- Learning Outcomes Planning Tool 2019
- Learning Outcomes Design Tool 2019
- Learning Outcomes Menu 2019
- Programme Assessment Storytelling Tool 2020

**Assessment Institutional Reports:**
- Head & Heart Indigenous Undergraduate Research Programme Assessment Reports (2018, 2019, 2020)
- Head & Heart Knowledge Exchange Platform (2018-2020) [https://ir.lib.uwo.ca/headandheartprogram/](https://ir.lib.uwo.ca/headandheartprogram/)
- Head & Heart Knowledge Exchange PodCast (2020-2021)
- Impact Experience Assessment Report 2019
- HireWesternU Assessment Report 2019
- Thriving Under Pressure Assessment Report 2019
- Imposter Syndrome Assessment Report 2019
- Road to Resilience Assessment Report 2019
- Upstander: Gender Based Violence Training Assessment Report 2019
- Community Connections-Thriving Foundations Programme Assessment 2020
- Becoming a Mustang Assessment Report 2020
- Design Your Western Assessment Report 2020
- Healthy Relationships Assessment Report 2020
- Gallup Strengths Assessment Report 2020
- Undergraduate Summer Research Internship (USRI) Programme Assessment Report 2020
- USRI Programme Assessment Report: Faculty of Science 2020
- USRI Programme Assessment Report: Faculty of Engineering 2020
- USRI Programme Assessment Report: Faculty of Education 2020
- USRI Programme Assessment Report: Faculty of Music 2020
- USRI Programme Assessment Report: Faculty of Social Science 2020
- USRI Programme Assessment Report: Faculty of Arts & Humanities 2020
- USRI Programme Assessment Report: Ivey Business School 2020
- USRI Programme Assessment Report: Schulich School of Medicine and Dentistry 2020
- USRI Programme Assessment Report: Faculty of Information and Media Studies 2020
- USRI Programme Assessment Report: Faculty of Law 2020
- USRI Programme Assessment Report: Faculty of Health Sciences 2020
5. **CO-CURRICULUM and DESIGN THINKING: 2017-present**

**Learning with Head & Heart: Indigenous Student Research Programme (2017-2020)**
https://indigenous.uwo.ca/research/head-heart-program.html

**Key Accountabilities:**
- Lead the co-curricular design of the Head & Heart Programme in partnership with the Office of Indigenous Initiatives.
- Lead the implementation of the co-curricular H&H programme.
- Direct the H&H programme, chairing the selection committee.
- Direct the co-curricular component to the H&H programme, ensuring the smooth running of the programme.
- Direct the assessment and evaluation of the programme each year.
- Teach in the programme each summer.
- Coordinate the Living Lecture Series, which is a critical component of the programme.
- Act as a research mentor to the student cohort.
- Lead the faculty research partnership and placement process for each student.
- Manage the H&H Budget each year.
- Co-lead the H&H Knowledge Exchange Platform.

In partnership with the Office of Indigenous Initiatives, Western Student Experience, the Office of the Vice-President Research, and Western’s Indigenous community partners, I led a team comprised of staff from Western Student Experience, Research Western, Research Finance, and the Office of Indigenous Initiatives to create an innovative Indigenous student experiential learning programme. Western’s Head & Heart programme is a unique research and experiential learning program that strives through an intergenerational network to nurture a community and the next generation of Indigenous scholars. The program model recognizes the value of bringing Indigenous and non-Indigenous scholars at different levels (e.g. undergraduate, graduate, emerging and established) together through community-based learning activities that privilege Indigenous research priorities.

The goals of the program are to:
- Grow the next generation Indigenous scholars by increasing the number of Indigenous undergraduate students engaged in research at Western.
- Facilitate relationship building and mentorship between Indigenous undergraduate students, graduate students and faculty members across all disciplines.
• Nurture an intergenerational network of researchers committed to Indigenous research priorities and needs.

