MOTHER EARTH, BROTHER BEAR:

DISCERNING METAPHORS TO LIVE BY IN ENVIRONMENTAL EDUCATION

by

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ABSTRACT

Language is a pervasive educator. It shapes and expresses people's understanding of the world they experience. In environmental education, language conveys an understanding of the natural environment. Analysing language, through metaphor, allows one to discern the way a particular culture understands and experiences the natural environment. This study examines, through metaphor, the discourses about nature that prevail in Western and Aboriginal cultures.

This thesis uses language as a point of departure for studying nature. Attending to the nuances of language, especially in the light of the importance aboriginal cultures place on story as a means of transferring knowledge and understanding, influenced me to combine the uses of personal narratives, story and analytical text to create a text of shifting metaphors about nature.

Examining the language concerning nature revealed the conceptual metaphors of NATURE IS A RESOURCE (Western Judeo-Christian culture) and NATURE IS A FAMILY MEMBER (Aboriginal). Nature seen through the "eyes" of Westerners is understood as a resource. Nature is objectified, conceptually abstracted from local sensibilities, and economically valued. On the other side, nature, seen through the "senses" of aboriginal cultures, is an extended family member whose value extends beyond economics to include the value of *being* alongside others. The aboriginal way of sensing

nature embodies experiences and understanding that encompasses a sensuous, empathic, physical relation to the world.

Environmental education focuses on teaching students about the natural environment. The goal of this education is to foster a lifestyle that maintains a sustainable co-existence with our natural environment. Promoting an understanding of nature as a resource can not foster this goal. I conclude that a different understanding of nature, such as the understanding that aboriginal cultures maintain, needs to be introduced into environmental education if we ever hope to live in a balanced and harmonious relationship with nature.

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CHAPTER ONE

> There are times in life when the question of knowing if one can think differently than one thinks, and perceive differently than one sees, is absolutely necessary if one is to go on looking and reflecting at all. (Foucault, 1984, p. 8)

This summer I have been spending a lot of time in the backyard lying out in the sun, reading books and trying to build relationships with the numerous little animals and plants that share the backyard with me. When I was little, all the adults used to refer to me as their little Snow White. Probably because I had short dark hair, but I believed that it was because they saw me as Snow White. Of course I owned the Snow White record and listened to the story several times a day. The part that intrigued me most about Snow White was her ability to communicate with the animals. The one picture of her, sitting in the forest surrounded by all the animals talking and laughing with them, was my idyllic vision of the perfect life. I spent many hours of my childhood sitting in trees, or nestled in little niches of nature around my house, talking to nature and all my little animals friends that lived there. And they did communicate with me. They never said words, but their thoughts and language came to me and I knew what was being said. I never questioned this phenomenon. It just was.

I don't know when it really stopped. When I didn't feel the need to hear the voices of the land anymore. It just happened. Over time the voices of my friends grew faint while other voices filled my ears. Once in a while, when the opportunity arose, I was still

able to talk with them, but every time they became harder and harder to hear. Each time, I could feel the struggle inside, my voices questioning their presence. Eventually, my relationship with nature became one of silent appreciation.

This summer, while sitting in my backyard, I have been reading a book called *The Spell of the Sensuous* by David Abram. It has made me question my relationship with nature. It has reminded me of my childhood and the way that I used to talk with nature. So as I sit here, day after day, I have been trying to make a conscious effort to reunite myself with the voices of nature. At the moment, my nature consists of a few birds, some squirrels, insects, and a fluffy white cat that seems to go against the norm of cat behaviour, because it wants nothing to do with me. It just goes about its business, and if I try to talk to or approach it, it takes off. To reconnect with nature, I have set up two bird feeders and have filled them with all the delicious treats that a nice lady at the store told me they would love. And it seems they do. As far as the insects go, I have been making a conscious effort to acknowledge them, and respect them for their role in the great circle of life. They are quite interesting to watch when you make the time. I believe that my efforts towards my new backyard friends over time will allow them to trust me enough to talk with me. But so far, no words, although I do feel a closer connection to them and they now hang around even when I move about the backyard

After returning from work at the university, I approach the driveway of my house and see my friend the squirrel, and shall I say my friend the white cat, out on the front

yard. The white cat is chasing the squirrel in circles and is pouncing on it. Feeling mortified at the prospect of losing one of my new friends and knowing the skittish nature of the cat towards me, I run towards them and scare off the white cat. The cat sprints away from my rushed advances to the neighbour's lawn, leaving the squirrel behind. I feel heroic and say to the squirrel, "There you go, I chased that big bad cat away. Now she can't hurt you." The squirrel looks at me, but it isn't a look of gratitude that it gives me. Instead it almost looks confused, and then, believe it or not, the squirrel turns towards the white cat and chases after it. I stand there dumbfounded. What just happened here? Squirrels are afraid of cats, aren't they? Why would the squirrel go back to the cat? Is it looking to get attacked again? I watch the two of them disappear around the corner of the neighbour's lawn, with the white cat running away from the squirrel who is chasing it. I am confused and feel lost. I don't understand. That wasn't what I expected. That's not what I've been taught to understand. Thinking about the actual occurrence, I would have to say that what I just saw looked like two friends playing catch. But squirrels and cats aren't supposed to be friends. But let's say they are. That kind of behaviour wouldn't be unusual. Humans enjoy the sports of boxing and wrestling. And I can recount many times when I have wrestled with my friends and siblings for fun. That must be what it was. The white cat and squirrel are friends. Aren't they?

Sitting inside the house, I begin to question what I know. What I thought should have happened, didn't. And a possibility that I have never thought of, did. Why haven't I thought of it? Has my understanding of the world never allowed this possibility? It seems

to me that I have been taught one truth, and it occurs to me now, in light of the present events, that perhaps other truths exist. I know that this could be considered an anomaly. But what happens with anomalies? Are they discarded, never reported? Perhaps many others have experienced the same as I have; have seen squirrels and cats playing together, questioned it and then ignored it when it didn't fit into their truth.

Well, I am not going to ignore it. I am instead going to question the truths that I have been given. Today they were friends playing together. Perhaps tomorrow they will be enemies, but not today. Today, I saw a different truth. A different story. This event, and probably others in the past that I chose to ignore, actually represent glimpses of different realities. I realize that there are more stories out there that differ from the stories that I have already been taught and at this moment, I want to know what they are. I want to see more, hear more.

All of sudden it comes to me. Hearing, listening. I haven't heard the voices of nature because they can't be heard in the reality that I live in. I assumed that I was meeting my backyard friends halfway and that they were the ones who had to meet me the rest of the way. But the truth is, I could never meet them halfway because I was on the wrong road. I have been seeing them through the eyes and mind of a truth that doesn't validate their voices. Although my intent was genuine, the thinking behind it never allowed the communicative connection. It occurs to me that today's event was my friends' way of talking to me, in my reality. They had to enter and challenge my logical world in

order for me to acknowledge its presence. I had to be aware of its existence in order to make a change. Now that I perceive this, I know that their voices never left me. It was *I* who left them. I who rejected their existence. I who chose not to hear them. But they were and are always there.

I have been hearing the voices again. Their voices encourage me to spend time with them. To reacquaint myself to them. It is this encouragement that compelled me to visit Haida Gwaii (The Queen Charlotte Islands), to experience their voices and spirit without the intrusion of city life, to go on a journey to better understand the things I was thinking and writing about for this thesis. My experiences with the voices of nature have left me with such beautiful stories that fill my heart and nurture my spirit. I am lucky now because I am building my knowledge from different stories and many truths. Together, they weave me a story that has many possibilities, many outcomes, and they create themselves in the enfolding of my life. My life seems much more fulfilling now. It is strengthened by the presence of the unexpected and the unknown, and yet, I feel more certain about life and my own knowledge now than I ever did before.

SEARCHING FOR NEW LINKS

> If you talk with animals they will talk to you and you will know each other. If you do not talk to them you will not know them, and what you do not know you will fear. What one fears one destroys. (Chief Dan George, 1974, p. 33)

Throughout the world environmental degradation is occurring at a rapid rate. Half

of the rainforests in the world have already been destroyed. "The remaining half is being cut down at the rate of 250 million acres a year - an area the size of England"(Dehr, 1989, p. 3). This environmental problem is just one of many different environmental issues that the human race is facing today. Other problems such as acid rain, the greenhouse effect, global warming, animal extinction, and desertification are also just as devastating. These problems are difficult to comprehend and unravel because they are interrelated with political, economical, and social issues. An essential key that is needed to address environmental problems, if we want to try and eliminate them, is a thorough understanding of not only the issues themselves but also of the conceptual patterns that build the foundations upon which they exist.

