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Understanding and Gaining Knowledge in a Different Way; Traditional Ecological Knowledge and its Implications for Today's Environmental Framework

Veronika KUBIK

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Veronika KUBIK

CENTRAL EUROPEAN UNIVERSITY

ABSTRACT OF THESIS submitted by:
Veronika KUBIK
for the degree of Master of Science and entitled: Understanding and Gaining Knowledge in a Different Way; Traditional Ecological Knowledge and its Implications for Today's Environmental Framework
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The goal of this thesis first attempts to first discover why an anthropocentric view of nature is being held. In order to understand this, the challenging of the researchers own belief about the natural world will be attempted through the communication and attempted connection with a non-human entity. This attempt to connect emotionally, spiritually, and mentally in order to gain and pass knowledge with and through the non-human being shall allow the researcher to find possible reasons that it is difficult to understand the spiritual concept of nature as Traditional Ecological Knowledge requires. Through this process the cultural beliefs that the researcher has been subjected to throughout the course of their life will become apparent and will lead the discussion. The themes that were discovered include: priorities, valuation, time (patience), individuality, and modern nomad (mobilized world).

These themes are then used as a guide for a discussion on Traditional Ecological Knowledge [TEK] and its place and possible integration into current environmental practices. This will be done through different contrasting cases and knowledge that is provided by the two different sets of systems used to understand the environment. The researchers own stories, journal pieces, opinions, and perspectives will be included as a part of these themes but are not the main focus as the goal is to bring out the differences and similarities between the two different knowledge systems in relation to the environment and how they may be able to be integrated together.

Keywords: Traditional Ecological Knowledge, Anthropocentric, autoethnography, Indigenous Knowledge, environment, holistic

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CLFNA: Cold Lake First Nations Association

TEK: Traditional Ecological Knowledge

TK: Traditional Knowledge

UN: United Nations

UNDP: United Nations Development Program

Prologue

Lost in the Wilderness

If you've ever found yourself in the wilderness somewhere then the thought of what would happen if you got lost probably crossed your mind. It's an interesting notion. Can you tell the difference between which plant is edible and which one isn't? Can you set a trap to capture some sort of animal? Do you know how to build a shelter? What's if it's winter? How do you survive in that kind of condition? Would you survive? Perhaps it's possible to manage for a while, for a few weeks or even a few months, but eventually you'd be found and everything would return to normal. The wild would become something like a bad dream, it would slowly fade from your mind as modern society and all its comforts and demands took over.

Personally, if I was lost in the wild I don't think I'd last a week.

Rupert Ross, the author of Dancing with a Ghost (1992) put forward a notion for me that never crossed my mind until I read it. It struck me so heavily because it seemed almost incredulous to even conceive of such a concept:

> "We followed a trail which had been used for more than a hundred years, winding through the rock faces, through dense and silent cedar forests, around the edges of swamps and up and down small canyons…I imagined the path, my family and I were all that really was. I imagined that at the end of the day there would be no schools, no warm, dry houses, no hospitals, no pensions, no clothing stores, no supermarkets… There would only be more of what I could see around me, stretching off into some boundless infinity of both time and place…Suddenly imagining a world in which the "outside" simply did not exist was a shock. In a world where there was nothing but wilderness, there would be nowhere else to go, no other context in which to seek fulfilment. Further, the enterprises of life would not change from generation to generation. My great-great-grandchildren, and theirs in turn, would inhabit the exactly

same struggles, and live lies essentially identical to mine. They would not have a better life than I did, nor would they even have a different one. They would do and be what I had done and been, in the same places, in the same ways forever, just as it had always been." (Ross 1992, 88)

This idea was so remote to me that until I stumbled across it in Ross' book it was something I'd never imagined. Yet, only a few centuries ago this was a reality. Once upon a time the very notion of us being able to destroy Earth was probably inconceivable. It may have rather appeared as if we were encroaching into the planet's ecosystems…or perhaps that we didn't even make a blip of a difference. There were plenty of forests, fields, rivers, lakes, mountains, and everything else that today we are trying so hard to protect.

Once upon a time it was about survival, valuing our life, working as a community to provide for each other, understanding that we don't know everything, tying ourselves to the land, and when time was nothing more than a notion of the sun rising and setting and the change of seasons.

Today, it's about comfort, valuing what each of us own, individual interests, believing we know just about everything, tying ourselves to what we have without even knowing where it's from, quick solutions, and a whole other slew of problems that the modern lifestyle has given us.

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Introduction

Current important issues, such as the exploitation of resources and the ever-pressing problem of climate change, make it necessary for modern society to change its perceptions about humankind's relationship to the natural environment. Politicians have been disregarding the knowledge that can be provided by the people who have been living on the land for generations and how they managed to adapt to the changes seen in their environment over time. The inclusion of a different knowledge-system is necessary in order to understand and gain a grasp on what is happening in today's world, with particular focus on environmental and ecological awareness.

The need to incorporate different knowledge systems into today's decision-making processes, in this particular context that of Traditional Ecological Knowledge (TEK), is becoming a more urgent issue to government, industry, NGOs, and consulting companies (McGregor 2000). Much of the information that has been gathered through TEK is based over long periods of observation that make the data gathered valuable in understanding many environmental phenomena. This knowledge has been passed down through oral tradition for millennia and the knowledge gained has an apparent difference to that of current practices that are used to gain an understating of the natural world. Traditional Ecological Knowledge holds many ideas that are seen as contrasting with today's rational, technological, scientific world of understanding. TEK utilizes a type of holistic image that believes and understands that there are beings other than humans that humans share the planet with.

The anthropocentric perspective that I have grown up with was juxtaposed with ideas offered in Traditional Ecological Knowledge, which have made me interested in studying the similarities and differences between the very different bodies of knowledge. I want to know

why they are so difficult to get to work together and if there is a way to make them sync. I can't help but think it's necessary to start thinking and assessing our environment differently because it just seems to me that the way we have been doing things isn't working anymore. The knowledge that many traditional cultures have gained and use focus on the relationship between knowledge, people, and all of creation and does not focus on one specific point of interest (McGregor 2008). This concept of "knowing" challenges and questions the Euro-centric way that much of society has been using and imposing over the centuries over other "non-western" cultures. Much of their knowledge has been disregarded as "unscientific" as it was not gained and does not hold many of the same value that current scientific practices hold.

The Traditional Ecological Knowledge system does not wish to discard Western ideas but rather attempt to look for strengths in both and integrate them. In Two-Eyed Seeing, a concept developed by an Eskasoni Elder, Albert Marshall at Cape Breton University (undated) describes some of the differences between the two systems of thought. It is accepted that Western science is excellent at looking at the physical world and finding patterns as well as mechanisms that allow it to work, but the view is that of an observer looking in. TEK and in this case, Indigenous Knowledge, focuses on patterns but rather as a part of that pattern and attempting to understand ones place in it. Indigenous knowledge's reflect not only on the physical world but the spiritual world as well (Cape Breton University undated). The dilemma of integration lies in how to experience and talk about deep connection to the land in a way that crosses cultures but does not appropriate different ways of knowing.

So how do I find out what's standing in the way…?

Well, I'm going to talk to a plant of course!

The choice to talk to a plant and write a journal about it probably seems like a bit of a strange move but think about it for a moment. I'm trying to understand the difficulties of moving from an anthropocentric knowledge system to a different knowledge system that views the world holistically. I am the product of a Euro-centric society; everything I learned, I learned from institutions that were set in place to lead me to think in a certain way. This is why I started attempting to communicate with Jesús, a type of bonsai tree from Japan. If I can start to think of what to me are inanimate- albeit alive- objects as something more, then maybe I can change how I view my place in the world in relation to nature and gain a better understanding of one of the major aspects of TEK.

Plants can't technically communicate, at least in terms that humans consider to be communication. The idea of communicating with plants isn't anything new though; in fact it is the modern world's way of removing oneself and studying the plant in an analytical, mechanistic way that is new. Cultures from all around the world have claimed that "plants can speak to human beings if only human beings will listen and respond to them in the proper state of mind." (Buhner 2004, 2). It is about listening and gaining knowledge about the world through the plant. Whether you chalk this up to being superstitious nonsense or not is up to you.

I got a part of the way to this other way of knowing but not far enough because it all seems very superstitious to me. I still look at him and think, *did I water him and does he have enough sunlight? The Rona store tag said once every two weeks I should water him*, I then pick up a rock and press my finger to the dirt and see whether it's damp or not. That is how I decide whether he needs water or not- I don't really think to ask him. The very idea of asking

him seems ludicrous to me. The biology of the plant is known, anything I want to know I can find on Wikipedia or ask. It's all there. From my worldview, that is all I feel I need to know in order to let it live.

Reading tree rings, carbon dating, reading plant and animal fossils, etcetera, those are all forms of reading and interpretation of the different events that have occurred in Earth's history. Gaining this type of data is something I am more than comfortable with in terms of gaining knowledge from nature. However, the idea that it is possible to gain something from a plant by connecting with it mentally, emotionally, and spiritually, is far out of my comfort zone but is exactly what I am attempting to do. To say I am sceptical is to put it mildly but in order grasp all aspects of TEK it is necessary to at least attempt to understand.

1. Methodology

What am I doing here?

"It's an autoethnographic study."

"What's that?"

"I have no idea."

It certainly sounded cool and fancy and complicated but in truth I had no idea what it was. It had been suggested to me as a way that I could tackle my research problem and it was certainly different from other approaches. I'd understood it as a diary or journal and in an attempt to find out more about it I checked the most reliable and easy to access source I had available to me at the time: Wikipedia.

> **"Autoethnography** is a form or method of social research that explores the researcher's personal experience and connects this autobiographical story to wider cultural, political, and social meanings and understandings…autoethnography focuses on the writer's subjective experience rather than, or in interaction with, the beliefs and practices of others." (Wikipedia 2012)

The definition wasn't extremely helpful.

Soo, you're going to do what?"

"Umm," I stared at my friend with what was a bit of a blank look as I tried to find a way to justify what I was saying, "I'm going to attempt to view a non-human being as something that has the same characteristics as us… like that they should be respected, treated, consulted, and dealt with in a way that perhaps once upon a time they were. You know how some cultures used to believe and some that still believe that there are other entities out there that have the ability to communicate and share knowledge."

This type of conversation was a common one for me during my time in Manchester when my classmates all began to speak about what we were possibly going to be writing about for the final project for our program, a master's in environmental science, management, and policy (MESPOM) at Central European University. We'd spent the past few semesters moving from

one university to the next across three different countries. This was our last semester of classes and soon we would all be starting the final and possibly most challenging part of our program: the dreaded thesis. I was heading to the University of Saskatchewan where I would be trying to find out how to integrate Traditional Ecological Knowledge into the anthropocentric way of understanding and dealing with the environment. The first step would essentially involve trying to find why it is so difficult for to move from a "Eurocentric" or "anthropocentric" body of thought that views nature and the environment as something of separate entity from our own lives to one that views nature and ourselves as a part of its whole cycle. It would involve finding my own beliefs towards non-human beings and the environment and challenging them to try and move to that different and holistic way of thinking. Once I had enough data collected through my journaling process I would attempt to answer, what to me, was an important element and practical question: Is it possible to integrate the two forms of thought about nature and if possible, how?

This question sets up the second step which will use whatever discoveries that I make regarding my own difficulties as different themes, or deep cultural narratives, and will bring forth a discussion regarding the challenges of conservation, natural resource management, and other environmental problems from the perspective of the anthropocentic worldview and TEK. This would continue to include my own stories and perspectives in order relate my own struggles with the larger environmental theme of the study.

1.1 Defining Science, Anthropocentric worldview, and TEK

Before I can go any further into this methodology I have to make clear what I mean by the anthropocentric world view and science as well as Traditional Ecological Knowledge. These brief definitions are partly my own and partly drawn from literature.