**Thriving Foundations: 2020**  
https://www.uwo.ca/se/digital/incoming/thriving-foundations.html

**Key Accountabilities:**

- Led a diverse team of student affairs professionals in the design of the Community Connections co-curriculum design.
- Led a diverse team of student affairs professionals in the design of the Academic Success Programme co-curriculum design.
- Led the design and development of the Community Connections and Academic Success Programme assessment tool design and programme evaluation.

**Community Connections: 2020**  
https://www.uwo.ca/se/digital/incoming/community_connections.html

In July to mid-August 2020, Western Student Experience launched an optional, one-day intensive, interactive experience, Community Connections, to support incoming Mustangs as they transition to their first-year. The Community Connections programme was created with a focus on setting students up for success by creating an opportunity for social connections, community building and introducing them to the rich support units available at Western. This on-campus experience offered students the opportunity to form meaningful friendships and create a connection to place, with the hope that they would continue to draw on these newly formed connections during their online learning experiences throughout their first year.

**Academic Success Programme: 2020**  
https://www.uwo.ca/se/digital/incoming/asp/?

The Academic Success Program is a collaboration between Student Experience and participating faculties (i.e. Engineering, FIMS, Music, Science, and Social Science) that connects upper-year undergraduate students with groups of 25-30 first-year students enrolled in select first-year courses. Peer Leaders, with the support of Graduate Peer Coaches, will:

- Facilitate the formation of friendships between new students in digital spaces;
- Answer questions about on campus resources and support wayfinding, and;
- Coach new students as they develop the academic skills and strategies they need to thrive throughout the term and beyond.

**Knowledge Exchange Graduate Student Curriculum: 2018**

In partnership with the Society for Graduate and Post-doctoral studies (SGPS) at Western University, I designed a set of innovative core Knowledge Translation/Exchange curriculum. The programme
developed is part of Western’s flagship programme “Own your Future,” which is a unique doctoral professional development program designed by SGPS in collaboration with various units across campus. The program is designed to enrich doctoral education at Western by providing the opportunity for students to develop professional skills that help maximize their success in graduate school and in their future careers either within academia or within non-academic sectors. I was also responsible for designing, in partnership with SGPS the change management and quality improvement pathways for this new programme. I also developed the quality improvement evaluation and implementation plan that anchors this new programme.

**Western Research Fellows (WRF): 2018**
The WRF programme consists of 10 sessions (1 per month, September to June) of 90 minutes, each devoted to a specific topic and led by an expert in the area. The sessions require group work and peer learning, so as to create a community of Research Leaders on campus. There are 10 themes that structure the sessions for the 2018-2019 cohort. I have led the development and implementation of the programme evaluation for this new leadership development programme. I have used mixed methods to design the programme evaluation using attitudinal surveys, as well as qualitative interviews. I also designed the programme evaluation to be longitudinal so that we are able to, over a three-year period, track the outcomes of this cohort to better understand how and in what ways they have implemented the leadership skills they were exposed to in the programme, into their programmes of research. We will also track the number of WRFs that take on leadership roles at Western, and extant to Western in disciplinary specific roles within learned societies, for instance.

**Collaborate for Community Impact: SGPS 9105: Curriculum development; Facilitation; evaluation plan: 2018**
In collaboration with the Graduate Experiential Learning Developer at the Student Success Centre, I facilitated a section of the Collaborate for Community Impact course. I was responsible for the development of course learning outcomes related to students using the KEx partnership tool I developed, and I developed a rigorous programme assessment and evaluation about the use of the tool, and key learning outcomes for students enrolled in the course, and the impacts the use of this tool has had on their community partners.

**Western Leadership Learning Community: Assessment and Continuous evaluation plan: 2018-2019**
Collaborating across units, I was asked by Western Human Resources to design the assessment and programme evaluation for their new Western Leadership Learning Programme, which launched in October 2018. I designed the evaluation plan; worked with the HR team to design the surveys and key performance indicators; and conducted the qualitative interviews that comprise a portion of the overall programme evaluation.