Environmental educators around the world are trying to combat the destructive trend of humans by educating them about how the way they live affects the natural environment. The belief is that this awareness will then encourage humans to take less destructive paths. As an environmental educator and an individual, I am always questioning if environmental education is in fact helping to solve our world's environmental problems. The reports of environmental degradation seem to become more serious and more numerous every year even though environmental education is becoming more prevalent in contemporary school curricula. Even though students are educated about the destruction of the rainforest, rainforests continue to be cut down at alarming rates each year.

I have felt so frustrated sometimes because I know something is missing. Somewhere, important links in environmental education between understanding and action are being missed. The connections between global and local, education and life are being missed and misunderstood. This concern not only pertains to environmental education but also to other areas of education as well, such as health education. The questions that continually enter my mind and are why I began this journey of enquiry in the first place are: Why isn't environmental education working? Why doesn't everybody see how their actions affect nature? Why are they not really doing anything about it to change themselves and the present condition? What is preventing us from changing, from finding a way to end our destructive relationship with nature?

I have come to a conclusion that one of the missing links between understanding and action lies in the language that is used when we speak and educate. Language is linked to thought not only as a representation of our thoughts but also as the construction of thinking.

> The way we talk about a place or another entity reflects how we feel, how we see, how we understand, and most importantly, how we think about it. Language is a reflection of how we organize and perceive the world. In language there are key words, phrases, and metaphors that act as sign posts to the way we think about the world and ourselves. (Cajete, 1994, p. 45)

I am choosing to look at metaphors in language about nature in my enquiry because I am hoping that it will help me to understand the thought processes behind the language and because language plays such an important role in education. Perhaps this

enquiry will offer new insights and open up a new avenue of study that may contribute to a new way of looking at and teaching environmental education.

I have come to the realization while writing this thesis that the enquiry can not stop at language alone. My own experiences while on this journey of enquiry have shown me how important personal experience is in the building of understanding. Therefore, the examination of the experiences *behind* the language will also be presented. Throughout this study I struggled with the often abstract approach to academia, and I came to the conclusion that it would be contradictive if I didn't attempt to approach this study in a style that coherently amalgamated my bodily sensibilities with my logical reasoning. Therefore, this thesis is written using my creative, imaginative, innocent and sensuous abilities alongside the logical reasoning that I have been educated to use. This approach, I feel, will help to provide a more wholistic expression of what people actually think and do.

The words and images that we utilize while educating create particular understandings, but they also hinder understandings that may be more relevant to achieve certain outcomes. As an environmental educator, I am interested in the language that we use when we speak about the natural environment, particularly the metaphors that we use. I am particularly critical of the metaphors that deny sensuous experiences and connection with nature.

This thesis will present metaphors that are prevalent in our culture's environmental

language and suggest that these understandings act as a barrier for environmental education and prevent our culture from having a mutually beneficial co-existent life with our natural environment.

Chapter two will present the fundamental basis of my study – how language can be used as a tool to understand thought processes. I will introduce the contemporary metaphor theory of George Lakoff and Mark Johnson from their book *Metaphors We Live By* (1980). In their book they argue that metaphors are not merely a characteristic of language, as traditional views would suggest, but that metaphors are fundamental to our conceptual system. Metaphors are linked to our thoughts and actions, and therefore, are a pervasive part of our understanding of the world around us. This would suggest, then, that the metaphors used in environmental education actually play a part in the way that we conceptualize and act on the natural environment. I wish to extend Lakoff and Johnson's cognitive research about metaphors to a practical examination of the metaphors used in environmental language and how they affect our relationship and in turn our actions towards the natural environment. I would like to acknowledge that in using language as a point of departure for my thesis, the study is prone to the limitations that language itself creates in the assumption of meaning. I have tried to lessen this limitation by collecting several different sources that present the same meaning. I would also like to say that I realize that textual language is not the only source of understanding thought, and that areas such as the arts and bodily language also have many things to offer to this area of questioning.

With an understanding of metaphors as a fundamental part of our conceptual system, it is interesting to examine the metaphors that are prevalent in our western culture when speaking about the natural environment. It is easily seen that we metaphorically view nature in terms of NATURE IS A RESOURCE (Exploitative Judeo-Christian tradition). This conceptual metaphor reveals notions of control, domination, and power. It creates a natural world that is dead and abstract, and whose value is determined solely on an economic basis. The concept of nature is a resource creates a particular understanding of the natural environment which highlights some aspects and hides others. A discussion of these aspects and how and from where these concepts have come will be presented in chapter three.

How potent and powerful is this metaphor in environmental education? Through illustrative examples of the metaphor, it will be argued that it is very potent and creates a barrier that works in a conflicting manner to the goal of environmental education. That goal is to live in a sustainable co-existence with our natural environment.

If metaphors are fundamental to our conceptual system, can we use this knowledge to create or use existing metaphors that will be more appropriate in gaining an understanding of the natural environment that is less destructive? On my own journey I was not able to find what I was looking for in my own culture, so I began looking at other cultures to find an alternative way of understanding that might encompass an harmonious relationship with nature. There are other ways of viewing nature and I found that in many

aboriginal cultures around the world, nature is viewed differently. A conceptual metaphor that is dominant in aboriginal cultures is that of NATURE IS A FAMILY MEMBER. A discussion of the aboriginal way of seeing nature will be presented in chapter four. The different conceptual reality that this way of seeing establishes will be presented and it will be suggested that this way of seeing nature creates a relationship between humans and nature that is far more conducive to the goals of environmental education.

Different metaphorical conceptions create different understandings of the world and in Western culture the dominant metaphors that we use in our environmental language are metaphors that we *can't* live by. Many aboriginal cultures understand their relationship with nature as an extended family. Within this realm of understanding there are many new ideas and thoughts that are instilled in the way one thinks about and acts upon nature. Wholeness, respect, the presence of "the Other", empathy, personal experience and personal story are all aspects that embody the familial understanding of nature. These ideas are not present in the understanding of nature in Western culture. It is in these concepts, which I will discuss in chapter five, that I see a new direction that environmental education can take to help educate and foster a new relationship between humans and nature that will allow harmonious co-existence. To discover the ways to open up the connections that allow nature and human beings to talk to one another, feel one another and learn from one another. To be able to share our personal stories of experience. That is environmental education.

CHAPTER TWO

Language is the dress of thought (Johnson, 1975, p. 39).

I walk down the hallway to the backdoor and my adrenalin rushes in anticipation of new experiences that may lie ahead. I am going for my daily walk to the lake. Last week the weather started showing the beginnings of a new season. Looking out the backdoor window I can see that all the leaves have finally fallen to the ground. The daily temperatures have substantially dropped and I can sense the first snow lurking around the corner.

This week, the annual ritual of retrieving winter clothing from the upstairs attic closet occurred. The large box bulging with my warm winter accessories now sits at the end of the hallway After putting on my down filled jacket I pull on boots and grab several items from the box: a pair of mittens, a headband and a scarf. I put these items on and I grab a hat and stuff it into my jacket pocket, just in case. All dressed, I open the door, step outside and take a deep breath. I exhale and my breath condenses into a cloud of white steam. I smile and wonder what new things I will notice today in the changing season. I pull the door closed behind me and head off down the path.

The first thing I notice is the smell of the air. The scent of decomposing leaves fills the air and I find this intoxicating. The notion of leaves dying only to regenerate into new

life next spring seems so supernatural.

My first stop is Glen Lonely Lane. In this serene place a lot of birds congregate on a myriad of bird feeders. My arrival scares the birds initially, but I stay still and eventually they return to feed. Removing a mitten, I reach into my pocket and pull out a handful of birdseed. I stretch out my arm and within a few minutes the first bird lands in my hand to see what I have to offer. It is a black-capped chickadee that inspects and then takes my offerings. It is the least intimidated by me, but soon a junco and a sparrow also begin feeding from my hand after scrutinizing me from a nearby feeder. I watch the chickadee's expression as it feeds from my hand first. The bird never takes its eyes off of me. There is a sense of apprehension present which doesn't allow the bird to totally relax in my hand. Even so, the bird accepts the food and seems thankful for the offering. I speak to the bird, vocally and telepathically, telling it that it is **"I"** that am thankful for the trust it is expressing towards me. I notice that, like myself, the birds have thicker coats for the colder season. They have fluffed up their feathers in order to trap more air for warmth. I put on extra layers of clothing to achieve the same effect. I feel a real kinship with these birds as we all prepare for the approaching season.