1.1.1 Science and the Anthropocentric Worldview

This is the type of knowledge is probably what most people growing up in today's modern society have been exposed to. It is a type of knowledge that is based on analytical, linear, reductionist, deterministic, and mechanical gathering and use of knowledge (Buhner 2004). The scientific view, works under the assumption that everything has a cause and effect relationship, that everything has to start from somewhere and will go somewhere else but it can all be explained. "In short, the scientific view of the universe seems to say that man can, potentially, successfully interfere in everything; man can *control* his surroundings." (Ross 1992,52). It is the type of study and science that involves removing the researcher from the research and making sure that all assumptions are objective; hypotheses cannot be wrong, they can only be rejected.

According to Novacek (2001, 66) there are three different definitions regarding how to view nature:

- Anthropocentric view (man is superior to living beings and nature)
- Biocentric view (it assumes the equality of all living beings)
- Theocentric view (it assumes the existence of God- the Creator, man is the custodian of entrusted gifts)

Most commonly held by governments, corporation, and different organizations in much of today's modern post-industrial world is the anthropocentric worldview. It is based off the assumption that everything is measured by humanity's values, experiences, and knowledge. These ideas are based on a very linear view with much of its focus on development, change, and the concept of working hard today to allow life to be better lived for tomorrow (Ross 1992).

All of these concepts will be discussed further on and throughout the thesis with more depth and in relation to current environmental problems and Traditional Ecological Knowledge.

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1.1.2 Traditional Ecological Knowledge

TEK has since the 1980s come into widespread use and is considered to be a subset of ethnoscience (folk science) due to its cultural relation and its initial study as ethnoecology by anthropologists (Inglis 1993). This type of knowledge relies on a highly refined awareness of the environment that has been acquired over thousands of years of direct contact with the environment (Inglis 1993). For researchers that come from the outside (non-Natives) and attempt to understand TEK it is viewed normally synonymously with that of Indigenous Knowledge (IK), ethno-science, and Naturalized Knowledge Systems (McGregor 2008).

There is no formal definition of TEK so for this paper the working definition as provided by Fikret Berkes (1993, 3) will be used:

"TEK is a cumulative body of knowledge and beliefs, handed down through generations by cultural transmissions, about the relationship of living beings (including humans) with one another and with their environment. Further, TEK is an attribute of societies with historical continuity in resource use practices; by and large, these are non-industrial or less technologically advanced societies, many of them indigenous or tribal."

Some key aspects of differences between Western science and TEK are provided by Inglis (2006) and can be found below in Table 1:

Table 1. Differences between Western Science and TEK

Traditional Ecological Knowledge	Western Science and worldview
Qualitative	Quantitative
Intuitive	Purely rational
Holistic	Reductionist
Mind and matter are one and the same	Separation of mind and matter
Moral	Value-free

Spiritual	Mechanistic
Empirical observations gathered through trial-and-error	Experimentation and systematic, deliberate accumulation of fact
Data generated through the resource user	Data gathered through specialized researchers
Data is based on long-time series accumulated over a small area (diachronic data)	Data is based on a short-time series over a large area (synchronic data)

1.2 Culture

Any questions that came up along the way would use different sources of literature to draw upon to help reaffirm or argue my own findings. I like the idea of finding data through myself as it's similar to how Traditional Ecological Knowledge is gathered and is one of the reasons this methodology feel appropriate for the study, but the researcher in me needs to use other work to support my observations. This is where my personal observations will cross over into the cultural aspects of my studies and is a critical aspect for my methodology. The raw data is what I gather through myself, the "case study", but the literature I draw upon puts it into a larger context that investigates what these ideas I find may mean on a cultural and environmental level.

During my time in Manchester, I'd begun to read *Autoethnography as Method* by Heewon Chang (2008) but I had yet to really fully understand how I was going to write this project. In the notes I had taken I managed to pick out a few important points regarding definitions of culture. There were normally two major streams of culture, or how they can be defined. Below (Table 2) is a table that separates and summarizes the two different forms of thought on culture as provided by Chang (2008).

Table 2. Differences Between Different Definitions of Culture

The Bounded Whole	The Individual
-culture is group oriented and is a result of human interaction **-culture is transmitted through artefacts, traditional ideas, and the attached value given to these as they have most likely been the product of action that further developed the culture (Chang 2008)** **-the strength of the culture is dependent on the size, position, and strength of a group** **-in this state culture is also considered to be super-organic and public, meaning that the effect that an individual would have on the overall culture to be minimal (Chang 2008).**	-culture is located in the individual's mind and it is the individual who acts as an agent to create and transmit culture (Chang 2008) - the individual then decides what can be accepted as a part of their culture -there are three aspects of this second definition as well: 1) psychoanalytic and human nature meaning that the surface variations in culture mask the similarities as we psychologically and biologically need culture (Chang 2008) 2) personal and public symbols which asserts that culture is a limited set of knowledge that allow for communications and regulations of behaviour (Chang 2008) 3) cognitively distributed culture that holds the idea that culture is based on cognitive standards that define peoples interactions and experiences (Chang 2008)

The different definitions and perspectives regarding culture caused me some problems as I don't think that culture necessarily stems from just one area; neither public nor private space. This, I would come to realize later is an important decision to make for myself and for my project. If I'm trying to cross from my personal experiences and bring them into a cultural context it would be necessary to understand whether the problems I pick out in regards to my research question are personal traits or the result of public influence. Personally, I don't believe culture is inherently one or the other but rather a product of both individuals and the public. Individuals are a part of the culture but that does not mean that culture is only about the individual. One person cannot have a culture; it goes against the very concept of what culture really is (Chang 2008). However, individuals are free to change aspects of their culture as they are the agents who choose what to create, accept, and transmit aspects of culture through their interactions and experiences with others.

1.3 Journaling

Sitting in the Pizza Pizza of the Pearson International Airport I finish Autoethnography as Method (Chang 2008). I just stare at the cover for a few moments more before I take another bite of my pizza and then stare blankly at the book store just in view from my seat.

I left Manchester a little over a week ago and have spent my time since then travelling through Toronto, Peterborough, and Bowmanville visiting old friends. I've been reading through the chapters of this book regularly so as to have it finished by the time I arrive in Saskatoon. It would help me be better prepared for what is to come. I had a feeling I'd be busy once I arrived with trying to settle down.

Casting my gaze down at the same text still sitting on the awkwardly small, round, and somewhat unstable table I can feel it mocking me. A fleeting thought of, *what have I got myself into?* passes through my mind.

The methodology of autoethnography, still a bit hazy to me, seems interesting and different from anything I'd done in my academic career thus far. Well, perhaps the writing style relates strongly to my creative writing class back in my senior year of high school. It was a question that my advisor had asked, *'am I creative?'* I had answered yes as once upon a time I had been submersed in a world of writing creatively and expressing myself through art. It would be important for this method and my project overall as I would need to convey what I was attempting to do in a way that kept true to the methodology and could engage the reader. That world had been pushed aside mainly because I had absolutely no time anymore and because, to be honest, for me, writing a report really only required one to be as creative as possible in techniques of procrastination.

My high school career has consisted of writing many essays, one after another. I think our teachers were trying to make sure that no matter how hard we'd try we'd never forget how to write a proper essay. I never forgot. Then I entered MESPOM and somehow along the way picked up how to write a research report which, besides the format, is essentially the same as an essay: reading/research followed by interpretation (if necessary) and writing. Always reference or cite and never state your opinion unless there is some factual evidence to back it up.

The very first essay I had to write addressed the very relevant problem that has been plaguing society for centuries: Did Romeo and Juliet really fall in love at first sight? I wrote what I believe to be a very well-constructed essay detailing how he did not in fact fall in love with Juliet, but instead as a young boy who had his initial crush reject him, was looking for a rebound. There were quotes, citations, and references to disprove Romeo's love and unmask it

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for what it was: mere infatuation and a desire to get into her pants because she's the one girl he shouldn't be messing with. My friend wrote otherwise and somehow, while using the same piece of data, managed to argue Romeo's true and ever-lasting love.

I don't know who got the better grade on that essay. I'd like to think that I did, and since neither one of us remembers I'll just say I did. Now, this may just be my opinion but doesn't it seem a bit like stats? A person can say two very different things with the same piece of data, yet it's still considered to be valid and factual.

Well, I had a nagging feeling this would be different from all those essays and reports. The method of autoethnography described in this book requires a lot of self-awareness and dedication to the topic at hand. According to Chang (2008) there are five key points that all autoethnographies required:

The researcher:

1) Must be completely immersed in the world in which they are studying

2) Must be able to engage themselves in order to collect reflexive data

3) Should be visible and active in the text

4) Incorporates others who are experiencing similar situations into the study

5) Committed to theoretical analysis

These key points made only a shallow impression on me. I knew I was supposed to be using my observations for this report- I'd talk about the ice disappearing or flowers beginning to bloom or something like that. This part of the process is called the Natural History Journal which would be done in order to allow me to practice what is referred to as, a restored ecological consciousness (Berry 2006). Sarah Conn (2007) emphasises that for this to happen it is necessary to slow down and to allow myself to be chosen by a different being which will allow me to become receptive and open to it. Hopefully, with this change my ability to see

myself as a part of an "interbeing" (all that is) rather than just an "interpersonal" cycle will occur (Conn 2007).

A key part of my methodology is the writing of a journal as this is where I write any thoughts, reflections, observations, etc. that occur over the course of my research. It could include conversations that I had during the day regarding my project and how it was progressing or any concerns I might have at the time in my every day. Lisa Lipsett (2011) proposes steps to this process calling it "Letting the Inside Out" where the researcher goes to whatever being it is they are attempting to connect with and allows for different feelings or ideas that come to mind to just be put down onto paper. Her method counts on creating an intimate connection through different forms of understanding, not just by speaking or ways that we may understand as common forms of communicating. I feel it important to mention that Lipsett does emphasize this process for painting/drawing and although I began with process, I quickly discarded it and focused on my writing simply due to personal preference.

The journal was also used to discuss the progress (or lack of progress) in connecting with Jesús. By recording past and present issues that come to mind or have been experienced during the writing of this journal it is possible to move between that cultural and personal context that is necessary to conduct a proper autoethnographical study. This data would allow me to compare and contrast myself in a cultural context allowing me to discover new dimensions of my own life as was stated in the previous section (Chang 2008). This is all based off of the assumption that is being held in order to write this thesis: there are multiple ways of knowing (knowledge-systems) in relation to the environment and these different forms should be incorporated into the decision making process.

I stare at the notes I'd made from Chang's book one last time briefly, but not much more sinks in regarding the methodology. Methodologies have always been a pariah to me and up until now I have been able to avoid them to a certain degree. My thesis in my undergrad didn't even

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have one. They are perhaps necessary though, as they are there to help solve a certain problem and carry a set of rules and principles that guide the study. Packing up my books I head towards the baggage-drop off, giving no more thought to the project, and wonder if Westjet will serve dinner during the flight.

Later, in Saskatoon…

Okay, I think with complete confidence as I stare at my notes and go over the discussion I'd just had with my advisor regarding my research project after my arrival in Saskatoon. My gaze is steady and my posture one of a student ready to study for all their worth.

"Exactly what am I supposed to be doing?!" I call out as I sit in my empty dorm room. I have a mini heart attack as the chair I'm sitting in rocks back almost sending me to the floor. Once stabilized and sure I'm not about to have an accident I give out a sound of annoyance as I quickly leave my room and head downstairs to visit a few friends I'd made since my arrival

I'm greeted cheerfully but my greeting is less than happy. "I have no idea what I'm doing. I don't understand. What am I supposed to be writing about? How am I supposed to talk to a plant? What does that even *mean?* It's all totally subjective."