**Research Data Management Learning Modules, Assessment and quality improvement: 2017**
[https://guides.lib.uwo.ca/rdm](https://guides.lib.uwo.ca/rdm)
In collaboration with the Research Data Management Committee at Western Libraries we developed a set of on-line learning tools geared for both students and faculty to help manage and create research data management plans that are in compliance with Tri-council Standards. I was responsible for developing and mapping out the change management and quality improvement pathways for the implementation of these resources across all parts of our organization from staff/faculty member, to Faculty to Institutional level.

**6. INSTITUTIONAL BENCHMARKING STUDIES: 2018-present**
As the Director of Research, Assessment & Planning at Western Student Experience (WSE), I lead and implement all benchmarking studies. Benchmarking studies are an important input to the WSE continuous improvement cycle, allowing us to benchmark our student outcomes against international and national trends, allowing us to track our relative progress against peer institutions, in key areas including campus climate, sexual violence, health & wellness, student engagement, and student thriving. Benchmarking studies that I lead include: The National College Health Assessment (NCHA); the Thriving Quotient (TQ); Canadian Campus Wellbeing Survey (CCWS); the EAB Campus Climate Survey; The Student Voices on Sexual Violence Survey.

Key Accountabilities:
- Lead the Ethics Board Process.
- Lead the design and delivery of the survey instrument, and all contextualization of the survey design instrument.
- Lead the project management of the survey design implementation.
- Lead the data analysis.
- Lead the report writing.
- Lead the stakeholder engagement.

Stakeholders Engaged:
**Internal Partners:** Western’s Provost; Western Student Experience AVP, Directors, and Staff; Centre for Teaching and Learning; Western Libraries; Western Faculty Stakeholders: Deans, Associate Deans, Staff; Western Students: University Students’ Council, Society for Graduate Students.

**External partners:** Affiliates (King’s, Brescia, Huron Universities; Ministry of Colleges and Universities; University of British Colombia.

Benchmarking Institutional Reports:
*National College Health Assessment 2013 & 2016: A comparison analysis and Report 2019*
*Student Voices on Sexual Violence Survey Findings, Analysis and Report 2019*

Forthcoming Benchmarking Institutional Reports:
*Student Thriving Findings, Analysis and Report 2021*
*Canadian Campus Wellbeing Survey Findings, Analysis and Report 2021*

7. RESEARCH ADMINISTRATION LEADERSHIP:

I have 10 years of progressive leadership experience related to all aspects of research administration, from managing large scale institutional research grants; to managing Western’s research partnerships and research partnership grant portfolio; to leading the design and implementation of Western’s Knowledge Exchange and Translation Strategic plan. While in this role I also developed nationally recognized Knowledge Exchange and Translation tools, as well as sat on the executive board of Research Impact Canada. I played a strategic leadership role in the following areas related to research administration, detailed below:
- Research Partnership Stewardship
- Strategic Research Management
- Strategic Research Data Management

| RESEARCH PARTNERSHIP STEWARDSHIP: 2015-Present |
As the Director of Research, Assessment and Planning I am responsible for the Development of Research Partnerships. The WSE portfolio focuses on the development of strong research partnerships with faculty across campus in order to innovate our programming based on cutting edge research. By participating in faculty led research at Western and external to Western, we are able to increase our research productivity which enhances the body of evidence we create that supports the strategic directions of our programming across our three pillars. These research projects broaden the opportunities available to our portfolio to apply for, and participate in, grant funded research.

Currently I lead research projects in the following areas of focus:

1. **Student Mental Health & Wellness:***
   - *Bell Let’s Talk*: In Partnership with Bell and Queen’s University
   - *Monitoring Effects of Covid on Student Mental Health and Wellbeing*: In partnership with Dr. Eva Pila, Faculty of Health Sciences.
   - *Thriving On Campus Study of LGBTQ+ Student Experiences*: SSHRC Funded Project led by Dr. Michael Woodfield, Laurier University.