I decide to continue my walk, and I throw the remaining birdseed on the ground below me. My mind returns to my experienced connection with nature. It is not the first time I have felt connected with nature. It happens all the time. That is the primary reason I enjoy going on my walks. They rejuvenate me and I feel energized when I return home

from them. Where does this sense of vitality come from? Is it because I am somehow connected with the life force of nature? Is nature passing some of its life energy onto me? Does viewing the diversity of life in nature make me appreciate my life more? Is this phenomenon similar to what people experience around babies? Does the miracle of life in all its diversity create a connectedness with a preciousness in our own lives?

Up ahead the lake shimmers with diamonds and I get caught up in my senses. I sit myself down on a bench and observe my surroundings. The wind pushes waves across the lake, makes the trees dance and caresses my face with its cold hand while whispering words of winter into my ears. The lake is surrounded by barren trees that look like naked bodies reaching up towards the heavens. I sense I am not alone.

I feel safe here. Everything surrounding me comforts me and makes me feel secure. I wonder if the feeling is mutual. I remember the chickadee's fearful awareness of me and I wonder about nature's ability to inform itself about dangers. All over this planet humans are destroying nature. Does nature know to be fearful of humans? It disgusts me to think about the selfish actions we as humans exercise on nature. Why do we continue to take such actions? Do we not see, hear and feel the ramifications? Do we all not feel the vital connection? Do all people think about nature the way I do? I know the answer to this; no. Why is that? Is it the way people are brought up? The experiences they had with nature or what other people told them? Is there a connection between the world's degradation and people's thoughts about nature? Do people's thoughts affect their actions

towards nature? What kind of thoughts establish actions of destruction and disregard for nature? What kind of thoughts establish nurture and respect for nature? Is there a link between thought and action? If so, what is the link?

My body senses a chill so I pull out my hat and cover my head to conserve heat. I stare at the lake and the thousand glistening diamonds that sparkle on it. They remind me that there are thousands of questions for which I seek answers. I look beyond the lake and wonder about the connections between humanity and nature and realize that there is a vast world out there with a vast number of questions that are unanswered. It overwhelms me and I sit in silence.

I shiver and realize that it is time to head back to the house. I walk back wrapped in my thoughts and hardly noticing my surroundings. I have walked this path a hundred times before and my body already knows all its curves and indentations. Like a long-term relationship with many shared experiences, my body feels comfortable with this land and it leads me home, leaving me to my thoughts.

I reach the house and my mind is spinning. I turn the knob on the door and push it open. I quickly shut it to conserve the heat and begin to peel off my outer clothes. First the mittens, then hat, headband and scarf. I throw them back into the box and tell myself to keep my thoughts simple. How can we really know what a person thinks about nature? We ask them, "What do you think about nature?" and they respond with the words that

make up sentences. Through the nouns, verbs and adjectives they use we get insight into their thoughts and experiences of nature. I unzip my jacket and hang it back up in the closet. By examining language, we can begin to understand their thoughts and perhaps understand and even predetermine their actions. Language can be a link to understanding thought and action. Language is a communicator of one's thoughts and it also plays an important role in developing thought because it is a communicator. Language affects thought and action. A root to understanding and helping the relationships between humanity and nature lies, therefore, in examining the language we use. I remove my boots.

THE LANGUAGE LINK

> Language is the blood of the soul into which thoughts run and out of which they grow. (Oliver Wendell Holmes, 1987, p. 152)

Language plays a very important role in our lives. Every day we continuously try to make sense of our lives. Part of this process of making sense comes to us in the form of language. We use language to talk about what we do and what we think. With language, we explain and justify our actions, our feelings and our intentions. Language acts as the communicator of our thoughts and ideas.

> One could say about language in its relation with thought what one says of the life of the body in its relations with consciousness. Just as one could not place the body at the first level, just as one could not subordinate it or draw it out of its autonomy ... one can say only that language makes thought, as much as it is made

> by thought. Thought inhabits language, and language is its body. This mediation of the objective and the subjective, of the interior and the exterior - what philosophy seeks to do - we can find in language if we succeed in getting close enough to it. (Merleau-Ponty, 1973, p. 102)

Consequently, looking at language can help us to understand our thoughts and actions. Language, thought and action are all closely related because they are all linked to our conceptual systems that help us to determine our realities. Because of this link, language is an important source of evidence for understanding what our conceptual systems are like (Lakoff & Johnson, 1980).

To try to understand the relationship between humanity and nature, we need to understand the conceptual systems that form our thoughts and actions. One way to discover these conceptual systems is to look at our use of language to see how the reality of those relationships are formed.

In recent decades, there has been much research in the area of linguistics. But language research has not been exclusive to the linguistic disciplines. Many branches of science, including psychology, biology, and mathematics have defined language as a legitimate area of research and have utilized linguistics as a tool to 'socialize' their disciplines. American linguist Edward Sapir (1949) said that "Language is a guide to social reality" (p. 162). It is not surprising that many other disciplines, have as a result, tried to explore the use of language in an attempt to better understand reality and the role their discipline plays in rendering it explicable.

There has been a lot of writing done in the area of language and many writers have concluded that language plays a very important role in creating our social realities. Edward Sapir hypothesized that the influence language has on perception, which he termed linguistic determination, is largely determined and influenced by the language that one speaks. "We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation" (Sapir, 1949, p. 162).

Ludwig Wittgenstein analyzed the relationship of language to the world, claiming that in language meaning can never be exact because meaning is subject to interpretation and social influences. Language has a very social nature and is, therefore, like a game where the 'rules' need to be understood first to interpret their meaning. What is important in understanding the meaning is understanding its place in a "language-game".

Wittgenstein understood the power and influence language plays in our conceptual realities of the world. He understood that different meanings exist in language and these differences influence and create different conceptual realities and meanings. As he said so powerfully in his writings: "The limits of my language mean the limits of my world" (Wittgenstein, 1961, p. 115)

With this basis for understanding, language is seen as a creator and reflection of our thoughts. Through an examination of an everyday language use, we can gain an

understanding of the categories of thinking that determine social action. Specifically, we can examine the language used in social discourse about nature to get an understanding of the conceptual relationships that exist between humanity and nature.

THE METAPHORICAL LINK

One discipline that has embraced linguistics is cognitive science. In fact, there is a separate branch of cognitive science now dedicated to this subject alone called cognitive linguistics. This area of study uses linguistic evidence to better understand cognitive processes. Since language encompasses a very large domain of information, hypothesizing that there is a link between language, thought and action is one thing. Trying to find evidence to support it is another. How can language be used to understand conceptual systems?

Two current researchers who are studying cognitive linguistics are George Lakoff and Mark Johnson. In their research they have found a way to use language to better understand conceptual systems. They have found that the metaphors we use in language are linguistic examples of our conceptual systems and that our conceptual systems are primarily metaphorical in nature. In their first book, *Metaphors We Live By*, they explain how metaphors go beyond the classical view that alleges that they are just decorative language. Instead, Lakoff and Johnson (1980) found through linguistic analysis

> ...that most of our ordinary conceptual system is metaphorical in nature. And we have found a way to begin to identify in detail just what the metaphors are that structure how we perceive, how we think and what we do. (p. 4)

By looking at metaphors in language, Lakoff and Johnson have been able to demonstrate how our conceptual understanding is often understood through metaphors (Lakoff & Johnson, 1980; Lakoff, 1987, 1993).

George Lakoff pays homage to Michael Reddy in his article entitled, "The Contemporary Theory of Metaphor," as the originator of the idea that metaphor is part of the ordinary system of thought and language. Lakoff (1992) sees Reddy as the first theorist to demonstrate the idea through rigorous linguistic analysis. Lakoff says,

> Reddy showed, for a single very significant case, that the locus of metaphor is thought, not language, that metaphor is a major and indispensable part of our ordinary, conventional way of conceptualizing the world, and that our everyday behaviour reflects our metaphorical understanding of experience.(p.204)

Reddy's study and the continuing works of Lakoff and Johnson have created a method for examining language, through metaphor, which allows us to catch a glimpse of how we conceptualize and act in the world around us.