Staring at me wide-eyed after my outburst I get asked the one question I dread. "What do you mean you're talking to a plant?"

"You're missing the point. I have a plant and now I have to talk to it, and somehow based on what I observe and feel I'm supposed to write a report on how and what block me from moving from one knowledge system to another."

"Maybe the plant can tell you what to write."

"I'm pretty sure that's actually what it's supposed to do." I take a seat on the couch in the lounge, slouching and staring at the wall across from me waiting for an epiphany.

"Then what are you worried about? I'd be happy if a plant wrote my thesis for me."

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I know I'm being mocked but I don't get angry. It's all done in jest. Also, he has a point, this is sorta insane as it is (to me)- having the plant write the thesis for me doesn't sound like such a bad idea. Still, I feel the need to bring my point across although I don't know what that is yet. "It's not like that. I'm supposed to talk and connect with it so I can figure out what's stopping me from connecting to it as I observe and reflect on what happens while I'm with it. When I do that I'm going to have…something. I think. I hope." Total silence. I look over my shoulder at one of my classmates who just gives me another shrug. "I think I'm missing something. There's some sort of connection I'm missing. I'm supposed to be talking to this plant or tree or bush or whatever so that I can try to understand why other people view these things as living beings. Like, I think I'm supposed to be immersing myself totally in writing about this stuff. I just don't get what I'm supposed to write about. There's only so much you can say about a plant."

My classmate decides to give the most rational reason for talking to a plant. "Plants like it when you talk to them- the carbon's good for them."

"Plants wilt, shrivel, and die in my presence. I'm going to kill my project and then I'm not going to have anything to write about. Not that I have anything now anyways."

"…Maybe you should talk to a rock."

1.4 Unorthodox Methodology

The challenge with this methodology (aside from my own frustrations) is that it is not only unorthodox from other forms of methodologies, it also receives a lot of scepticism because of it veers off the track from accepted academic modes of research. As universities are producers of knowledge it would seem necessary to understand exactly what would be considered to be "knowledge". In the more conventional views of science and engineering (Davyd and Lincoln 2005) this is not so problematic, however the social sciences are more difficult to pin down in

regards to valid knowledge. When most of us think of knowledge it comes with an idea of numbers, figures, words that are explicit but this is of little use in the social sciences. The social sciences and problems that it can decide to tackle also have a tendency to challenge and sometimes upset the private and public sector in which universities receive their funding.

Perhaps most important of all is a concept known as the "Humpty Dumpty" problem which is defined by Waddoock and Spangler (2000) as the attempt to solve a problem with only some of the knowledge necessary in order to solve it. This is because of all the specialization that occurs between professionals that attempt to try and tackle the problem without any knowledge of what Humpty looked like before or what others can do to help make him whole. "In addition to their traditional area of expertise, professionals must be able to view society holistically, through lenses capable of integrating multiple perspectives simultaneously." (Waddock and Spangler 2000; Davyd and Lincoln 2005, 211) Where else, except outside of academia and the professional world do problems only occur in one specialized field without spilling over into other areas and disciplines? It is necessary to move from one discipline to another in order to solve current social problems.

Even in the social sciences the idea of research in the field of economy, sociology, and political science is one that considers it necessary to sever oneself from the study in order for the knowledge gained to be valid. This is unfortunate as the knowledge gained by immersing oneself into the study can lead to valuable forms of interpretations gained during the study.

Another text that I am using in order to gain a further understanding of this methodology is called *The Ethnographic I* by Carolyn Ellis (2004). The cover is a bit freaky but what's inside is gold. Flipping through the first pages I find an explanation as to why my method is not common. First of all, subjective opinions and experiences are not welcomed in academic research. This has been true all through my schooling, I even remember my history teacher stating with a hint of animosity that, "I do not want or care about your opinion. I only care to

hear what the facts are." So, the idea that anything of worth can come from the researcher's own experience is disregarded by the research world before one even begins writing.

Another problem Ellis addresses is the lack of interest in qualitative research without any connection to quantitative research in the realm of non-social sciences. Methods that hold reserve in the academic worlds are ones such as life history, personal files or documents, interviews, etc. (Ellis, 2004).This sort of data is considered valid by the scientific community and connects the qualitative to the quantitative allowing for a sort comfort in how the knowledge that has been gathered is represented. These perspectives clash with autoethnography, a method that is primarily based on the researcher's subjective opinions, observations, and interpretation of the data. When an autoethnographic report is written, it is written in order to bring the readers own stories forward so that they may be able to connect to what's being said by the author. Another point stated in Ellis's book comes from a paper she'd been handed in 1975 in her qualitative research class. The paper sums up the traditional science perspective on gathering data all quite nicely, "'Ideally one's field notes should be such than an independent reader could take them and arrive at the same inferences and explanations as oneself…While we may not be able to fully reach this ideal, a person who cannot keep adequate field notes should reconsider his choice of doing fieldwork.'" (Ellis, 2004, 16) This advice encourages the researcher to completely disconnect from the topic and the society, group, individual, corporation, plant, etc. that is being studied. Breaking out of this mould that has been in place for longer than I've been alive may not always be readily met with enthusiasm and acceptance, as with most concepts that break away from the norm.

1.4.1 Just a little more info…
When the actual word "autoethnography" is stripped down to its root words it's possible to identify its meaning: *auto* meaning self and *ethno* meaning culture. This, as aforementioned requires the researcher to make sure there is a balance between personal stories told and

broader cultural references. Ellis writes, "Back and forth autoethnographers' gaze: First they look through and ethnographic wide angle lens, focusing outward on social and cultural aspects of their personal experience; then, they look inward exposing a vulnerable self that is moved by and may move through, refract, and resist cultural interpretations. As they zoom backward and forward, inward and outward, distinctions between the personal and cultural become blurred, sometimes beyond recognition." (Ellis 2004, 37) As I attempt to write my own experiences and connect them to a wider cultural form I will be attempting to do this so as not to lose myself in either the personal narratives nor in normative cultural interpretations.

1.5 Why this methodology?

Flipping through the pages of Carolyn Ellis' (2004) book I try to find ideas for what I may have missed in my first attempt to write my methodology section. Right there, near the beginning of the book is a chapter called "The Call of Autoethnographic Stories" and as I skim through I begin to realize that I hadn't actually written down a concrete reason as to why I had chosen this methodology.

Originally, it had been proposed to me by my advisor as I had had in mind a more traditional research paper. In the beginning I had no idea what I'd gotten myself into and really questioned the method as I was unsure of how my story could really be considered as a part of the research. Although I had my doubts it seemed interesting enough to continue with so I ordered *Autoethnography as Method* and began to read it while I was still in Manchester. As noted before the book didn't help much, at least not in the beginning.

After countless meetings, articles, and constant returns to my go-to books I managed to grasp a better idea of what I was doing. Traditional Ecological Knowledge is different from scientific ecological knowledge for numerous reasons but the first and most distinctive is because it's qualitative rather than quantitative. Other reasons include the fact that TEK holds

an intuitive component, is spiritual, bases its data gathering on the resource users, and is holistic. This methodology is also clearly based on qualitative research that uses intuitive components, empirical observations, and the data is gathered and based through the researchers own experiences. All of these elements are similar to that of how TEK is gathered and used allowing for the methodology and its objective to be complimentary.

1.6 Digging up the past to get to the present

Now, the problem is really in trying to explain why I've decided to take this path in order to complete my research project. As a part of the journaling process I have had to often try to figure out why I wanted to investigate this issue in the first place. I needed to figure out what I was doing, why I was thinking what I was thinking, and what were my actions telling me about where I was and how I got there- a lot of "what's going on here?" questioning.

Autoethnography digs into the roots of a person's experiences (whether past or present) and the cover of *Ethnographic I* gives a perfect illustration of this concept. An oil painting of an almost nude woman with her back facing a mirror; half of her body has been swept way- melding the colours- as if the artist wanted to give an image as if half the person is missing or can't be seen. Here's how I start out, a part of me is known and a part of me isn't. This part of me that isn't well known is the part that I need to explore in order to answer my first question of 'how can I move from an analytical way of thinking to a holistic way of knowing'. Trying to find the answer to this brings me back into experiences that have shaped the way I think today. In the beginning of my research project I ran into the problem of trying to explain my thesis without having people burst out into laughter or look at me like I should be wearing a nice jacket in a padded cell. When I ran into this problem the question of 'why do I think this is ridiculous and why do they think this way too' popped up. So I begin to try to find the incongruity between the two forms of knowing I was attempting to work with. This then led

me far back into my own past and my constant struggle between what was a social norm and what I sometimes believed in that challenged the social norm (which tended to lead me into bundles of trouble). This is where I found the answer to the lurking question: why autoethnography? It is fundamental for me to reach back into my own experiences in order to understand where the missing link between one way of thinking and another could be, and where the detachment occurred from the environment. This is what the analysis section would provide for me once I would begin to review the journal that I have been keeping

In the 1950s the concept of the Johari window was created by Joseph Luft and Harry Ingram and is a, "simple and useful tool for understanding and training self-awareness, personal development, improving communications, interpersonal relationships, group dynamics, and inter-group relationships." (Chapman 2003). This "window" is used when a person attempts to discover more about themselves through a disclosure/feedback model. The person chooses six words that they feel describes themselves out of a list of fifty and the four quadrants of the window hold the self: known/unknown and others: known/unknown. As feedback comes from the "others" that parts of the "self" that a person was not aware of begin to show. This allows a person to know the parts of them that until that moment they may have been unaware of. Autoethnography requires much of the same knowing and allows a person to discover those different aspects that may have been hidden from view until then.

throughout the course of the research project. Finding and understanding the social norms is a critical part for my study as without them I would not be able to understand what it is that stops my ability to connect with nature on a holistic level.

Finding a balance between what I was willing to share and what I'd written to be relevant was the next challenge.

1.7 Pitfalls

"An autoethnographic study is supposed to be evocative. It's supposed to move the reader, almost scream at them to wake up. It's not supposed to be pretty, it's supposed to grasp the

reader, pull them in, and not let them go until they finish reading. The conclusion they draw is their own."

Now sitting in the office of one of my committee members, Lee, I begin to feel the pressure of what I'm supposed to accomplish in the few short months I have as she explains to me what I should be aiming to accomplish. "That's a lot of things that I'm supposed to do. How am I supposed to do that?"

"You just tell your story."

Autoethnography is supposed to be reader-friendly. Since autoethnographies can be written on almost any subject there is no limitation to writing styles on how one can get their point across. This is what Lee was explaining to me, what needs to happen. I need to tell a story that was going to do more than just state facts and analyse them.

Reviewing the notes I've made while sitting in the office provided to me by the university I come across an important side note regarding how I might choose to write my journal. Just because I'm writing about myself doesn't mean that's the focus and there are a few pitfalls that I should be avoiding when writing.

The first potential pitfall is similar to the first point I noted in Chang's (2008) book concerning the definition of culture and the researcher in relation to self and others. This is in regards to the working on the individual level of culture, rather than with society as a whole as the context in which the data will be gathered it will be personal and involve one-on-one interaction with the researcher and unit of study rather than the public. I was talking to a plant so it was a bit difficult to try and broaden my study to the wider public, at least during the journaling process.

The second pitfall involves the possibility of getting carried away with the storytelling aspect of the research. The risk is that the researcher begins to focus on telling a story without making the cultural connection to the research clear. As the point of writing the journal is to

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find and connect the cultural and personal experience a story cannot simply just be told as it would hold no relevance to the context in which it is being made (Chang 2008). However, I ran into the problem of not knowing what to write about on more than one occasion. This led to somewhat meaningless and shallow attempts of writing with the occasional rant thrown into the mix which took away my ability to connect my writing to a cultural context. It was after some time that I was able to decide what sort of stories I should be aiming to write in order to gather a more helpful form of data.