2. **Gender-based violence prevention:**
   - *Upstander Research* (Funded by the Provincial Government, Former Ministry for the Status of Women)
   - *Women's Safety Grant*: Funding for Various GBV Prevention Education Programming
     (Funded by the Provincial Government, Former Ministry for the Status of Women)

3. **Transferable skill development and employability:**
   - Undergraduate Research Internship Programme: Knowledge, Skill and Personal Values Development Research Project. Funded by the Provost and the Office of the Vice-President Research.
   - Skills Catalyst Grant: Partnership with CityStudio and the City of London. Funded through the Provincial Ministry of Economic Development and Research.

**Creation of a Knowledge Exchange (KEx) Platform, Western Student Experience: 2018-present**

The establishment of a Knowledge Exchange (KEx) platform, and incorporation of KEx as a practice that all of our scholar/practitioners engage in. These developments will allow us to highlight Western Student Experience as leaders in the field of Student Affairs. We will accomplish this goal by creating a KEx plan, that enhances our ability to exchange knowledge with our diverse stakeholders through the curation of a Scholarship@Western Account; participation at national and internal conferences; publication of academic scholarship with research partners; enhanced storytelling and communications to our various stakeholder groups.

Throughout this work, we will incorporate best practices for increasing the overall capacity for diverse voices to be represented in our evidence informed programming and we will adopt an intersectional lens to our analysis, so we can better understand the diverse student experiences occurring on our campus.

**Knowledge Exchange (KEx) Manager: Office of the Vice-President Research, Western University: 2016-2018**
Stakeholders engaged: Municipalities; Provincial Government; Federal Government; Indigenous Stakeholders; Not-for-Profit Sector; London Health Sciences Centre; Lawson Health Research Institute; ICES; International and National Industrial stakeholders.

- As the KEx manager, I built excellent working relationships with Federal level departments, such as Statistics Canada, the Department of National Defense, Public Health Canada, Global Affairs Canada, the Privy Council- in particular their Impact and Innovation Unit, working to place students in exciting research directed learning opportunities.
- Provincially, I worked with multiple Ministries (Ministry of Health and Long-term Care, the Ministry of Education, and the Ministry of Research and Innovation) to create student research opportunities where students have been provided the opportunity to gain the necessary skills identified by our research partners and sector experts in order to be competitive and innovative leaders in dynamic and complex work environments.
- At the regional/local level, I developed strong working relationships with the City of London, Innovation Works, Museum London, London Middlesex Health Unit, London’s growing technology and design sector and many other regional not-for-profit organizations. I leveraged these relationships in order to work with our partners to envision the innovative skill-sets that students will require in order to be engaged employees who are able to collaborate and become leaders within their sectors, ultimately strengthening and actively participating in civic engagement.
- I was responsible for facilitating, building and stewarding research partnerships for Western University with diverse stakeholders across sectors such as multi-national/international industrial, not-for-profit/community services, multi-levels of governance: Municipal, Provincial and Federal Government. The result has been the engagement of 20 researchers/research groups, 5 institutes, and over 40 research partners from Industry, government and the not-for-profit sectors, which has generated over $36M in partnered research funding in the last 24 months.
- I integrated research to be a central component of my KEx role, where I created 2 separate knowledge exchange, impact and evaluation tools using rigorous methods of testing; continuous evaluation and iteration. The KEx planning tool is widely implemented across Western. SSHRC and the Department of Defense are in the process of implementing this partnered research planning tool into their partnered research programmes, as well, currently a branch of Global Affairs Canada is trialing this tool in a partnered research capacity. Tool 2, a new Impact and Scholarly Evaluation tool has been implemented in the Kex office at Western.
- I led a team of research librarians and computational statisticians in building innovative impact measures for a diverse set of research and grant programmes, centres and institutes at Western University. The implementation of these innovative impact indicators has allowed the VP and AVP Research to better assess Western’s research outputs across a number of new measures.
- As part of my institutional partnership building, in collaboration with the Associate Chief Librarian, we created the first ever defined partnership agreement between a Research Office and Institutional Library within North America or Europe in order to better serve and expand how Western University implements Knowledge Exchange and Stewardship.
- I supported the creation and planning of knowledge mobilization/translation/exchange (KTE/KMb) related to health sciences, life sciences, social sciences, arts & humanities research to our diverse community, industrial, and policy stakeholders. I was the lead consultant on KTE/KMb
on all large-scale (over $1M) grants managed by the Vice-President Research’s office at Western University.