The word metaphor is derived from the Greek word meaning "to carry over." "It is a figure of speech in which a name or quality is attributed to something to which it is not literally applicable "(Webster's Dictionary, 1987). We use a metaphor to help others to communicate and understand an object they have little understanding of or experience with. This is done by having an understanding or experience with one thing which is then

carried over to another thing. As Lakoff and Johnson (1980) relate it, metaphors in our language are part of metaphorical concepts where there is a 'target' which is described by a 'source.' The target is the domain that we have little understanding of and the source is the domain that we have some understanding of. The things known about the source domain are carried over or projected onto the target domain. We come to an understanding of the target domain through our understanding of the source domain. An example of this taken from Lakoff and Johnson (1980) is LOVE IS A JOURNEY. LOVE is the target domain and JOURNEY is the source domain. Therefore, within this metaphorical concept, we understand love as a journey. Some examples of this metaphorical concept that we may find in language are:

> I don't think this relationship is *going anywhere.*
> We can't *turn back now.*
> We'll just have to *go our separate ways.*
> We're *at a crossroads*
> Look *how far we've come.*
> It's been a *long, bumpy road.*
> We're *stuck.*
> This relationship is a *dead-end street.* (Lakoff & Johnson, 1980, p. 44-45)

Through this illustration it can be seen how, through metaphor, we conceptualize LOVE as a JOURNEY. It also gives us an understanding of how we can analyze metaphors to attain an understanding of our thoughts and conceptual systems.

On a daily basis we use metaphors to convey and understand thought. People's ideas are initially articulated in everyday language and most of our language relies on metaphors. Most words and relations between words are metaphors. One reason for this,

as we have shown, is that we need metaphors for talking about things which are not concrete or experienced. We need metaphors to help us make sense of the complex world we live in. We express ideas through the words we use, the labels we give things and the names we give to events. A good metaphor illuminates and takes you further by providing new insights and making new connections that didn't exist before.

Lakoff and Johnson (1980) explain that "metaphor provides us with a way of partially communicating unshared experiences and it is the natural structure of our experience that makes this possible" (p. 225). However a conceptual metaphor used to describe one concept and highlight certain aspects, also hides other aspects. Lakoff and Johnson (1980) make this dual-edged demeanour of metaphors very clear.

> The very systematicity that allows us to comprehend one aspect of a concept in terms of another will necessarily hide other aspects of the concept In allowing us to focus on one aspect of a concept, a metaphorical concept can keep us from focusing on other aspects of the concept that are inconsistent with that metaphor. (p. 10)

Metaphors are crucial in this regard when trying to understanding people's conceptual systems because they are not merely embellishments but instead highlight, shade and obfuscate reality in certain ways. Metaphors are connected to understanding, thought and action and, depending on the metaphor used, a particular reality is created concerning the object being explained. It is this understanding that we will have a closer look at. Metaphors are themselves part of larger systems; they bind together and form a discourse. Metaphors are part of whole ideologies. They are the tips of icebergs, where

words are submerged within the structure of other words, which together bring whole ideologies with them.

METAPHORS IN NATURE

To further our understanding of prevailing conceptions of nature, we must examine conceptual metaphors in language as they pertain to nature. This will illustrate how different discursive metaphors of nature play an important role in structuring particular conceptual realities. What realities do these different conceptual metaphors create? Where do we predominately find these metaphors? Who are the "language-groups," as Wittgenstein would say, that use these metaphors? What kind of thoughts, values and actions do these specific metaphors establish? These are the kinds of questions that we will query in an examination and analysis of two significant conceptual metaphors that prevail in the nature discourse.

Focusing on metaphor in the discourse about nature may lead us to an increased awareness of how certain highlights of a reality have been exercised to communicate a view of reality that supports a particular 'language group' or society. Such an awareness may not only lead to a change in language but also a change in attitude and then in action with respect to the underlying reality revealed by an analysis of the language used in the discourse about nature .

The following chapters will examine and analyze two conceptual metaphors that appear in language concerning nature. The first conceptual metaphor we will examine in chapter three is NATURE IS A RESOURCE. Following this in chapter four, we will examine the conceptual metaphor NATURE IS A FAMILY MEMBER. Through the analysis we will compare and discuss the contrasting conceptual systems and realities that each metaphor creates. Two differing metaphors, two differing realities.

> The world that a people experiences and comes to count on is deeply influenced by the ways they live and engage in that world. The members of any given culture necessarily inhabit an experienced world very different from that of another culture with a very different language and way of life. (Abram, 1996, p. 41)

After the analysis of nature metaphors, chapter five will consider the elements needed to create new metaphor, language, and understanding that can be introduced in environmental education in the hope of creating a balanced relationship between humans and nature.

CHAPTER THREE

It has been a long and hot summer. I am spending the summer as usual at our family's cottage in Northern Ontario. I love it here, but it is pretty secluded. My uncle and cousin have a cottage a few lots down from ours but this year my cousin, who is my best friend here, got a summer job working at the lumber mill. This has made my summer pretty dull. I do have a little brother who is five years younger than me but I just can't get into the games he plays with his friend. I usually spend my days roaming through the woods and moping around the cottage.

Today is different, my uncle is going to take my dad and me to the lumber mill to see where my cousin works and to go on a tour of the mill to learn about its operation. I am more excited to see my cousin than to do the tour but my dad tells me that it will be interesting. My dad had worked as a lumberjack when he was in his twenties and he seems pretty excited about going to the mill. He says there is nothing like the smell of fresh-cut lumber.

We arrive at the mill and my uncle informs us that we will be going on the tour first and afterwards we will meet up with my cousin for lunch. My uncle takes us to a school bus which is waiting outside of the mill and we get on it for the tour. The bus is going to take us to a location where the company is presently logging. The guide introduces himself and informs us that it will be a 20 minute ride to the site. As the bus

starts its journey the tour guide begins to give us some history about the forest company. He tells us how long the company has been in operation, who owns it, and how many people it employs. He emphasizes that the forest company employs a lot of people who live in the region and three generations of his own family have worked with this company. The company is involved in the harvesting of wood but it also owns a lumber mill and a paper mill. The paper mill is about 25 kilometres away. The company harvests wood from land that they own and also from crown land for which they have the "falling rights." The guide informs us that their company supplies wood for their own operations as well as for the operations of other companies and that wood is always in demand. The company has built a reputation on being able to provide and supply wood and they have built up quite a reserve to provide for the incredible demand. The company assesses future needs and prepares for them. The company even employs people who research how wood and wood products might be utilized in the future. There is a lot of science involved in the forest industry and the guide says he will talk more about that when we reach our destination. He points out that there are many jobs in the forest industry and they are not all labour oriented.

When we reach the logging site and amble off the bus, the guide hands out a hard hat to everyone and welcomes us to the company's outdoor warehouse. The guide begins the tour by telling us that this is where we get the wood that you all need. He then asks if anyone can tell him what we need wood for? People on the tour answer: to build homes, to make furniture and to make paper products. My dad nudges me to give an answer so I

say, to build canoes. My father smiles at me. The guide continues by commenting on how important wood is in our everyday lives and then he takes us on a walk that brings us closer to the logging activities. We learn about the different machines and methods that they use in harvesting wood and how they differ from the machines and methods of the past. As a group, we follow the harvesting process of one log. First, the tree is cut by a man with a chainsaw. It is cut a particular way to ensure that it falls in a particular direction which results in the least damage to the lumber. After it has fallen, several men quickly chainsaw the large branches off and then chain the log up to a machine that drags it out to a clearing. At this point, the log is placed on a machine that shaves all of the remaining limbs and most of the bark off. Next, the log is loaded onto a truck and when the truck is full the wood is taken to the mill to be processed. The guide explains that harvesting all the wood in one area is very efficient because it saves money and time and when it comes time to reforest the area to replace the wood supply it is easier to do in cleared land. His company believes reforestation is very important. They need to be cautious about the amount of wood they clear because they do not want to drain the resource. By replenishing the stock through reforestation, they can ensure that there will be enough wood for our future needs and requirements. Right now there doesn't seem to be a shortage of wood around. In this region alone, there are hundreds of square kilometres of forests. But he reminds us that we all need to be careful and that by managing forested areas we can ensure that there will never be a shortage and that we will never run out of wood.

Continuing the tour, the guide mentions the science involved in the forest industry. Most of the science is related to the biology of the forests and how it affects the reforestation process. The forest industry employs a lot of scientists who research things like, which trees are the best to plant, how they should deal with or prevent disease and insect outbreaks, and what is the best way to care for the replanted trees. The guide asks us if we have any questions and of course my dad has a couple. The guide then directs us to return to the bus and when we get there we return our hardhats. The guide tells us that we are returning to the mill for the second half of the tour where we will see how the wood is turned into lumber.