The third potential pitfall is encountered when the researcher relies heavily upon personal memories, and is also known as retrospective recording (Chang 2008). This involves writing information that has not been recorded in-situ but rather removed from the site it has occurred and recorded at a later date. Memories are important for autoethnographic writing as this is where many of the perspectives that the researcher has are initially from. Understanding why one reacts or acts the way they do to a certain situation can tell much about their attitudes, belief systems, upbringing, etc. The problem is that memories change over time and certain bits can become a bit cloudy or altered. This can call into question the validity of the research. Issues of validity can be avoided by using external data in relation to internal so as to be complimentary. In this study, such issues were addressed easily as themes that I found and that will be used as the main piece of my research findings were found throughout the three month research period when the journal was being written.

The fourth problem is in regards to ethical issues (Chang 2008). Just because the project is based on personal experiences does not mean that getting permission for writing about them is not required. This is especially true when talking about other people's stories or personal lives that are directly connected to that of the researcher. It's easy to claim full authorship as an autoethnographer but guidelines for ethical research still have to be followed. In the end, with such a short time period and because of the nature of the study I decided to avoid many of the

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problems that could occur because of ethical issues. This was done by keeping people unidentifiable and different locations vague so as to keep peoples identities anonymous and confidential.

The last pitfall comes from the very definition of what autoethnography is. With many different types of self-narratives it's important to distinguish what it is that the researcher is trying to accomplish and exactly what they define autoethnography to be in their work (Chang 2008). The forms of data in my own autoethnograpahy come from the journal I wrote for three months. The topics were wide and varied from trying to find a job, to the different places I've lived, to something as simple as the weather. These journals provide raw data which I analysed to identify key social norms that prevented me from moving towards a holistic way of thinking. Autoethnography, for myself will use these themes and stories to show how I was influenced by different cultural norms and then data from different sources will be used as support in regards to how they exist in the public sphere. Being able to identify my own hurdles will provide that essential piece for understanding the cultural connection in social norms and how they've influenced my way of thinking.

1.8 Attempting to Connect: The Finding of a Theme

"So what exactly are you researching?"

I swear that this topic of conversation is getting to be just as common as talking about the weather. Still, I'm up for the challenge to convince people that what I'm doing isn't crazy.

"Well, basically I'm trying to move from an analytical perspective- you know a "western" sort of worldview towards nature- towards a more holistic way of knowing." I only receive blank stares at this statement. "Okay," I try again, "By connecting with Jesús (the plant) I'm trying to understand *why* and more importantly *how* it is possible to think within a different knowledge system. Through my writing I'm trying to find dominant cultural narratives that

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make up social norms. I then intend to look at these in the context of Traditional Ecological Knowledge."

Nods of approval go around from the people sitting in the lounge and one lady comments, "Ah, so that's what you're doing. I was wondering what was going on with the plant and the paint and all that stuff on your desk."

I can't help but give a sheepish grin- I know what I'm doing must appear to be strange, even I still think it is but I'm enjoying it so it's not all bad. "Yeah, well that's a part of it too. I'm using the natural history journal to write about my experiences but I'm using the paint and art supplies as more of an intuitive method. It's cause, you know, a plant doesn't exactly form coherent sentences to say what it wants to say. It's got other ways of speaking so I'm just trying to hear it in other ways."

A few nods, some confused looks, and then one of the Ukrainian girls asks. "Have you tried meditating when you're with it?"

"I've tried but I have a very hard time clearing my mind or shutting it off. I did it in yoga once and I was thinking of trying it again in the office, It might help. Honestly, I'm not sure if what I'm doing is right in the sense of connecting right now. I have a feeling Jesús has a lot to say, I'm just missing it because I can't pay attention for long enough to actually get at what's going on."

Shutting off and removing myself from my thoughts in this part of my research is important to really understand what's happening with the non-human being I am attempting to connect with. I was given a few steps that I could follow in order to achieve this by a PhD student I was working with. Some were perhaps through her own experiences ans some through Pam Montgomery's book, *Plant Spirit Healing (*2008):

1) Relax – get out of head: This is considered the most important step and sadly the hardest one I have getting by. With so many things going on, getting the mind to take a

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moment and breathe (metaphorically speaking) is more of a challenge then it may
seem.

2) Heart coherence - this can be interchangeable with the next step and involves focusing
   your energy on becoming stable or calm in such a way that allows you to interact with
   the plant

3) Focusing - this is when you have to focus on the intent to have a coherent
   communication with the plant

   - If there is a felt sense back off and go back to see if it's still really there

   - Describe the feeling (e.g. smooth as silk)

   - Check with the plant to see if the description is precise and ask for the meaning
     behind the feeling

   - These steps should allow you to access the plant at any time

4) The last step is to thank the plant for sharing as we're dealing with the plant as if it
   was a being and not just an object

Unfortunately, I found the idea of "shutting off" to be a very difficult concept and was rarely
able to stop any thoughts from crowding my mind. As I began to analyse the data I'd written I
found this ability to remove myself from everyday concerns to be one reason I was being
deterred from returning to the restored ecological consciousness I was aiming for. With so
many other things going on, especially trying to find a job after graduation, I couldn't justify
stopping myself from thinking about other aspects of my life or taking the time to just sit and
what felt like, do nothing. This is one of the important hurdles in attempting to view nature
holistically and will be discussed in detail further later in the thesis.

1.9 Questioning the writing and the Ending

I'm staring at a few pages of my journal that I've written so far and that nagging feeling that I haven't really written anything of importance causes a slight panic to rise. I'd brought up this worry before to my advisor and to my committee member who'd both read through pieces that I'd sent them. I just couldn't see how what I was writing was going to help. I understood that I was supposed to be evocative and at the same time culturally relevant but so far my writing just felt like a bland and shallow piece of work.

"There's just nothing there, nothing that I can see as being helpful in any way." Sitting in Lee's office I bring up this concern yet again.

She takes a moment before asking me about something I'd written in a previous journal I'd sent out only a couple days ago. "Well, what about your grandmother's garden? You wrote about how you disliked it so much because of the smell. Maybe that's a part of the reason for this disconnect from plants that you have."

The idea of being disconnected had popped out at me a few days before. I'd been trying to figure out why I was so reluctant to write on such a personal level as required for me to make this study and had come to the conclusion that I may just be too disconnected. Society today seemed to require a certain level of detachment, living in an age when so much information, so many images, ideas, and stories are thrown at us all at once. It was something I remember being aware of at a young age, the need to let a lot of what was handed to me to just bounce off, like bee-bee bullets off a Buick: *ping, ping, pingpingping*.

So, journaling had allowed me to realize another important point in my study.

I nod a few times before muttering, "Yeah, it's possible. I hadn't thought of that. I really hated that garden and the smell. I don't know what it was but I would recognize it today, even after all that time…so it's just things like that that make a difference, eh? Maybe it is a part of the reason."

Besides the fact that autoethnography should be evocative, cross cultural boundaries, and do everything else that's been stated over the past few pages in terms of its "scientific" value and its concept of validity, it has another job with the reader. Researchers are supposed tell the story in a way that will show, "bodily, cognitive, emotional, and spiritual experience…empathetic social science in which readers can keep in their minds and feel in their bodies the complexities of concrete moments of lived experience" (Ellis 2004, 30). This essentially means that while a clear statement of research must be made there still has to be the ability to move the reader. It is supposed to be accomplished through the journaling, but in my case this is a definite challenge. Before I started I was informed that my work will allow the reader to draw their own conclusions, an idea I was not happy about as normally a research project has a defining beginning and end. The concern I have stems mainly from the fact that it might be possible that the reader would not draw out their stories in the same way as mine were and would not allow the reader understand the main point of what I'm trying to bring across in project.

"I'm not sure I like the idea of allowing the reader to draw their own conclusion. I understand the need to read almost like a novel so as to engage the reader but there has to be some sort of application to what I'm doing. Just saying that this can be used in environmental decision making is too broad. I need to find something that really shows that 'hey, it's actually useful because of this reason'. I need some closure at the end otherwise it's going to feel incomplete to me, like I did all this work and I have no solid conclusion."

This was a huge concern for me which is why I was raising it with my advisor. I didn't see how the methodology, with wanting to allow the reader to make its own conclusion, could allow me to make a statement that would give the entire project some validity. This was probably the more quantitative side of me coming out, wanting to make or draw some conclusion as one would from any sort of project or report. Yet, I understand how the

methodology compliments the work I am doing, they were complimentary in order to focus on both the holistic side and the journey as has been mentioned earlier in the methodology.

"Just don't try to generalize. You can draw a conclusion but autoethnography isn't used for making grand generalizations about the process."

Okay, that means I need specifics. "I need to find something that I can apply this towards. Something like a discussion so it can be seen that this work is valuable in a practical application outside of academics. I need it to be practical for environmental work as well." I'd been toying with the idea of applying it to conservation and natural resource management and how it relates to Traditional Ecological Knowledge. I was still trying to figure out how I could put it all into context and getting that answer would involve some more contemporary forms of research: library time!

1a.1 Debating and Altering the Methodology

I had spent three months writing about my different experiences, thoughts, feelings, and past events and after these three months later I decided not to use most of the stories. Autoethnography is supposed to be personal, evocative, and written without any boundaries. This became problematic for me.

First off, I'm a private person- something that I unfortunately did not realize until I started writing my journal. I tried to be evocative but those pieces were more then I was willing to share. I don't like telling personal aspects of my life – it's really uncomfortable. Those who can tell their story and leave it for the world to see are braver than they seem. It's not easy to leave yourself out there for people to judge and allow them to come to their own conclusions about you and your experiences. For this reason, I began to avoid anything I thought to be too personal or that might involve other people that could have their stories recognized as well.

Second, if I am left to my own whims my writing can really end up saying absolutely nothing. I kept wondering about specific topics to write about and how to keep them in check. I kept trying to find certain themes or topics or something to guide my writing otherwise it felt like I was writing a diary. Questioning what I was supposed to write is not an effective way to write in autoethnography as I'm just supposed to write.

Also, after countless meetings and three months of work to gather data I still could not see how this methodology would work in the practical sense I had hoped it would. It was too abstract for me but too far along to be discarded completely; the objective of telling a story about my journey was no longer a viable option. My refusal to use the stories I'd written and my constant frustration that it wasn't dealing enough with the practical applications of TEK and its integration into the current environmental framework had me questioning how this would relate to what I wanted to focus on.

Along with this reasoning is also the lack of time to complete the kind of study that would involve creating a sort of guideline towards understanding the holistic view provided by TEK. Three months of research to attempt to understanding something I know very little about in relation to native spiritual beliefs and traditional cultures, having not lived among them, studied them, or even spoken to anyone who could provide me with some understanding that went beyond literature had me guessing wildly as to what I was doing. As a non-Native researcher stepping into the grounds of a spiritual belief system of a culture I know very little about it is nerve-wracking. So many problems that arise from non-Natives studying TEK is the desire to categorize and label different concepts, exactly what I felt would have occurred had I attempted to try to explain the difficulties of moving and attempting to understand that knowledge system.

For these reasons I turned my focus towards the implications of TEK in today's environmental framework and began to strengthen and lengthen this this piece. The practical application

towards conservation, natural resource management, development, and the understanding of environmental changes that TEK could provide are highly beneficial when dealing with today's environmental problems.

However, even though I came to the decision to move away from certain aspects of the methodology I decided to keep elements as the journals did provide me with the basic themes I would be using to speak about the ecological (and a little of the spiritual) implications of TEK.