- As the KEx manager, I also worked with Western’s signature research clusters, utilizing my design thinking and planning skills to develop long-range plans, developing strategies to enhance existing partnerships; create new partnerships; increase grant funding; curriculum development and knowledge translation/mobilization priorities, as well as creating strategies to measure the impact of these research clusters.

- As the KEx Manager, I sat on the Governance committee of Research Impact Canada. Western is an organizational lead member of this international organization that is dedicated to promoting the impact that collaborative research has within society.

**KEx Institutional Reports:**
- 2018 Research Impact Canada: Report on Ethical Engagement
- 2016 Research Impact Canada Governance Report

**SCHOLARALY RESEARCH/PUBLICATIONS/CONFERENCE PRESENTATIONS/INVITED TALKS:**

**PhD Dissertation:** Defence June 2021
Supervisors: Dr. Chantelle Richmond & Dr. Isaac Luginaah, Western University.

Participatory Knowledge of Motion: *Ezhianishinaabebimaadiziyaang mii sa ezhianishinaabeaadisokeyaang.* The way in which we live, that is the way we write stories.

**Peer Reviewed Publications:**


**Refereed Conference Abstracts:**


2006 Huner, E & Tipman, L. Building the Artificial: The Language of Utopia and Planning Regulations. In the proceedings from the World Planning Congress. Mexico City, Mexico.


Forthcoming:

Articles Under Review:

2021 Huner, Erin, Schieman Kate, Wills, Sara. The Stack Digital Learning Model.

2021 Huner, Erin & Schieman Kate. When Consent is Understood as a Concept and Not as a Process: Student Attitudes and Experiences of Gender-Based Violence.


Book Chapters:

Solicited Book Chapter:


Creative Writing:

Collection of Poetry under Review:

2021 We are the stories made in between moments. (this is the story I tell you)

Conference Presentations (last 5 years)

2020 The Canadian Association of College and University Student Services, Conference. Educating in the Grey Zone: Reflections on developing a thriving gender-based violence prevention framework at Western.

2018 Research Western Conference: Knowledge Exchange tools for impact

2018 Research Impact Canada, Vancouver, British Columbia
<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Social Sciences and Humanities Research Council, Ottawa, Ontario</td>
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<tr>
<td>2018</td>
<td>Canadian Science Policy Conference- Ottawa, Ontario</td>
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<tr>
<td>2018</td>
<td>Canadian Association of Research Administrators- National Conference, Ottawa Ontario</td>
</tr>
<tr>
<td>2017</td>
<td>Research Impact Canada, Montreal, Quebec</td>
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<tr>
<td>2017</td>
<td>Canadian Association of Research Administrators- Ontario Conference, Toronto Ontario</td>
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<tr>
<td>2017</td>
<td>Canadian Knowledge Mobilization Forum, Ottawa</td>
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<tr>
<td>2016</td>
<td>UWO Department of Geography Colloquium. “Make What We Said Heard”: Elder Voice, Sensory Mapping and Traditional Knowledge</td>
</tr>
<tr>
<td>2014</td>
<td>CIHR Institute for Aboriginal Peoples’ Health National Gathering of Graduate Students, “Make What We Said Heard”: Honouring Elder Voices Lost in Research Practice. Vancouver, BC.</td>
</tr>
<tr>
<td>2014</td>
<td>Invited talk Ontario Ministry of Transportation, department of Aboriginal Affairs</td>
</tr>
</tbody>
</table>

**Invited Talks (last 5 years)**

June 2021: Keynote address ACPA Student Affairs Assessment Insitute Opening and Closing Keynote.