Once again inside the mill our guide ushers us into the lunch room where another man introduces himself as our guide for the mill tour and he gives us a quick safety talk. We are given hardhats again and safety goggles to wear for the tour. I am curious to see what goes on in this place as the guide leads us into the mill. The distinct scent of cut lumber fills my nose and I smell a hint of pine and cedar. I quickly learn that with every deep breath I collect sawdust in my nostrils. Along with the sawdust there is also a lot of chips of woods flying through the air from the machines. I see why we need the goggles.

Our first stop on the tour is the place where the raw wood, still in its freshly cut form, is brought into the mill. Each log comes up a conveyor belt and there is a man at the top of the belt in a little room who is responsible for sorting the logs. We stand behind this man, and his job is to decide what each log will be used for. This is decided by its size

and shape. By pressing different buttons the logs are steered in different directions along different conveyor belts.

The guide takes us to view several saw-like machines. These machines turn the wood into lumber. The first machine trims the logs into large square shapes, then another machine cuts them into different lengths and then finally a machine cuts them into smaller dimensions like 2" x 4". We then move outside to the lumber yard where all the cut lumber is stockpiled and stored. The lumber is stacked up high and I see a tractor picking and piling up the bundles of cut lumber. The guide tells us that this is where the finished lumber is deposited and that once the lumber is packaged in a bundle it is called a 'lift' of lumber. It is here that the lifts of lumber wait to be shipped out.

The tour ends back at the lunchroom. We return the hardhats and goggles and the tour guide who says goodbye reminds us that the future is in wood and wishes us a good day. The other people from the tour leave and we stay because we are going to have lunch with my cousin. We sit down and my dad asks me what I thought of the tour. I tell him it was very interesting. He seems satisfied with this answer. He says out loud that it is too bad that they didn't give out free wood as a gift for going on the tour because he wants to build a new shed at the cottage. Everyone laughs. I think to myself what I could do with some free wood too. Maybe, to build a fort in the woods or a dock for the lake so I can go diving off it. There are so many things that you can do with wood. It really is a valuable resource. We hear a bell and within a few minutes the workers from the mill

start coming into the lunchroom. My cousin is one of them and she seems a little embarrassed when she sees us, but then she comes over and sits with me and everything is great. I think to myself that maybe I can get a job here next summer. Maybe one day I'll become a scientist and discover new ways to use wood in our world.

When we examine language pertaining to nature in contemporary Western culture, a dominant conceptual metaphor that emerges in the language is NATURE IS A RESOURCE. Before illustrating the existence of this metaphor in everyday language, it is important to examine the origins of this metaphor in order to understand the context of its existence.

THE HISTORICAL LINK

> When science is seen as a human activity rather than a repository of ultimate truths, and cognition generally is seen as a creative shaping of our conceptions of the world, the creative, imaginative play of metaphor is seen as characteristic not only of poetry, but also of science. When language is seen not only as the medium of making picture-like true statements about the world but as a tool; for communicating, expressing and creating – a chief element in [to use Goodman's term] "world-making" – the role of metaphor must be accounted for in a theory of language. (Kitty, 1989, p. 9-10)

There are three major historical contributions to the eventual emergence of the nature is a resource conceptual metaphor in Western culture. A brief overview of these historical movements will help us to get a clearer idea of the underlying concepts that

created the nature is a resource metaphor.

THE SCIENCE REVOLUTION

The rise of modern science is traditionally considered to have begun in the mid 16th century in the field of physics, with the publication of Nicolaus Copernicus's *De revolutionibus orbium coelestium* (On the Revolutions of the Heavenly Spheres) in 1543 (Cohen, Floris, H., 1994, p. 268). Although Copernicus did not plan to revolutionise science, his use of mathematical reasoning as an analytical approach in explaining the cosmos was a departure from traditional ways in the science of physics. By using mathematical reasoning, Copernicus's work questioned the Aristotelian common-sense approach to physics. Through mathematics, Copernicus developed the concept that the Sun was stationary and at the centre of the universe, and that the planets, which included the Earth, revolved around the Sun. Copernicus's work laid down the foundation for using mathematical reasoning as the language for science.

Following Copernicus, the use of mathematics as the language of science quickly developed in the beginning of the 17th century and several others began to take a great interest in developing the new science. Galileo Galilei, 1564 – 1642, followed in Copernicus's footsteps and used mathematics and geometry to uncover and understand nature and space. "Galileo was much concerned with the role of mathematics in scientific

method and in particular with the problem of the degree to which physical objects correspond to geometric figures" (Mason, 1956, p. 121). His use of mathematics, experiments, and observations to understand nature and space shaped the present day model of scientific reasoning. Galileo presented the concept that mathematics is nature's true language. "With Galileo the mathematical-experimental method of science came to maturity" (p. 124). This development began the fostering of the mechanical philosophy of nature. It was a philosophy that began to view the world as a vast machine that could be understood through mathematical examination of its smaller mechanical interactions. Thus, what resulted was the rise of mechanistic science and the purging of the organic, subjective experience. "A view of the natural world as primarily physical matter with little spiritual content took hold and became the practical metaphysics for human affairs" (Deloria Jr., 1995, p. 16).

The philosopher Francis Bacon, 1561 – 1626, "was amongst the first to become conscious of the historical significance of science and the role it could play in the life of mankind." As a philosopher "he set out to explore the possibilities of the experimental method" (Mason, 1956, p. 110). Bacon argued that in order to advance the new science the primary requirement would be the "searching out of new principles, processes and facts" (Mason, 1956, p. 112). Bacon also believed that for the new science to be accurate the new methods had to purge the mind of what he called "idols," or tendencies to error. These came from human nature ("idols of the tribe"), from individual emotions and experiences ("idols of the cave"), from language ("idols of the marketplace") and from

false philosophies ("idols of the theatre"), like Aristotle's, in Bacon's mind. Consequently, these are examples of subjective truths. Bacon planned a large work, the "Instauatio Magna" (Great Restoration), which would set forth his concepts for the restoration of humankind to dominion over nature. He only completed two parts but essentially Bacon's work fostered the goal to master nature and gave impetus to the development of modern inductive science which is based on objectivism (Anderson, 1962).

Another philosopher who endeavoured to give a general analysis of the new scientific method was Rene Descartes (1596 – 1650). In 1637 Descartes published his *Discourse on Method* which consisted of two parts. In the first part Descartes analyzed the mathematical-deductive method. "In developing his mathematical method, Descartes made notable advances in mathematical technique" (Mason, 1956, p. 132). In part two Descartes presented an outline of his view of the physical world. He saw nature as being governed by laws and he illustrated these laws of nature with the principles of mechanics (p. 135). Descartes work fundamentally changed the way of science and philosophy. For science, his work created a world where "the physical and organic world was a homogeneous mechanical system" which followed the "quantitative mechanical laws revealed by the mathematical method" (p. 135). In philosophy, Descartes created a separation between the mechanical and the spiritual world. Descartes conceived "that the universe was composed, so to speak, of two horizontal planes, the one mechanical and the other spirit, man alone sharing in both" (p. 135). Descartes' work was fundamental in promoting the mechanistic science as well as creating a new way for humans to view their

place in the world. Humans now were separate, even superior, to nature because of their ability to exist in both horizontal planes. Descartes work gave humans a sense of power that didn't exist before and nature merely became a machine that could be tinkered with and controlled. "The Cartesian bifurcation of nature was fatal because it encouraged succeeding generations of scientists to treat an obviously living universe as if it were an inert object" (Deloria Jr., 1995, p. 18).

When you mention the concept of the mechanization of science, people often think of Sir Isaac Newton first. This is because it is seen that Newton was the one who synthesized the works of Copernicus, Galileo, and Descartes along with his own to emerge with what is now referred to as "classical physics," which encompasses the mechanistic view in a single comprehensive record. Newton's work established two traditions which later permeated every area of science. The first was the mathematical and reductionist tradition, which bred the rational, well-regulated image of the universe. The second was the experimental tradition of the "Opticks" (1706), which was somewhat less demanding than the mathematical tradition, and owing to the speculative and suggestive queries appended to the "Opticks," were highly applicable to chemistry, biology and the other new scientific disciplines that began to flourish in the 18th century. Carolyn Merchant in her book "The Death of Nature"(1980), spells out the extent of Newton's work and its effect on the concepts pertaining to nature.