1a.2 Analysis

The journals would remain my primary data, and I would analyse them to find the dominant cultural narratives I needed in order to guide this project. The narratives are powerful in their ability to shape how we think and act and once I would identify them they would then guide my writing as I start creating the drafts that would help answer my research question of first, what stops me from understanding this other way of knowing; and two how can these two knowledge systems be integrated in practical situations?

The next step, after all the journaling was to analyse the data and then interpret the data. The analysis perhaps ought to be difficult to do, at least Chang's book gave me that general impression, but I found that to be quite the contrary. It took only a once-over of the different forms of analysis provided by Chang's book to see which methods of analysis would be most appropriate in order to pick out my themes.

Analysis and interpretation are not synonymous with each other. Analysis involves the identification of essential features, in essence how things work (Chang 2008). Interpretation involves finding the cultural meaning beyond the data (Chang 2008), but this will be discussed in further detail later on. The analysis is where my writing would be seen to cross from that personal area to the cultural one. It involves going over the writing that an

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autoethnographer has written and dissecting it or coding it- similar to what's done in most qualitative interview analysis processes –and organizing it into a broader themes or issues.

The next step in analysis is viewing the data on a "microscopic" level, picking out important details, small points in time, all the while remembering the broader context. Some of the personal narratives that have been added to this thesis are like that: blips in time that add to the overall context of my writing.

The last step in the analysis process involves considering, "the different disciplinary orientation stemming from science and art." (Chang 2008, 129) It is important to use a systematic approach to collect and analyse data, which is where the scientific model of finding patterns, correlating data, etc. comes in so it's not just based on personal feelings and scattered thought. There has to be some form of analysis, some sort of system that allows the data found to be categorized and put into that cultural context. The artistic side deals with the personal, subjective part. The other factor that leads autoethnography to be "non-scientific" is what allows it to be holistic in its approach, a key factor for my project.

So, with these steps in mind I began to look over and categorize different points in my journal. Chang gives a few strategies for analysis which I found helpful in deciding what I was looking for so I could pick out my themes. Although she has given ten in all I chose two different forms to focus on:

1) Search for recurring topics: this was possibly the easiest one to pick out. "Topics refer to specific subjects pertaining to people, places, ideas, or activities...when a topic appears frequently in the data, it is likely to signify importance in your life." (Chang 2008, 132). This held true for themes such as priorities where I struggled between writing my thesis and other aspects of my life that were occurring at the same moment such as job searching.

2) Look for cultural themes: This is possibly the most influential part of my writing on my research topic as the problems I ran into stemmed from my cultural upbringing in many cases. Identifying themes such as seeing is believing, the individual, modern nomad, and others are all a part of a cultural theme that can be, "declared or implied, and usually controlling behaviour or stimulating activity, which is tactically approved or openly promoted in society." (Chang 2008, 132)

These different strategies allowed me to find the dominant cultural narratives that I would be using as the main body of my thesis. A description of all ten categories can be found in Appendix A. These themes are both personal but cultural as well and even though what I've picked out in regards to dominant cultural narratives is subjective I am a product of the society I've grown up in and have been influenced by the norms found common in the Western world.. This is where I had to now begin to interpret the data I'd picked out as my themes and put them into a cultural context.

1a.3 Interpretation

Interpretation of my results came next and involved making sense of my analysis. Tying it all together, finding what it meant to me and what I would do with the different cultural narratives I find. As I am the generator, collector, and interpreter of the data there is no distinction between the outsider (myself) and the insider (the researched) as I am familiar with, "the original context of the data and the context of autoethnographic interpretation in writing." (Chang 2008, 128)

What follows now is the interpretation of the data I've collected over the period of three months I spent journaling my experiences surrounding the attempt to move from one knowledge system to another. The context is larger than just me though, as I integrate the

different ecological and some spiritual concepts of TEK and different environmental challenges that are faced through these cultural narratives. The case studies and examples are what bring out the cultural differences between these two different systems and show the clearly different ways the environment can be understood and managed.

Usually, when life gets a bit too hectic for me I just try to escape it for a while. If there's a park or some green area where I am then I go there and attempt to clear my thoughts with a walk or jog. It's a well needed break most of the time and allows me to come back to any problem I might be having with a fresh perspective.

Sometimes I wonder if that's what the world needs: to step back for a moment, take a breather in some natural setting, and come back to deal with the problem…one problem at a time. It seems like we're trying to do too much at once and we're losing track of what's happening where. It seems like we're living in a time of history that's struck by such a bombardment of PROBLEMS all the time. It just seems necessary to prioritize our priorities now- just like I had to.

2. Priorities

National Parks and Protected Areas

When I began to question why is there such a lack of connection with nature today and why does it seem like such a foreign concept to be a part of it, live with it, learn with and through it my attention turned toward the concepts of protected areas. These are areas that are considered to be as close to pristine wilderness as one can get in many regions of the world. My desire to work as a park warden is because of my desire to be tied to this wilderness that cannot be found anywhere else. The removal from people and modern society is such a welcomed feeling that I can't help but hope that it never changes and this this beautiful place goes untouched.

> March 1, 1872 Yellowstone National Park is signed into being by the US National Congress and President Ulysses S. Grant. This is not only the first park in the USA but the first official park worldwide to be recognized. One of the more enthusiastic advocates for the park, Ferdinand Hayden was worried that this place of pristine beauty would suffer the same fate as Niagara Falls if it were not protected. Hayden and his party were aware that soon places like Yellowstone would become rarer with time. His concern was over the people and their eagerness to, "make merchandise of these beautiful specimens." Hayden stated in his report that, "the vandals who are now waiting to enter into this wonder-land, will in a single season despoil, beyond recovery, these remarkable curiosities, which have requited all the cunning skill of nature thousands of years to prepare," (Bullock 2011, 7) if the bill failed to become law. (Bullock 2011)

My desires to work as park warden would have never been possible as national parks and protected areas are a fairly recent concept, brought into being less than 200 years ago. To me they say something very clear about the cost of progress: the rapid and sudden disappearance of nature has us feeling the need to protect it from ourselves. Hayden already worried about this and advocated for it strongly in the case of preserving Yellowstone National Park. The history of industry and resource use was already making its mark.

Today, there are two main types of conservation. One type is based on utilitarianism which views nature as a commodity; the second is based on complete preservation where humanity has complete hands off approach with no interference from the human species (Berkes 2012). Generally, modern conservation practices do not fall into either category but rather bridges both with a main focus on gaining high levels of biodiversity.

Since the focus is on *biodiversity* conservation a question in relation to TEK and conservation is if their agendas are really consistent with it. The expectation now is for groups of indigenous people to know how to protect *all* biodiversity whereas in the past conservation occurred but so did alterations of the landscape so as to provide a form of living. The fire-drive methods of our hunter-gatherer ancestors are hypothesized to have created the world's great grasslands (White 1974) and caused the extinction of many animals from the Pleistocene era. Not all the biodiversity was protected but rather "acceptable" levels were maintained. Today, many of these indigenous groups strive to protect the land from large-scale destruction (ex. damns, open pit mines, etc.) but are also becoming linked to the market economy that have changed their practices with the land such as commercial hunting, small-scale cattle ranching, etc. (Berkes 2012).

This view on Indigenous people's attitude towards conservation does not fall under what dominant society views as important. TEK promotes a combination of the two ideas, allowing for resident communities to continue their traditional way of life in protected areas. This allows for their lifestyle to be protected while the additional benefit of their knowledge can be used for conservation education and practice (Inglis 1993). In the case of conservation, the bringing of two forms of knowledge together can be boiled down to one question: are traditional people natural conservationists or not? (Berkes 2012). There is a clear connection between biological and cultural diversity (Toledo undated) and it is possible that there is a correlation between high levels of biodiversity and settlements of indigenous people, however

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the exact relation is not completely clear (Berkes 2012). Many scholars believe there is at least a causal relationship between the two due to techniques and lifestyle used by traditional cultures in their relation to land. However, the reasons for this possible connection are still debatable as is whether they are naturally conservationists or not. One side, the Exotic Other, believes they are; the other side, Intruding Wastrel, that they are not.

The Exotic Other is similar to the concept of the "noble savage". It is the Romanization of traditional indigenous cultures and their connection to land. In this theory, one that is forever viewed be Western environmentalists, these people lived "in balance" with nature and are seemingly incapable of doing any wrong (Berkes 2012). This study is loosely based off this idea, the belief that traditional societies are able to view the world differently and are more in tune with nature.

The view of the Intruding Wastrel myth views primitive people as, "ignorant, superstitious, careless, and backwards." (Berkes 2012, 240). Instead of seeing indigenous populations as being in-tune it rather views them as being biological populations that were, "limited by their resources, at the mercy of natural forces and supernatural beliefs, and certainly not as organized communities with their own knowledge-practice-belief complex to adapt to their environment." (Berkes 2012, 240). This theory debunks that of the "noble savage" by clearly stating that there is no proof of conservation practices by native peoples but rather plenty of evidence showing a lack of conservation practices (Hames 2007).

In much of more Euro-centric societies there is a view towards nature as something that needs to be preserved and left as far away from development as possible in order to promote biodiversity. When TEK does not promote this mainstream idea it becomes diminished and discarded. This has become a large part of the problem when dealing with TEK through non-native researchers (McGregor 2008). The knowledge that traditional cultures look to live with

the land and become a part of it, seeing everything as "alive" with equal rights to life falls face first in the eyes of conservation practices.

2.1 Disconnect

Historically, most of earth's population was spread out in rural areas due to the demands based on survival and a need to provide only for oneself or a community on a small scale (Sale 2011). However, the UN estimated that in 2008 over half of the world's population will be living in urban centres, Asia and Africa leading the race at this (UN News Centre 2008) and by 2030 this number will grow to 5 billion (UNFPA 2008). Due to the anthropocentric view much of humanity holds there is disconnect from the land by the simple act of physically removing oneself from it.

This removal from the physical land causes a chain reaction towards a type of psychological separation as well (Pilgrim 2010). Heeson Bai (2009) explains this as humanity's inability to perceive and feel the intrinsic worth of others due to a type of psychic numbing. With much of the focus in today's modern society on physical value little attention is paid to the actual whole worth. Having dubbed the destructive force of this kind of numbing to be "ecocide", Bai argues that if this attitude would be recognized it could become a powerful tool in understanding humanity's relation to the land.

However, as much as I understand this lack of relation to the land I do not disagree with modern methods of removing areas away from development. Today's environmental problems have been recognized but development is still occurring and land is being used. The spiritual understanding that the land is sacred falls on deaf ears to a society that enjoys having protected areas feel protected and wild while there is a place to return to that provides all the comforts of daily life.

So, is it possible to integrate the two ways of viewing conservation? Which side should hold weight in the argument of conservation? The removal of people away from the land in an

attempt to conserve it moves society further away from the possibility of connecting to it and moving towards a holistic way of knowing. The physical disembodiment of people from the land does not allow for a focus on the relations that are needed in order to understand the connection between people, knowledge, and all of creation. Once TEK is attempted to be integrated into science in this case it becomes a commodity and trivialized (McGregor 2008). The knowledge gained from working as a part of the land is far more substantial when working as a part of it, having it as a way of life, rather than as a place where knowledge can simply be gained from.

I like the idea of wilderness. Perhaps, it is a western concept because the term only exists when people see themselves as separate from the environment, a seemingly appropriate term for a society now so removed from direct contact with nature. I understand that it's not how indigenous cultures, rural societies, and many other cultures view nature but I have a hard time really seeing National Parks, biosphere reserves, and other forms of protected areas as a necessarily bad thing. It seems perhaps a bit misguided because it seems to fools us into thinking that if we protect more and more places we'll really be alright but it's on the right track. It's at least acknowledging the fact that we have less and less of that wilderness. The first step is admitting that we have a problem, and we know we do, so it just seems like a natural reaction, almost like precautionary principle to perhaps save what we can and as much of it because until we really do something about our problem that land needs to be hands off. All in all it seems odd that only 147 years ago the first National Park came into being. Was it really only so short of a time ago that people really began to worry about the rapid deterioration of their natural surroundings?