May 2021: Global Ivey Day: 48 minute Report: “Imagining the Future of Case Based Learning”


November 2019: MINDS Expert Briefing, Department of National Defence

November 2018: Grant writing and Knowledge Translation- LHSC and Schulich School of Medicine, Professional Development Series for New Professional Staff, and Basic Scientists

July 2018: Pillar Community Engagement Event: Engage with Western

June 2018: Global Affairs Canada

June 2018: Social Sciences and Humanities Research Council

May 2018: Rotman Institute of Philosophy

May 2018: Faculty of Arts and Humanities: Partnerships across disciplines: Knowledge Exchange in Research

April 2018: School of Nursing: Grant writing, Knowledge Exchange and collaborative research in practice

February 2018: Faculty of Information and Media Studies: Knowledge Translation and the future of the Library

January 2018: Department of Family Medicine and Public Health- Knowledge Translation: Evidence to Practice

November 2018: Grant writing and Knowledge Translation- LHSC and Schulich School of Medicine, Professional Development Series for New Professional Staff, and Basic Scientists

September 2017: Faculty of Engineering: Industrial Translation- Partnering Collaboratively

August 2017: Faculty of Science: Knowledge Translation and Industry

July 2017: Faculty of Arts & Humanities- Knowledge Exchange: the practice of talking to publics

June 2017: Western Continuing Studies- Community Collaborative Engagement

March 2017: Faculty of Health Sciences- Knowledge Translation and Research Practice

January 2017: Faculty of Music- Research and Practice- Knowledge Exchange and Performance

November 2016: Grant writing and Knowledge Translation- Institute for Clinical and Evaluative Sciences

October 2016: Grant Writing and Knowledge Translation- London Health Sciences Centre, clinical skills

September 2016: Grant writing and Knowledge Translation- LHSC and Schulich School of Medicine, Professional Development Series for New Professional Staff, and Basic Scientists
June 2016: Chaired Roundtable stakeholder workshop on KTE strategy at Western with AVP and university stakeholders  
May 2016: Responsive Research- School of Graduate and Postdoctoral Studies, Western University  
April 2016: Knowledge mobilization and translation in practice: engaged research across the tricouncil-SGPS Research forum for Faculty and PDFs, Western University  
April 2016: Knowledge mobilization and Translation in practice: engaged research by, for and with community partners- Pillar Not-for-Profit community engagement workshop  
April 2016: Knowledge Translation between Industry, the academy, and government- Sustainable Agricultural Systems in the Great Lakes Basin Workshop, Western University  
December 2015: Knowledge Translation, Research and Funding in the Canadian Landscape: ICES Faculty Scholar Workshop, hosted by LHSC and Lawson Research Institute  
November 2015: Partnering with Purpose: Respect, Reciprocity, Relevance, and Responsibility in research partnerships, Walpole Island First Nation  
October 2015: Co-chair, with Fay Harrison, KTE/Kmb workshop with the Research Impact Network  
August 2015: Partnering with Government: Effective movement of knowledge between research and action- Faculty of Social Science, Western University  
May 2015: Knowledge sharing between partners: Building effective KTE strategies in grant funding- Western Indigenous Health and Well-being Summer School, Western University  
April 2015: Western's first Knowledge Mobilization and Exchange workshop- 75 attendees  

RESEARCH GRANTS: TOTAL: $1,031,523.44  

2020: Indigenous and Black Students and Mental Wellness: Belonging and Thriving  
Sponsor: Ministry of Colleges and Universities: $375 000. Awarded  
Role: Co-applicant  
Over the past three years, Western University has, like all Post-Secondary Institutions, seen a rise in mental health issues in the general student population, and a steady rise in demand for counseling services. The COVID-19 pandemic has intensified pre-existing inequities in Canadian society, with many of these challenges highlighting pre-existing structural inequities and vulnerabilities faced by Black and Indigenous peoples. As a result, these inequalities have been further exposed to show the gaps in services and supports for these marginalized groups. Western recognizes that our mental health and wellbeing services also suffer from this gap in culturally responsive and respectful care. Thus, we seek funding to address identified gaps in our mental health care, and unequal power relations between program providers and participants, by building equitable, reciprocal relationships characterized by respect, shared responsibility, and culturally responsive care. The grant funding will use a targeted approach to support Black and Indigenous students struggling with mental health and wellbeing challenges that may have been pre-existing, and exacerbated by the COVID-19 pandemic, or emergent because of the pandemic.  