> The mathematization of the world picture presented in the "Principia" (1687), based on the dualism between passivity of matter and the externality of force, epitomized the success of the mechanical analysis of nature. Mechanism

> eliminated from the description of nature concepts of spatial hierarchy, value, purpose, harmony, quality, and form central to the older organic description of nature, leaving material and efficient causes – matter and force. (p. 277)

The works of Copernicus, Galileo, Descartes, Bacon and, Newton created a science that focussed mainly on visual observation techniques. Observation with the eyes became the tool for understanding. In doing so, the body and our sensibilities of emotion became invalid and nonessential.

> Visual knowledge alienates the psyche and degrades the body, which comes to be equated with the world of matter. In contrast to the soul or ego, matter is considered dead and inert. Hence the body and the entire material realm come to be viewed as something that can be willfully manipulated; and since the world is without "feeling," there is a tendency in dealing with it to dispense with the morality that supposedly obtains in human relations. (Arguelles, 1975, p. 23)

Overall, the new science viewed nature like a machine. If you could understand the parts and put them together, like a clock, you would understand the machine. For example, the notion that " stars and planets moved like clockwork according to universal rules" (Botkin, 1990, p. 103) arose out of the new mechanistic science.

The nature as a machine metaphor and the mechanistic philosophy of science dominated the 17th and 18th centuries. The importance of the science revolution is that the use of mathematics to understand reality began the whole process towards objectifying and abstracting nature. Nature started to be viewed as an object that had no intrinsic value except for humans to understand in order to dominate and have mastery over.

During the 17th and 18th centuries, the advances in science, due to the new mechanistic philosophy, led to many new inventions. In particular, there were new machines which could be used for industrial purposes, such as the sewing machine, the spinning jenny, the machine loom and the steam engine. "The success of these machines and their ability to transform society and improve the standard of living reinforced the growing faith in the new sciences and the machine ideal" (Botkin, 1990, p. 104). With the advancement in machine innovations and mechanistic approaches to economics, another type of revolution occurred.

THE INDUSTRIAL REVOLUTION

The term industrial revolution is used to describe the historical transformation of traditional into modern societies by industrialization of the economy. The first industrial revolution occurred in Britain in the 18th century. The importance of the industrial revolution in creating the conceptual metaphor Nature is a resource is that the process of advancing the industrial organization of a society often leads humans to alienate themselves further from nature. Before the industrial revolution, work organizations were simple and small scale. Members of a family provided for their own needs, utilizing materials like wood which they would carry through the various steps of a production process, like a blacksmith or basket weaver. In these simpler forms of industrial organization, humans had much more physical and emotional contact with nature. Rural life was very common and being within nature allowed humans to see their existence as a

part of the land. For example, a family that provided for itself needed to tend to the land to produce food to eat. This way of securing a living led to direct contact with nature in the forms of agriculture and hunting (Ashton, 1964, chapter II).

The advanced industrial organization, known as the factory system, played a key role in the industrial revolution that originated in Britain. The factory system brought large groups of people together in a building to be totally devoted to their work. This form of organization drastically changed social and economic standards. Multitudes of people moved away from the land to the urban areas where the factories were located. This relocation greatly severed the physical and emotional ties that existed between humans and nature. In the cities, the people sold themselves as labourers rather than as artisans, so economically they identified their own self worth through monetary notions rather than through their skill of living with and from the land. They were no longer immersed physically in the land and this change removed the connection that people had with nature. Nature was something to go *see* rather than be a part of (Heilbroner, 1980, p. 82-83). The focus on visual sense in the new science became the instrument by which reason and understanding was achieved. The opportunity to understand nature through the body, with our senses, was taken away and dismissed as an illegitimate way to experience and understand. "Reason appropriated the organ of vision and the rest of the sense-body shrank in proportion" (Arguelles, 1975, p. 15)

The new mechanistic science changed the way humans perceived themselves in the

world. With each new scientific discovery and with technology growing exponentially in all fields of science, humans began to feel the power that technology and science could give them and they relied less on there own intuition and bodily senses. As science unravelled the mysteries of nature, we no longer needed to fear or have emotion for it. It could be controlled, and manipulated to fit human lifestyles; just as science controlled our senses and our way of understanding. Today, the belief that science can answer everything still continues. Science has given humans a sense of power over nature, and this in turn, has given greater importance to scientific reasoning.

ECONOMIC THOUGHT

With the rise of the industrial revolution and the new mechanical science, it was only natural that economics would emerge as a separate discipline in the 18th century. With the rise of factories, capitalist enterprises, and mass production, economists of the 18th century sought to discover the universal laws of production, exchange and distribution. Using mechanistic science, economists reduced and rationalized the market economy with mathematics to find ways to improve efficiency and eventual profits (productivity). Adam Smith exemplifies this notion of productivity in his concept of "Division of Labour" that appears in his work *Wealth of Nations* (1776). Smith, through the example of a pin maker, systemically reduces the production process and its tasks into mathematical quantifications. By doing so he illustrates ways by which the division of labour can enable an employer of a pin factory to construct the most efficient product and

gain more profits (Heilbroner, 1986).

The application of mechanistic science to economics brought the final end to nature having any sort of intrinsic value. It was here through economics that the metaphor of resource was developed. Now the world became a place of things to produce, use, buy and sell. Money became definitive of wealth and this concept was reflected onto nature. Nature became a source that could be produced, used, bought and sold to create wealth for humans. Nature became a resource – "a new or a reserve source of supply or support: a fresh or additional stock or store available at need: something in reserve or ready if needed: immediate and possibly sources of revenue (rich natural resources) (Webster's Dictionary, 1993).

In the 20th century, economics has reduced nature to a monetary value as a resource. Although the environmental movement established itself in the 20th century, the metaphor nature is a resource is overly prominent in our language. Human rational minds of the Western World may well be advocating environmental consciousness, particularly through education, but what is the nature is a resource conceptual metaphor really saying to us? Let us examine the nature is a resource conceptual metaphor a little more closely to see.

NATURE IS A RESOURCE

Our language has many everyday expressions that are based on conceptualizations about nature. These conceptualizations are used not just for talking about nature but for reasoning about it as well. This is why by examining language, particularly metaphors, we can link up with the thought and reasoning processes that establish our relationships and actions towards nature. The everyday language we use when talking about nature is not poetic, or rhetorical; it is literal. "We talk about... [nature] ...a particular way because we conceive of it that way - and we act according to the way that we conceive things" (Lakoff & Johnson, 1980, p. 5). Therefore, looking into the concepts behind the nature is a resource metaphor can disclose the way we think and act upon nature.

The history behind the new science paradigm, its objective visual focus, has moulded us and our ways of thinking and it is easy to see how for most of us the concept of nature is a resource is a reality. Everything around us, our entire reason for getting up in the morning, is based in the system of economics and the concept of resources.

> Capitalism and consumerism are so ingrained in the American "real world" that they are seldom questioned as foundations of human life. Materialism and an objective sense of physical reality predominate the mindset of most modern people. For many moderns, this orientation has become a theology of money, treated as sacred and strived for religiously. (Cajete, 1994, p. 46)

Everything around us is considered a resource, something that can be used to meet an end. The mirror (a resource), is an object that we gaze into that allows us to see and

make ourselves acceptable (an end). Being acceptable (a resource) allows us to make money (an end). Money (a resource) then allows us to buy other resources, like a computer (an end), that can make ourselves even more acceptable, as a resource. And the cycle continues. It is no wonder then that nature can easily be conceptualized as a resource because the experiences and language that already exist are so pervasive in our everyday Western culture.

So what is the language that promotes the nature is a resource metaphor? What are the concepts and actions that prevail and is this what we as environmental educators, parents and citizens of the planet Earth want to foster?

Before showing linguistic evidence, let me first illustrate the logical generalization of the nature is a resource metaphor. Following the classical syllogism, if X is in category A and category A is in category B, then X is in category B, the logical pattern of thought for the nature is a resource metaphor based on known definitions would be,

Nature is a Resource (X in A) and,
Resources are for human need (A in B) then,
Nature is for human need (X in B)

(adapted from Lakoff, 1991, p. 213)

With our understanding of resource, which is founded in an economic rationale, it is only logical that, when the nature is a resource metaphor appears in our language, we

conceptualize nature as an object for human use because of our understanding of resource.