3. Valuation

One day in 1969 the world shrunk. The first image of our planet from the moon opened our eyes; we were living on this small planet dubbed the "Blue Marble", minding its own business and shimmering against the endless void of space. It did something to people; it made us realize just how unique our home is. This is it, this is all.

> "The word "ecology" means the study of the relation between organisms and their environment. When you pull apart the word it becomes "oikos" (house, about the house) and "logos" (the word, reckoning, thought). "Thus, at the heart of the ecological sciences is housekeeping; keep your house clean, love it, tend it serve it, care for it- your house, your home."" (Hull 1993, 120)

It is hard to care about a piece of land half-way across the world that a person has no physical or psychological connection to. It seems as if there is no real reason to care about the fact that only 10% of Madagascar's forests are still in-tact (WWF undated) or that the amazon is slowly disappearing or being flooded in the name of progress.

The concept of the world's system working as a whole is understood by science in the physical sense, not the spiritual, so when a physical act such as deforestation, desertification, or mining happens to the Earth it is hardly felt by most of modern society. The value is not placed on the spiritual worth of the resource being extracted but rather on the physical properties and products it can provide.

Assumptions about how many people the world could support have estimates that range from only 1.5 billion (a number that has been exceeded) to around a trillion (Moran 2006). These estimates are based off the assumption about the world's patterns of consumptions. At our current rate of our population we're consuming around 1.4 of the Earth's resources per year (National Geographic 2009).

Nothing is free, not even those samples at the grocery store. I admit that I enjoy free samples-everything's better when it's free- especially when it's food and you're a student.

If it is a material good then it's 100% guaranteed that at some point or another, energy was at in order to produce it (Moran 2006). Most people are not producing their own food but are relying on trade to produce the diversity in our diets we now seek. This is a concept that only came into being about 2500 years ago (Anderson 2010). Agriculture came into being about 11 000 years ago so it is a fairly new concept in the way nutrition can be obtained (Anderson 2010). This ability to utilize resources from a different area than the one in which a person lives and not having to be aware of the consequences that certain acts towards the environment cause is known as living a "biosphere" lifestyle.

The rapid movement over the past couple centuries has caused a transition from being dependant on our immediate ecosystems to dependency on other, foreign ecosystems. This has given humanity an illusion of "untouched" nature, wilderness, and paradise existing somewhere else. This form of thinking, similar to that spoken of previously about protected areas, allow for denial towards the destructive intensity of today's practices to occur among the average citizen.

Pristine areas hardly exist anymore; the Maya regions of Mexico and Central America look to have areas of complete wilderness but studies have shown these to be old growth forests that came after intense agricultural practices (Moran 2006). What might be considered to be pristine areas have hardly gone untouched by humankind. Living as "biospehere" people though does not require viewing the results of extraction, monoculture, feedlots, deforestation, overfishing, etc. in one's own backyard making it difficult to believe otherwise.

My own travels haven't taken away this idea from me, everywhere I go I see patches of nature and whether it is the product of humans or not rarely matters. It can give the sense that there is plenty of wilderness everywhere.

This lack of understanding has caused for the evaluation of what can be provided by nature to been grossly underestimated. TEK recognizes that beyond that the gaining of physical worth there is much knowledge that can be gained through working with non-human-entities. This form of understanding perpetuates that, "the process of learning, or of gaining new knowledge is focused around learning more about oneself in relation to the land, the spirits and all other relations." (Simpson 2001). This type of knowledge can lead to a further connection and understanding about today's environmental problems yet faces the problem of material value holding far more worth. This lack of understanding and mechanistic and rational worldviews is considered by Ramimundo Pannikar, to be the biggest forms of deterrence to ecological renewal (Bai 2009).

I find my value in my friends, where I am, and what I own, not in what I don't see and understand. If I can't understand and gain knowledge from nature as holistically as perhaps others can then why should I focus on it? As I reach the end of my journaling I realize that I'm nowhere near close enough to gain and understand the type of knowledge the TEK strives to share. In fact, as I continue to try to understand this other way I feel myself pushing against it and wanting to reach back to the safety of what I understand. I understand material worth; I understand how to analyse, how to test, and how to interpret results from a data set. I don't understand this worth of knowledge that can be gained by connecting with the plant on my desk, Jesús.

3.1 Shadow Costs

> "At the time of his treaty with the European settlers in 1854, Chief Seattle of
>
> the Squamish tribe along the North Pacific coast is reported to have said that
>
> when the last animal will have perished, "'humans would die of loneliness'."
>
> *(Berry 2006, 33).*

What would it take to say the world we live in is invaluable? Because, really it is; it's a one-of-a-kind, unique, individual, planet with so much information about our cultures, history, lives, etc. and it's what gives us the gift of life.

Moran (1996) discusses the concept of shadow costs: what is the actual cost of what we take and make? If it is assumed that a McDonald burger is actually made out of beef, wheat, and the occasional onion how can it cost only one buck?

If nature is valued as something worthwhile only so long as something can be extracted from it to supply demands than a price tag on the Earth's natural resources is going to exist. Natural resource management attempts to help to manage our natural resources, but due to the considerable amount of resource extraction and the obvious decline in species abundance in many regions of the world, especially in that of fisheries, a stricter regime towards the use of natural resources is being demanded. As current practices are being questioned alternative approaches to natural resource management are being sought (Moran 2006).

Traditional Ecological Knowledge and natural resource management are two fields that can merge together. Much of the knowledge and many of the observations that are provided by TEK concern resource management or at least how to understand patterns that can help lead to sustainable consumption. Integrating knowledge that is flexible with local communities rather than that of larger bureaucratic management regimes allows for easier adaptation to changing condition (McGoodwin 2006). This process of using local knowledge is also seen to help capitalize on the natural processes that occur with populations such as fisheries, rather than complicating or opposing them (McGoodwin 2006). The introduction of larger corporations that use current large-scale modes of extraction also tend to weaken and destroy local institutions that had managed to keep at bay the "tragedy of the commons" phenomena. This destruction of livelihood then can cause a bitter reaction from the local institutes as they rather begin to promote overfishing in order to move the large companies away faster, once the stocks are depleted. (McGoodwin 2006).

Although local and Indigenous knowledge is viewed as particularly helpful in the case of resource management care has to be taken because the romantic notion of indigenous people can lead to the belief that they can solve all the problems. Butler (2006, 107) states that, "Placing the burden of sustainability and responsible resource management on the shoulders of Indigenous knowledge's dooms them to failure." She states that the impact that colonization had on the Indigenous people has to be recognized before so much promotion of their knowledge can be looked to as a solution to the current global crisis. TEK may be a partial solution or helpful alternative to better resource management but this ideal thinking about how people use to live in such harmony with the land has to stop. Traditional cultures have changed and with it a loss of knowledge has happened; recognizing that there are good and bad aspects to how they worked with the land would allow for clearer and more productive solutions in regards to resource management to happen.

However, active members of TEK argue much of the knowledge that is held quite often becomes categorized and put through a system that takes away its fundamental concepts. Words such as "resource" and "management" don't exist in many traditional cultures, such as with the indigenous people of North America but are still used to describe concepts brought for in TEK. Simpson (2001) argues that outside researchers are only interested in knowledge that parallels to theirs, rather than all forms of knowledge that can be provided through TEK. This appropriation of their knowledge has left many native communities unhappy with how their knowledge is being defined in a western framework with clear focus on the ecological component rather than the spiritual (Simpson 2001).

3.1.1Spirit

I see it. I understand now how it is when a non-Native attempts to understand the knowledge provided by TEK. I cling to my understanding of the environment and of ecology, I remove myself away from the spiritual component because it cannot be quantified, it cannot be labelled and understood as I understand many other concepts that I have studied.

The spiritual worth is lost in the face of modern science. Understanding this relationship to the Earth involves shutting down and allowing it to speak to you, through you, and if you let it you'll be able to understand the knowledge it is giving you.

Heeson Bai (2008) first introduced this concept through the author Thomas Berry and his concept of "collective autism", we have a deaf ear in which nature speaks to us but is incapable of being heard.

Although this concept may appear to be the product of only the past couple centuries Bai 2008) and Berry (2006) reach further back into the days of Aristotle and Descartes. Descartes separated the mind from the matter (Hesson 2008; Berry 2006) and this simple idea gave way to the belief that the mind, in its perfection is real value whereas matter or physical shape has worth based on utility. If nothing else on this planet holds a mind other than humans than all that can be gained from it is its utility. With the focus of so much of science being on utilization or the understanding of TEK only so long as it parallel's interest with what is considered important with todays environmental issues a grasp on what it can offer spiritually is lost.

3.2 Seeing is Believing

In my attempt to connect with a plant I had to try and get myself to believe that just because Jesús wasn't animated he still had a spirit and was able to provide knowledge and retain information. It's easier said than done. I like the notion that there's more than meets the eye in this world but a large part of me doesn't understand the need to believe in an "invisible world" or in things existing that we don't know about. It seems a bit unfortunate to me that some people are so caught up in what might exist out there that they completely miss the amazing world right in front of them.

Believing that everything has a soul or has as much of a right to life as we do seems alright.

I begin to detest this idea of the other worldly however, when it gets out of hand and people forget where reality begins and end. Using superstition and other worldly beings as excuses for why bad things happen is unfair: it's us, we're human, we're here, we have to take control of our actions and stop making excuses.

Really, we've created some of the strangest concepts about what's out there and what for?

[Storm: Tim Minchin 2009]

"Shakespeare said it first:
There are more things in heaven and earth
Than exist in your philosophy...
Science is just how we're trained to look at reality,
It doesn't explain love or spirituality.
How does science explain psychics?
Auras; the afterlife; the power of prayer?"
I don't mean to bore you

But there's no such thing as an aura!

Reading Auras is like reading minds

Or tea-leaves or star-signs or meridian lines

These people aren't plying a skill,

They're either lying or mentally ill.

Same goes for those who claim to hear God's demands

And Spiritual healers who think they've magic hands

…

Does the idea that there might be truth

Frighten you?

…Does the notion that there may not be a supernatural

So blow your hippy noodle

That you would rather just stand in the fog

Of your inability to Google?

Isn't this enough?

Just this world?

Just this beautiful, complex

Wonderfully unfathomable world?

How does it so fail to hold our attention

That we have to diminish it with the invention

Of cheap, man-made Myths and Monsters?

4. Time and Patience

> "We need to treat forest in forest time and not in people time. Nobody gets beyond 500 years and we are infatuated with our own blink of existence."
> -Bill McKay
> (Gagnon *et al.* 2009)

I went to a retreat one Saturday towards the end of April hoping and thinking that it was going to be a really good experience and that I would learn something conducive to my thesis in regards to trying connecting with nature. The flyer had advertised learning how to do so, so I was sorely disappointed when absolutely nothing of the sort happened. I just sat there in silence like the rest of us, in a rented out yoga room. The leaders of the retreat seemed a bit scattered and unsure of what they were doing and what they wanted us to do. There was some chanting, some praying, a break, then a peace pipe ceremony in which most of us couldn't take part in since we were women and the pipe was for men, and then lunch. I felt like I was going to go mad, I had so many other things I could've been doing at that point, this just demanded my attention but gave nothing back in return – that I could discern anyway.

If I did take away one thing from that retreat it's that if connecting with the earth involves doing almost next to nothing for hours upon hours then we're it's not going to happen. Life is busy in the modernized world and has been built with access to convenience and quick solutions.