2020: City Studios and Community Engaged Learning  
Sponsor: Ministry of Economic Development, Skills Catalyst Grant: $275,000  
Role: Co-Applicant  
CityStudio London brings together City staff, students, faculty, and community in an innovative model of experiential learning that integrates academic projects with the complex issues underlying the economic conditions of the London region, such as high unemployment and a workforce with low educational
attainment (Labour Force Participation in London Study, 2019). Student teams will complete projects that align with the City’s strategic priorities and directly link to increasing the economic prosperity of the region. Through hands-on experience, students gain a deeper understanding of course content, while honing critical employability skills. The City is able to leverage students’ ideas and perspectives, while creating a robust talent pipeline for future hiring. Based on a model pioneered in Vancouver in 2011, CityStudio creates the seeds for a future labour force that is able to combine high educational attainment with the necessary applied skills to be labour market-ready upon graduation.

2020: Mobile surveillance of first-year students amidst COVID-19: A prospective cohort study examining mental health and academic outcomes
Sponsor: Faculty of Health Sciences: $45,000
Role: Co-Applicant
The COVID-19 pandemic is a public health emergency that poses considerable challenges for the mental health and psychological well-being of young adults—the peak age of onset for mental illness. Primary infection risk faced by students in residential campuses, alongside secondary effects of social isolation and reduced in-person engagement, will have a significant and sustained impact on student mental health. As such, the overarching aim of this research is to identify risk and protective factors that prospectively predict mental health and academic outcomes among first-year students on campus using a mobile surveillance system. Leveraging multidisciplinary approaches, this innovative and novel research will integrate self-reported survey responses, mobile sensor data, and campus-based administrative data to identify potentially modifiable factors associated with mental health and academic outcomes. This innovative method of data acquisition and linkage will aid in devising strategies to support vulnerable student groups and mitigate the adverse effects of COVID-19 and other future pandemics, while enhancing student well-being over the next year.

2019: Institutional Project Grant: EDI research, programmes and impact.
Sponsor: Tricouncil of Canada: $183,863.44
Role: PI
Following the release of the 94 Calls to Action by Canada’s Truth and Reconciliation Commission (TRC, 2015), Western approved its first-ever Indigenous Strategic Plan, a document that reflects and seeks to support the long-standing work of Indigenous and non-Indigenous allies at Western. In February of 2018, Research Western (RW) in partnership with Indigenous Services (IS), collaborated to create a unique summer program that would open a space for Indigenous students and allied faculty members to discover ways in which Indigenous knowledge could intersect with diverse research programs on campus. These calls for change highlight the need for all faculty and staff to be more knowledgeable and responsive to Indigenous learners’ realities, needs and barriers. This project will help focus and create supports towards Western’s commitments to improving EDI in research project design and indigenizing our research laboratories and spaces.

2019: Women’s Safety Grant: Western Student Experience Gender-Based Violence Education Programming.
Sponsor: Provincial Ministry for the Status of Women: $92,660.00
Role: PI
The AVP-Student Experience has gathered a group of dedicated staff, students and faculty members to begin tackling the development of an evidence-informed framework that will establish an overall strategy for gender-based and sexual violence programming at Western, formalizing our efforts to redress gender-
based and sexual violence in our community. To realize and roll out this framework and its associated programming, Student Experience (SE) is seeking Women’s Safety Grant support. Specifically, SE is asking for fund to support the following initiatives that will ensure our Gender and Sexual Violence Prevention Framework is robust and evidence informed in its programming.

2016: Libraries of the Future. Sponsor: Western Research Fund. $25,000.00 Role: Co-PI
The aim of this work is to provide Western Libraries and Research Western with an improved understanding of Western University researcher needs and desires around interdisciplinary scholarship and next generation publishing. This project will help to identify faculty who are engaging in, or who wish to engage in, new modes of scholarly communication, and will assess where and how the library and Research Western can best amplify their scholarship. This proposed project will enable our two units to effectively collaborate with researchers and to develop the resources and expertise necessary to enable meaningful engagement across the entire research cycle, enhancing Knowledge Exchange and Stewardship at Western.