For example, if someone were to say to you, *we've run out*, one can conceptualize the idea of a resource running out but this expression is not necessarily about nature. *We've run out* can be used about any resource, and when it is, it evokes knowledge about resources. This knowledge and experience may vary from person to person but the concept of depletion, regardless of the type of resource, is understood by everyone. Almost everyone who lives in the Western World uses money and pays bills, and these experiences underlie the concepts of resources and depletion.

Now if a foreman and a logger are talking in front of a clearcut and the logger says to the foreman, *we've run out*, this expression can be readily understood as being about the trees that no longer exist. Thus, nature is understood in the concept of a resource.

Let us look at some of the ways in which resource can be understood. As per its definition, a resource is seen as a need or supply that is waiting to be used. A resource is seen as a means that is, therefore, subservient to ends. A resource can also have a monetary relation. It can mean wealth, provision and livelihood. When resource is understood in monetary terms the entire conceptual system of the finance domain is included. The concepts apply to a resource that is in *supply, reserve, stock, store,* that should be *stowed away, treasured, saved, put away,* once *accumulated* to insure that it doesn't *deplete, exhaust, run out, drain,* or get *wasted.* All these aspects stem from the

concept of resource (Roget's Internet Thesaurus).

Since the concept of resource is founded in on economic rationale, many of the terms and expressions listed above are also used in the finance domain. Finance is the "art or science of managing revenues and resources for the best advantage of the manager" (Devil's Dictionary, 1911). So what happens when they are used to refer to nature? Nature is understood as a resource just as in finance. Here are some examples of what one might hear through the media. Have you heard expressions like this before?

-At the rate at which the rainforest is being cut down, scientists speculate that it won't be long till we are *almost out of* prime examples of old growth rainforest.
-We have a steady *supply* of crude oil in *reserve* to be *used* whenever it is *needed.*
-There is quite the *storehouse* of medical *treasures* waiting to be discovered in the rainforest.
-We have just about *exhausted* the fish *stocks* and it is time to *save* and *replenish* them so that we can enjoy their *benefits* in the future.

Through these expressions it is easy to see how the concept of nature is a resource is conveyed. The concept of resource is heavily built into the concept of use. From this, the care of nature becomes something that needs to be *managed, assessed, regulated, dominated, controlled, exploited,* and *manipulated.* Nature is like money and everything else that is seen as a resource, even humans themselves.

The nature is a resource metaphor assumes that whatever is in nature is, and should be, a part of the human economic system. It should have a value placed on it,

which is to be determined by its usefulness and the market economy's regulation of supply and demand. If it is in demand, its value will be high. If it is in abundance, its value will be low. The value of nature is brought down to a science where it is abstracted, reduced, objectified, categorized, and quantified. This 'resourceful' conception of nature not only leaves nature physically external but also internally external. Nature in the form of an economic resource has no intrinsic value. Value is based on abstract notions that are computed through mathematics. Nature is replaced by numbers and dollar signs. The mere existence of a deer prancing through the forest in itself has no value according to the nature is a resource metaphor.

THE CURRICULUM LINK

Knowing this, the question then as an environmental educator becomes, if we are using the nature is a resource metaphor in environmental education, what exactly are we educating people about nature?

Most of today's environmental education is about conservation and building a harmony between nature and humans. The definition of conservation is..."1. the act of preserving, guarding, or protecting; preservation from loss, decay, injury, or violation; 2. the official care and protection of natural resources, as forests" (Webster's Dictionary, 1993). The Western mind believes the primary way to achieve conservation is to gain knowledge of nature through the sciences. The question to ask ourselves here is what are

we conserving for? If nature is seen as a resource, one can only assume that the goal of conservation is to ensure future *use* of the resource: nature. Is this the goal of environmental education?

There is a range of environmental education curriculum guides out there that show students through activities how to observe, reduce and quantify nature to get a better understanding of how it works. The doctrine being espoused in these guides, is that students will gain an appreciation of nature because they have achieved an understanding of it. In many circles environmental educators believe an appreciation of nature is what makes people become conscious conservationalists. But, these activities simply teach a way of seeing, not understanding.

I have been an environmental educator for over ten years and I have followed this doctrine and have watched and waited for the environment to be purged of its devastation. I am still watching and waiting. The question is: why is nothing happening? When you begin to examine the language we use in Western culture when speaking about nature, the nature is a resource metaphor is very dominant and I believe that as environmental educators we are following a doctrine that makes sense only on the surface. When we go underneath the surface and examine the conceptual layers that lie beneath the language and expose the concepts that the nature is a resource metaphor highlights, we see an oxymoron and vicious circle appearing. Yes, we are teaching people to conserve and be wise with resources, but only for the purpose of *use*. We are educating to the logic of a

save:use concept. Save nature to use as a resource and, as we use it, find ways to save it for future use. It is a circle that helps to perpetuate itself. To illustrate this, below is actual text taken from a Ministry of Education document.

B.C.'s Ministry of Education has been coming out with new Integrated Resource Packages (IRP's). In 1995, it developed the Science K to 7 IRP which now must be used in British Columbia schools. This document has prime examples of the nature is a resource metaphor and the concepts that encompass it. The following descriptions are taken from the Grade 5 Life Science (B.C.'s Living Resources) Section and appear under the Suggested Instructional Strategies/Activities – point # 2 and #4.

> The teacher provides a variety of learning resources, such as a fish enhancement program, to develop students' knowledge of the ways humans impact B.C.'s *living resources* (*enhancing, harvesting, processing, using*). Students suggest responsible ways of *using* such *resources*.
>
> Students investigate ways of lessening the impact of *resource harvesting* through the development of conservation and recycling technologies. Students could make graphs of *usage* to access the effects of these strategies. Students could discuss how various conservation and recycling technologies affect the length of time required to *renew the resource*." (p. 64, *my emphasis*)

The Context for these activities is;

> Knowledge of B.C.'s *living resources* is important to our future. Students investigate the effective *uses* of various living resources (e.g., forest, waterway, animal, and scenery). They consider issues of *resource use* from various perspectives. They identify ways in which *living resources* are *used* responsibly in their communities." (p. 64, *my emphasis*)

When one views the language used in these activities it is easy to spot the nature is

a resource metaphor. The **save:use** conceptual pairing of the nature is a resource metaphor is highlighted here and exists throughout the guidelines. The activities promote lessons that advocate nature is a resource, and that, by understanding the metaphor, nature can be saved (conserved) through scientific technology for future use. The activities educate that nature's only value is as a resource for our own human use. The nature is a resource metaphor plays out throughout the Science K-7 IRP in all grades and the concept is the same, **save:use.** This concept is founded on the Western scientific rationale and it leads to a mind-set that engenders a radical destructiveness towards nature because it only understands nature as a resource. It offers no other opportunity to consider other values except those for the purpose of human use. The critical importance of this document is that all B.C. teachers need to follow the new IRP's. Any environmental curriculum that is developed by educators and/or environmental organizations needs to meet the objectives of the IRP's, otherwise teachers will probably not use if it doesn't help to fulfil their IRP objectives. This document sets a precedent that the teachers must follow.

The nature is a resource metaphor conceptualizes nature as an object of economic value and as an object for human use. This is what the nature is a resource metaphor highlights and we have discussed the types of actions, (conservation and utilization) that this metaphor promotes. The nature is a resource metaphor emerges naturally in our culture because the concepts it highlights correspond so closely with our everyday experiences. It is hard to escape our experiences and because of this it is hard to conceive of other realities. The nature is a resource metaphor that exists in environmental

education grows out of our Western culture rationale, one that is dominated by science and economics. Environmental education that speaks the nature is a resource metaphor is not wrong. It just fosters and chains us to the Western rationale. It prevents us from comprehending other ways of conceiving nature.

The question that we need to ask ourselves is: What does the nature is a resource metaphor hide? From our examination we know that the nature is a resource metaphor objectifies nature. It understands nature through symbols. Its value, also a symbol, is external and economic. Nature is not a part of us; we control it. It does not warrant respect.

This seems very harsh when we read it but it is the reality of the nature is a resource metaphor. But, we have nevertheless also had experiences in nature that probably exist outside of the nature is a resource metaphor. What do those experiences highlight? Are they experiences that highlight the subjective side of nature? The sensuous side? The value of nature that comes from being? A nature that lives and has aesthetic value in itself? What metaphor is there that highlights the conceptual reality of that nature? A metaphor that relieves us from the great chains of Western being? A metaphor that brings nature back to life and to a level that warrants respect? A metaphor that validates our sensuous experiences . A metaphor that allows for harmony between humans and nature?