Patience really is a virtue.

It's a linear world

The author of the book, *Dancing with a Ghost* (Ross 1992) brings into light a very different concept of time and humanity's perception of it. Instead of imagining one's life as linear, as something to work hard at in order to get more out of, and as a step forward in development he imagines time as revolving rather than evolving.

Much of today's society lives with eyes forward, the past only for a point of reference from whence humanity came- a brutal, barbaric society, so the dedication of people's lives is to create change from one day to the next (Ross 1992) and is lived with a liner, short-sighted worldview. This is not to say that humanity is only concerned with only the "here and now"

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but it rather means that much of the information that is being used in order to predict changes has been collected within the span of the last 100 years (and more often even less) without taking much into account of what has happened before in concern to environmental changes (Sale 2011).

Perhaps some of the knowledge provided by TEK is appropriated this way, due to non-natives lack of interest in spending the time it requires to learn the skills needed in order to understand. If a form of knowledge cannot be understood or categorized easily it can easily become widely rejected as witchcraft or sorcery (Morgan 1999) with little to no time spent attempting to understand it. This type of discarded knowledge can certainly include that of the type of spiritual belief that TEK demands in order to be fully understood for not just its ecological benefits.

Jesús is alive because Rona was smart enough to leave instructions attached to him. If it were up to asking and really connecting in order to understand the spirit of my plant my project would not have lasted very long. This is in part because of my own impatience but also because much of the advice I received on how to connect with my plant involved the word: patience and/or time. In *The Secret Teaching of Plants*, Stephen Harrod Buhner (2004) he states that there are a couple ways to get to know a plant and, "…one is to spend a great deal of time with the plants you are drawn to, to greet them with the seasons, see them in all manner of dress, come to know their moods and relations, and let your relationship grow with the years and close association." (Buhner 2004, 165)

4.1 Resources

Similar to my short attention span, much of the resource management framework that has been put into place has been done with only a very short period of time accounted for; current practices are made to meet today's demands rather than for the long-term. However Traditional Ecological Knowledge requires time to work, time to make a difference; traditional medicine requires dosages, preparation, and time in order to work (Gagnon and Glynn 2009). It is societies such as the Indigenous cultures that prefer to communicate

through oral history rather than written history that have been keeping records and observations of change for millennia. Modern society does hold records as well but it is a different type of record- it covers grand scales and large patters of Earth's history. "TK [Traditional Knowledge] is constructed as the opposite of mainstream management structures, which are relatively new, externally formulated, and rarely site specific." (Butler 2006, 109). TEK involves local knowledge about local changes and solutions are tailored to that specific region. TEK can provide new knowledge for biological and ecological cases that are based off observations that have occurred over long periods of time and accumulated through trial-and-error (Inglis 1993). The pull towards using this type of knowledge opposed to the short-term outlooks of today management is the reaction that present policies and practices are facing.

4.2 Shifting Baselines

Why is it that today's models and stats created by some of the leading scientists in their field are failing to predict the actual trends occurring? As aforementioned, the data is short sighted and is also subject to *shifting baselines.* This is a term that was first introduced in 1995 by Daniel Pauly (Sale 2011) and is the idea that scientists do not choose appropriate reference points to base their evaluation off of. Pauly coined this term in reference to fishery stock and the lack of ability to notice the decline in stock until it was too late (Sale 2011). In his paper *On Baselines That Need Shifting* (2011) he remarks that the loss of knowledge of the past has possibly contributed to the easy acceptance of losses in biodiversity. He goes further to state that because scientists use their own memories of what they consider to be the proper state of the world when they start their careers, they discard the baselines of previous generations leading to what he has identified as "collective amnesia" (Pauly 2011). This continually affects the baseline margin as it shifts with each generation of study giving a distorted perception of change (Sale 2011).

This problem of shifting baselines does not only work for fishery stocks but also for the evaluation of environmental changes. Ecologists can be resistant to go back to older, less precise data that was gathered without all the modern techniques available today. Although this problem of shifting baselines has become widely recognized the resistance to change is strong. Sale (2011) suggests that it is not out of spite or stubbornness, but rather because people aren't looking for long term changes simply because they do not expect them. It is each person's lifetime that the focus is on so short term events rather than long term trends are viewed and understood.

Traditional Ecological Knowledge can help with finding the long term trends that are missing but if western science rejects its own older collected data what chances does TEK have of being considered a legitimate source of data? As stated previously, if the knowledge that TEK provides is not easily understood or is not systematic and quantifiable than it is readily discarded. However, because TEK is based off of long-term observation over a small area it could be used locally if brought to the attention of local municipalities or communities in the face of environmental changes.

An example of where this localized usage of TEK could work is with the Indigenous people of Northern Canada who have long been shaped by their climate as it dictated many aspects of their lives from where to live, where to establish hunting grounds, to gathering food (Ogden 2002). The rapid changes occurring in Canada's north in regards to climate change have been noted. The Inuit people of northern Canada have a name for what they're seeing: *uggianaqtuq;* meaning to act in an unfamiliar/unpredicted way (Albrecht, 2010). The direct observations offered through TEK provide much knowledge into these changes and add an important dimension towards understanding climate change and can complement and enhance current scientific models (Ogden 2002). This detailed information can also allow for the long-term planning and more holistic perspective that is offered by Traditional Ecological

Knowledge. This move towards utilizing TEK locally is beneficial also against shifting baselines as the knowledge has been passed down through many generations, not just the most recent so the understanding of animal behaviour, ecological health, and relations can be seen from further back than current documentation provides.

5. Just keep Moving

(The Modern Nomad)

Over the course of the past five years I've been living on a temporary basis everywhere I went, I always knew that sooner or later I'd be leaving and living out of a bag or suitcase became commonplace. Now, I want to settle down. I mean, when I say settle down it's for a year or two, max. I know that by then I'm gonna get antsy and get that itch to go somewhere else. I've always wanted to go to Australia or New Zealand. South Africa seems like a pretty interesting place as well. Peru's got some amazing history, the rainforest of Brazil, the steak in Argentina, the penguins of Antarctica, the cultures of Japan and China, the Red Square of Moscow, the sands of Egypt, the ruins of Jordan, the volcanic landscape of Iceland, and the beauty of the Galapagos Islands, Germany, France, Zimbabwe, Israel, Mongolia, Saudi Arabia, South Korea, demilitarized zone of North Korea (just to say I've done it), Tibet, The Maldives, Mexico, and a road trip across the USA and Canada. I've got a lot of places left to go and see and experience.

The ability for people to move, relocate, and change their immediate environment is a very powerful tool. Humans are excellent at manipulating or reproducing their environment to reflect what they consider beautiful or to simply reflect what is familiar. Cultural landscape holds importance to people and although people should be adapting to the environment they rather try to get the environment to adapt to them (Adams2010). Needless to say, this is not a good idea. Building on a floodplain is never a good idea even if the area is pretty. Building a house in a fire prone forest is also a bad idea, even if it reminds you of home.

Nature is hardly going to care if you're insured or not.

5.1 Forced Displacement

Today's modern way of life is fairly new but has been developed over time. However, there are other societies that did not, societies that were all of a sudden plunged into the modern lifestyle. Life had once been a relay where they had lived side by side with their ancestors and had gone through many of the same motions as the people of the past and knew the future

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generations would face much of the same. Naturally, that relay of life became sacred as did the land it occurred on.

During the past century the Canadian government moved the aboriginal people around like it was a game of chess; some reasons were to prove the settlement of the North, some to take children and put them into residential school so as to assimilate them into western culture. This assimilation caused much physical, mental, and emotional stress but also spiritual as the Eurocentic values were forced upon them in the belief that the aboriginal people's culture was based on only savage superstition (CLFNA undated). The stress this caused on communities as they were removed from their ancestral lands and forced to assimilate into western culture (Pilgrim *et al.* 2010) was profound. This assimilation brought on a type of psychological erosion in regards to their intrinsic connection with the land as much of that deeper connection is not just physical but spiritual and emotional as well. This removal, no matter why or how it's done, can severely damage and destroy cultures that have been living in their immediate natural setting, also known as being "ecosystem people".

This is where the theory of "noble savage/fallen angel" holds the most strength. The belief that these people have very strong ties to land has been promoted continuously but the impact that colonization and the modern world has to be recognized. Incorporation of indigenous knowledge into today's resource management structure requires a real understanding of how the knowledge has been impacted. Social factors such as the settlement of non-Indigenous people which forced some communities away from their regular hunting grounds changed the frequency in which they were able to harvest or hunt; legal restrictions limited the amounts; the movement towards labour or agriculture as a form of income decreasing participation in traditional practices; and residential schools that resulted in a large amount of knowledge lost (Butler 2006). All of these reasons have affected a lot of the knowledge that traditional

cultures once held and as TEK is based on a long line of mainly oral historical knowledge much of it may have changed over the years.

5.1.1 Other Results

The result of modernization on a culture that had almost no time to adapt can be clearly seen in today's society. Social problems abound in regions of abuse, suicide, poverty, depression as well as health related issues of diabetes, hypertension, and coronary heart disease (Pilgrim 2010; UNDP 1999). Societies that once hunted and gathered have been exposed to a lifestyle that promotes physical inactivity and unhealthy eating habits. The ability to take away people from their ancestral grounds worldwide has created a huge disconnect for a group of people who find it very important to be connected to the land.

This disconnection has been realized and ecocultural revitalization projects, the reconnection of cultures to their ecosystems, are underway (Pilgrim *et al* 2010). UNESCO and UNEP are working as part of this movement and efforts span much of the area of North America, the Arctic and sub-Arctic region, and Asian and Africa (Pilgrim *et al.* 2010). The different types of revitalization projects include the reintroduction of traditional foods, traditional healthcare, ecotourism, education, language, culture, and rights (Pilgirm *et al.* 2009). The projects have been met with mixed success as many of the approaches have been Western in their approach and individualize the problem, "removing the problem from the historical and contemporary experiences of entire communities suffering cultural dispossession." (Pilgrim *et al.* 2010).

 These projects are done to both help groups retain and regain aspects of their identity but also to help understand how some groups are able to cooperate so well with their natural surroundings even after having lost their homes (Pilgrim *et al.* 2010). However, even with these revitalization projects underway it is important to recognize that the romantic view of the way indigenous people once connected with the land is not going to help the current environmental situation. Recognizing that they paid attention to their immediate vicinity and

using their image of themselves and the world holistically can help though. It may be difficult to get to this form of understanding though without the physical connection to the land as it causes a chain affect towards the psychological being, the same concept that was discussed earlier on.

6. You are an Individual and you are Independent

Upon my recent acquisition of my first full-time, pay the rent job, a friend of mine commented: "Got a job, eh? Guess it's time for you to enter adulthood."

I may soon be financially independent but I am definitely not an individual.

There is a lot of stress now being put on building communities and getting people to work together. A lot environmental movements count on people working with one another and willing to make sacrifices in order to improve everyone's lives as a whole. It is the concept of equity and equality, everyone has a right to be equal and have access to safe drinking water, nutrition, health care, education, etc. It was the whole concept of the Millenium Goals that were coined by the UNDP. With headlines like "Despite progress, Malaria kills one child every 45 seconds; Inequality thwarts progress towards universal education; Progress to end hunger has been stymied in most regions," (UN 2012) it is clear that there isn't equity in the world.

6.1 The Tragedy of the Commons

"When individuals seek their narrow self-interest by the millions, we have the world we live in today- one in which we have more total wealth, but which is poorly distributed and where those who are wealthy do not show signs of greater happiness because of it." (Moran 2006, 121).