2015: Bridging the Data Divide: Engaging Northerners through Innovative Software Tools for Participatory Knowledge Sharing and GEM Data Mobilization. Sponsor: Natural Resources Canada. $30,000 grant Role: Co-PI
Our research team engaged with Inuit Tapiriit Kanatami (ITK) to investigate ways in which we can make Geological Data available to ITK stakeholders and how we can work together to create maps that contain both Traditional Knowledge and Western Scientific Knowledge, as a means of creating more equitable relationships and negotiations for Northern Land-Use Planning.

2014: “Make What We Said Heard”: Elder voices lost in Research Practice. Sponsor: Samuel Clark Fund. $5,000.00 grant Role: PI
In this project I am working directly with my community collaborator, Clint Jacobs, at Walpole Island First Nation to complete a 3-phase project. Phase 1 is comprised of interviewing elders about Traditional Knowledge (TK) and how it relates to caring for the land; Phase 2: is comprised of utilizing this TK data and working with the Heritage Centre at Walpole to create a land-use plan that utilizes TK as a means of establishing a first ever indigenized land-use plan for the Island; Phase 3: Is creating a database of this gathered TK so that Walpole Island community members, and other Anishinaabe communities can have access to this TK and the resulting land-use plan.

ACADEMIC FELLOWSHIPS & SCHOLARSHIPS: TOTAL: $170,800

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<th>Type</th>
<th>Description</th>
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<td>PhD</td>
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<td>2013</td>
<td>PhD</td>
<td>National Gathering of Graduate Students Bursary for travel</td>
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<td>2004</td>
<td>MEDes</td>
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<td>University of Calgary Research Fellowship ($9300/year)</td>
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<td>2005-2009</td>
<td>MEDes</td>
<td>Faculty of Environmental Design Research Fellowship</td>
<td>$4000</td>
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Huner, Erin

2006
Faculty of Environmental Design Conference Travel Grant $2000
2007-2009
Faculty of Environmental Design Thesis Research Award $9000
2007-2008
Faculty of Environmental Design Entrance Award
$18,000

M.A.:
2001-2003
University of Victoria Graduate Fellowship $9000
2001-2003
University of Victoria Department of English Fellowship
$15,000
2001
Academic Entrance Award
$15,000

Undergraduate:
1997
UWO Entrance Scholarship $2000
1997-2001
Faculty Scholarship
$16,000
1997
Students’ Union Tuition Scholarship
$4500
2001
Faculty of Arts and Humanities Highest Combined Average Award
$250
1997-2001
Dean’s Honour Roll

PROFESSIONAL HONOURS & DEVELOPMENT

Professional Honours:
2015
Western University Award of Excellence
The Western Award of Excellence represents Western’s highest level of recognition for staff members. Western faculty, staff, students & alumni are invited each year to nominate an individual staff member or a team of staff who make outstanding contributions to our campus community.

Professional Development:
2018
CARA: Certificate in Research Management
2018
Western University Continuing Education: Certificate in Project Management
2017
Professional Certification in Knowledge Translation & Implementation Science: Sick-Kids Hospital, UofT
2016
Child and Parent Resource Institute (CPRI) Conflict Resolution Certificate
2015
Indigenous Health Summer School: Certificate in Indigenous Community Experiences in Community-Based Research: Best practices & Learning Lessons
2014
Indigenous Health Summer School: Certificate in Engaged Community research
2013
Indigenous Health Summer School: Certificate in Community Based Participatory Research
2008  Certificate in Design Thinking, University of Calgary

COMPUTER SKILLS

Google Suite
Adobe Creative Suite (Illustrator, Photoshop, InDesign)
Microsoft Office 365 (Word, PowerPoint, Excel, Forms, Teams)
Solidworks
AutoCAD

REFERENCES
Available upon request