I know it's easy to point out all the things that are bad and wrong with society. It's always easier to remember the negative than the positive. Still, I don't want to be one of those cynics who see everything in the world as bad and if we're nothing more than a plague on this planet. Humanity has done some pretty fantastic things that we can all be proud of in regards to our ability to invent, create, imagine, and adapt. Our cognitive ability to think of the past, present, and future allowed us to take that step further in evolution and gave us the ability to not only survive but to live in relative ease and

comfort. As a society, as a species, we are unique and if it's our individuality that we always promote then our individuality as a species should be promoted and preserved- because in the end it's the decisions we make as a whole that's going to decide our fate.

Having said that, there are 7 billion of us. You'd think we could muster up the brain power to figure this all out.

In the tragedy of the commons it is smaller communities that are easier to manage; quite often they have a similar goal and base their ability to thrive on trust and cooperation. It is an understanding that if one person takes more then there is less for others; overexploitation affects everyone (Moran 2006, 122). The larger the community gets the harder it is to control and the more institutes are needed in order to ensure that the general goal is kept, but still it becomes increasingly difficult to stop people from pursuing their own self-interests. This is part of the problem that exists with TEK, a lot of it is based on small communities and providing for only smaller quantities of people, not for today's population and demands.

6.2 A Case of Green Infrastructure

Promotion of the individual did not always occur, the community as a whole mattered and things were done with the thought of others in mind. It is not impossible to go back to this sort of communal living either, examples of it exist today and some urban planners now plan with the idea of making communities work as a unit.

Green infrastructure is one of the community based solutions that merges conservation and development through strategic land use planning. Today's conservative concepts of conservation involve complex complete protection of entire areas as discussed before, allowing for minimal human contact to occur. However, with current trends towards urbanization other solutions towards environmental protection methods are necessary.

Entire communities can benefit from this concept. Green infrastructure can improve and promote many aspects of the community and the environment as described by Paul Ronan:

- The introduction of "green" space into urban centres can allow for an appreciation of the local environment and has a positive reinforcement people can get involved in the upkeep of "green" spaces. This allows for communities to be educated on the benefits of caring for the environment. Gaining this type of education at a young age and through a hands on approach can help create and carry a positive attitude towards the environment into adulthood.

- Due to this participation and communal upkeep of "green" spaces a sense of growth in the community between neighbours and residents can easily occur (Ronan 2010)

This concept of development by incorporation of green infrastructure can help to rebuild community ties and educate people on nature. If elements of this education could incorporate TEK it would become advantageous as its concepts could be introduced into modern societies that are beginning to acquire and appreciate having a connection to the land.

6.3 Defining Ourselves

I define myself as a tough, resourceful, and somewhat clever human being. I define a tree as a strong, tall, rooted, statutory piece of nature. I define gravity as a force that keeps my feet on the ground. I define a hill as a gently sloping piece of land. When I went skiing for the first time in Grade 7 I defined myself as the very mobile, very delicate, and very stupid human that was hurdling down the hill that was now defined as the provocateur, with gravity as the facilitator, and the tree as the strong, tall, rooted, statutory piece of nature I was about to crash into.
Life is all about perspectives.

The Euro-centric society is one very small portion of the world. Once one starts dividing the way that culture and geography can influence society it gets a bit more difficult to pinpoint where the problem of society's relation to the environment begins, making finding a solution

seem even more implausible. There is the north/south divide, first world, second world, third world or industrial, post-industrial, pre-industrial; then there's the even smaller sources of religious groups, ideological groups, blue collar/white collar, and the list goes on and on. With so many ways to categorize people and places humans have managed to continually separate themselves from everything and everyone in some way or another. It makes life easier, categorizing everyone, it lets people know where they stand, but it also justifies thinking of oneself independently of those who aren't the same.

Humanity evolved and became a species that is able to remove itself from its environment. No other creature alive that is not directly dependant on people (I speak in terms of pets) can so drastically remove itself from its environment. If someone truly desired to, they would never have to leave a city and could for miles upon miles keep their feet on cold, concrete ground.

> "Our inability to come to terms with this exquisite fitting of the world
>
> may be to commensurate our wish for immunity from its terrors. We
>
> wish to experience nature's sublime beauty while keeping its darker
>
> realities at arm's length." (Whyte 1993, 58)

It seems that the desire to be immune from the destructive forces of Earth put people in a mind-set set of holding power over the otherness of the world; this in turn puts people at arm's length with experiencing life itself as the concern for safety became overwhelming. Safety, because for millennia humanity lived at the mercy of "what lives in the woods". Old fairy tales like those that were collected by the Brothers Grimm during the later 16th and early 17th century (Wood undated) only put into context the idea that the safest place is in the villages, towns, and cities where there are people. Stories like Little Red Riding Hood, Hansel and Gretel, The Hut in the Forest, and many others all hold some reference to going into the forest and meeting dangerous people and creatures. Vast forests were considered in many

cultures to be a dark dangerous place that should be avoided due to the chance encounter with something other-worldly that is only out to cause harm.

Perhaps it seems that after having to live in fear of nature for most of humankind's evolution it is no longer necessary, not now that the world has been thoroughly explored and mapped. Yet, it is an illusion of safety that humanity has created (Whyte 1993). Nature and all of its terrors have not been tamed and completely understood as many natural phenomena are still debated over. This is where the concept of TEK and its local knowledge could play an important role in informing climate scientists as to whether different events are increasing in frequency or what changes have been observed locally. It is not the spiritual concept that can be used in this case but rather the ecological. The idea that TEK provides about becoming a part of the Earth using intuitive and compassionate (Anderson 2004) methods is an idea that is not being discarded but focus on bringing communities of people together seems like the first logical step. It is necessary to understand how humanity can live together and stop finding all the differences that divide everyone before focusing on the individual spiritual separation with the Earth.

7. "So what's my conclusion?"

It's simple (my journey)...

Through my attempt to connect with Jesús and to try and understand the spiritual connection behind the physical I ran into many problems. The themes bring light to some of those issues such as the removal from the land, the difference in priorities towards nature, and how as a species we are connected to it, and the lack of my ability to understand the spiritual belief that TEK encompasses.

I cannot claim to fully understand the knowledge provided by TEK nor can I incorporate all of it ideas in the short time-span I have been working within. What I attempted to understand was the differences in viewing the Earth ecologically and somewhat spiritually. There are many problems that stand in the way with attempting to embody spiritual belief such as used and understood by traditional societies. Over the course of four months I have touched on these problems but have found them to gross in scale and too abstract of an idea to tackle. My desire has been to only breifly touch on these concepts by bringing out some of my stories, opinions, and personal attitudes towards the cultural themes that have been identified. I came here wanting to move to a holistic way of thinking, to beat all those cultural norms and pathologies that I have ingrained in me so that I could have a conclusion that stated: "Yes, it's possible to move from one way of thinking to another. Here's how and here's the practical application in today's environment."

I cannot however, give this type of conclusion. I desire to remain positive and optimistic about understanding spirituality as defined by TEK but for now it will not work, anytime I took a step towards trying to connect with Jesús I felt myself take two steps back. My rational side would jump in and tell me just how crazy this is in many ways. I had a lot of reasons to imagine why this wouldn't work and not many to imagine why it would.

My further desire and focus has been to understand the different ecological and environmental attitudes that the anthropocentric worldview holds as well as TEK and how they can possibly be integrated together. This has been done throughout the themes by giving different viewpoints towards natural resource management, conservation, and other environmental issues that are currently being faced by humanity.

7. 1 Practically speaking…

The knowledge gained from traditional cultures has in some ways been lost or has changed in some aspect due to colonization, assimilation, modernization, and the removal of many traditional cultures from their ancestral grounds. The inclusion of the ideas that TEK provides can work complimentary with scientific knowledge but many of the ideas have been compartmentalized and only certain potions that work with the interests of mainstream issues are often used. This is often the case for the spiritual, holistic aspect of TEK which cannot be quantified or subjected to testing and therefore is quite often chalked up to being mere superstition and disregarded.

However, for areas that can and are understood TEK has the advantage of working on the local level. It is in an excellent position for filling in the spaces that modern scientific practice cannot when it comes to managing resources and understanding rapid shifts that happen in a local environment. It is based on local knowledge gathered in a smaller setting over long periods of time which give certain regions an excellent detailed history that can be conducive for solving local problems. As the knowledge has been passed down through oral communication much of it has not been documented so interaction with the people who hold the knowledge is necessary which can allow for a deeper understanding of TEK to occur.

On the other hand, modern scientific practices bridge gaps in knowledge from all over the world and has become a universal language when understanding certain concepts and trends. It is a lot like math. It does not grapple with real life situations but it makes it easier to understand one another on some level. This knowledge can view general trends of climate change that when used complimentary with TEK can give a far more detailed picture of what is happening.

This integration of TEK and modern scientific practices can also help to solve the shifting baseline syndrome giving more accurate knowledge concerning natural resources as opposed to today's very short-term planning.

Everything that I've written comes down to the idea that in order to work with the environment it is necessary to respect it first of all. It may not be wholly necessary to move to another way of thinking or to understand it spiritually as TEK demands. Practices towards the environment are changing among governments, NGOs, corporations, and the average person as acceptance and acknowledgement that the current anthropocentric attitude towards the environment can be destructive in many ways and needs confronted in order for environmental problems to be properly addressed and dealt with.

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Appendix A

All steps for the analysis process have been provided by Heewong Chang (2008)

1) Search for recurring topics: this was possibly the easiest one to pick out. "Topics refer to specific subjects pertaining to people, places, ideas, or activities...when a topic appears frequently in the data, it is likely to signify importance in your life." (Chang 2008, 132).

2) Look for cultural themes: This is possibly the most influential part of my writing on my research topic as the problems I ran into stemmed from my cultural upbringing in many cases. Identifying themes such as seeing is believing, the individual, modern nomad, and others are all a part of a cultural theme that can be, "declared or implied, and usually controlling behaviour or stimulating activity, which is tactically approved or openly promoted in society." (Chang 2008, 132)

3) Identify Exceptional Occurrences: These events can have a large influence on ones life and can change perspectives, people, cultural norms, and environments. These kind of events usually put a person on a new path as it's difficult to return to back to their old self.

4) Analyse Inclusion and Omission: Looks for different aspects that have been omitted throughout the story. This can reveal information about what the autoethnographer may try to avoid, dislike, be dissociated from, or devaluate in life.

5) Connect the Past with the Present: This is the concept of understand how past ideas, events, and behaviours, may be influencing present thoughts and behaviour's. Although it's not possible to completely prove the correlation between the present and past it is still a viable option to explore as the autoethnographer can use logical reasoning, imagination, and intuition to make the connect.

6) Analyse Relationships Between Self and Others: This can include the relationship between oneself and others as being a member of the community or as an outsider. Seeing how these relations work can bring into contrast what is familiar and unfamiliar to the autoethnographer about themselves.

7) Compare Cases: This can allow through comparison, for similarities and differences to be drawn between two different cases. The comparison can be drawn from numerous sources such as people, communities, cultures, religion, etc. but the key point is for the comparison to bring out the differences and similarities.

8) Contextualize Broadly: This focuses on taking the context of what has been written and, "attempts to explain and interpret certain behaviours, and events in connection with the sociocultural, ideological, and geographical environment in which they took place and in which data were recorded." (Chang 2008, 136). External literature should be drawn on in order to give an in-depth understand of the context in which it stands and boundaries should be made in order to narrow the focus.

9) Compare with Social Science Constructs: General ideas drawn from social science literature can help to explain certain social phenomena. Social science constructs can help become a framework for the analysis and interpretation.

10) Frame with Theories: This concept is one that uses "theories" in the loose sense of a postulate or idea that can be used an explanation "tool". The goal is not to create a new theory but rather to help use an existing one to help guide the process from data organization to the structure of the writing.