Science tells us that this whole panorama of life, our deepest experiences, and our most cherished ideas and emotions are really just the result of a fortunate combination of amino acids happening to coalesce billions of years ago and that our most profound experiences are simply electrical impulses derived from the logical consequence of that first accident. We thus stand alone against the cumulative memories and wisdom of all other societies when maintaining this point of view. (Deloria Jr., 1995, p. 38)

CHAPTER FOUR

I sit cross-legged on the ground and stare into the blazing fire in front of me. A hearth of stone surrounds the fire and I watch the sparks rise from the flames, reaching high above, but disappearing just before they reach the roof beams. The sound of the crackling wood keeps my senses alert and I am warmed by the light that radiates from the fire and from the eyes of the people around me. There are six of us sitting around this fire, but we are not alone. Around us there are four other fires with their own group of admirers. We are all gathered in a Big House and although we are separated into our own families, we feel as if we are all related. I belong to the gatherer family. This afternoon, my family will gather the things that are needed for the great feast. The other families are the hunters, the fishers, the wood workers and the weavers, and they, too, will contribute to the great feast. As I sit here enjoying the sensuous experiences before me, I feel a sense of certainty. I feel a sense of belonging, of purpose, of being an integral part of a grander scheme. What it is I do not know, but I am anxious to find out.

It is afternoon and our gatherer family is preparing to go out, preparing to gather. Everyone grabs a basket and we follow an elder who leads us out of the Big House and down a path that meanders into the forest. Along the way the elder stops, bends down at the side of the path, says something that I do not understand and begins picking at a small patch of green leaves. We stand and watch. She places the greens into her basket and then rises. It is only now that she speaks to us. She begins by telling us that in her culture

one learns by watching what goes on around you. She hands each of us a portion of the greens. We look at them and then she tells us they are dandelion leaves and that they are edible. Since it is only late March, the flowers have not yet bloomed and therefore, the leaves are tender and less bitter. We are told to taste them and to me, they taste like grass. The elder tells us to look around the area and to pick more dandelion leaves because we will be using them in a forest salad for the great feast. Everyone disperses to look for the plant.

I decide to go and ask the elder what she said before picking the dandelion. At first the elder pauses, then she smiles at me and looks me straight in the eyes and says, "You are a keen watcher, ... you learn with your senses, ...you will learn more deeply than others."

Her gaze warms my heart and I feel honoured. She tells me that she says a type of thank you before picking the plant. "The plant and all of nature is part of creation; life. Therefore, to be respectful, like having good manners, one must acknowledge and be humble for life's offerings."

The elder walks away and never tells me the actual words and it doesn't feel appropriate to ask. Instead, I walk to a nearby patch of green and look for dandelion leaves. I find some and before picking them I think about what the elder said. I think about the life in the dandelion and how it grew from the same things that sustain my own

life. I feel guilty about picking the plant because it will kill it. Then I remember that the elder used the word offering when speaking about the plant. She was not *taking* the plant but rather the plant was *offering* itself to her. Perhaps this act of respect reverses the action from taking to offering. What a different way of looking at it.

In my own life, I am aware of times when I feel others are taking from me, but there are also times when I feel like I am offering. I offer when I feel love and when I know that the other is thankful and respects me for my offer. Could it be that this awareness exists within nature? I feel wonderful at the thought that there is a mutuality between me and the plant; between me and nature. I lean over and thank the plant for offering its nourishment and convey that I will respect its offering and not abuse it. I feel overcome by a sensation of power, although not in the sense of control over the plant but in the energistic power that exists in this plant, in me, and in all of nature. The power and strength of life. In that moment I feel like the plant and I are one. That we belong to the same family.

I continue to gather dandelions to fill my basket and realize that because the elder did not tell me the words she had voiced, she has allowed me to experience my own words. The thoughtfulness used in creating my own words makes the experience more personal, meaningful and truly unforgettable.

As I walk through the forest I see it, no, I feel it differently. I have always

appreciated nature because of its beauty, but now I walk with it and appreciate it as a relation. It is an extension of myself and together we are the life energy that encompasses us all.

For about two hours we continue to gather plants after which we walk back to the Big House to prepare for the great feast. Each family group contributes to the feast. The weavers make grass mats on which to place the bowls of food. The wood workers carve bowls in which to place the food. The fishers and hunters offer salmon and deer. We, the gatherers, offer a forest salad which is placed on a food table that we have decorated with cedar branches. Our sense of accomplishment and community is strong.

Later in the evening, after the great feast, the elder tells me the words she said before picking the dandelion leaf. Her words beautifully synthesized and expressed all that I thought and experienced that day. She said, **"Mitakuye Oyasin"** (All my relations).

When we examine language pertaining to nature in aboriginal culture, a dominant conceptual metaphor that emerges in the language is NATURE IS A FAMILY MEMBER. Before illustrating the existence of this metaphor in aboriginal language it is important to examine the origins of this metaphor in order to understand the context of its existence.

THE ABORIGINAL ORIGIN LINK

> Is not the sky a father and the earth a mother, and are not all living things with feet or wings or roots their children? (Black Elk, Sioux Nation, 1961, p. 3)

Aboriginal cultures understand the world and all that is in it as a related whole (Bruchac, 1989, p. 5). This understanding originates in the many different aboriginal creation stories[1] that exist. The retelling of these stories has been passed down from generation to generation. In these stories, aboriginals hear about how their original ancestors and all that is in nature came to be. In many of the creation stories it is often recounted how the original ancestors were created out of nature by a great power or spirit. The following examples of creation stories are taken from different aboriginal Nations and illustrate the link between the natural world and the aboriginal people. The Hualapai Nation came into being in the canyons of the Colorado by being transformed from tall canes that grew by the riverbank. The Haida Nation of the Northwest Coast are said to have been coaxed out of a clamshell by Raven and the Algonquian or Wabanaki Nation were borne from a split ash tree. (Time-Life, 1997, p. 14-16). Among the Navajo Nation, the creation story recounts how the first man was borne from a white ear of corn and the first woman from a yellow ear of corn and it was the wind that gave them life (Erdoes & Ortiz, 1984, p. 39). The original ancestor of the Osages Nation grew out of a

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[1] I choose the word 'story' over 'myth' or 'legend' because I feel the word 'story' implies a narrative that is founded in a personal truth. The word myth or legend often implies a notion that the narrative is somehow removed from reality. Aboriginal philosophy is founded in their stories and many parts of these stories are founded on the reality that exists around them in the landscape. Therefore, I understand and refer to them as stories.

snail's shell (Bemister, 1973, p. 60). In Mayan text, the Heart of Sky, Heart of Earth, Newborn Thunderbolt, Raw Thunderbolt, Hurricane, Maker, Modeller, Bearer, Begetter, Heart of the Lake, Heart of the Sea and Sovereign Plumed Serpent all got together to create the first people. In their first attempt they created people out of mud but they were too soft and ugly. In their second attempt they carved people out of wood. Man's body was carved from the wood of a coral tree and woman's from the pith of reeds (Knudtson & Susuki, 1992, p. 198). In Australia, the Yarralin, Murngin and Aranda Nations all understand their original human-form ancestors as having been transformed from various spiritual animal Creation Time ancestors (Knudtson & Susuki, 1992, p. 39, 131, 138).

These few examples illustrate the prominent link and relation that exists between the natural world and aboriginal peoples. Although often labelled as myths, aboriginal creation stories reflect the natural phenomena that exist in the physical world and the stories illustrate the direct connection that aboriginals have with nature.

> One of the oldest concepts in Native American traditions is the recognition of Earth as the source of human life. Literally and figuratively, the Earth is our mother. It is a concept so old that it is firmly embedded in the languages, ceremonial practices and traditional stories of indigenous cultures throughout the western hemisphere. Rather than being a romantic vision, it is a logical view of reality, rooted in the Native practice of closely observing the physical world. (Bruchac, 1997, p. 12)

The idea that the original people were borne from nature is not unique to aboriginal cultures. It exists in other cultures as well, such as in Judeo-Christian where Adam, the first man is created from the dirt of the Earth. Today, the Judeo-Christian view

that dominates in Western culture does not further develop the belief that humans are one with nature. Rather humans are seen as separate from nature and even the dominators of it. (This is explained in chapter three.) The belief that nature and people are **one** and are connected is a concept that still continues to prevail in aboriginal culture. It is this concept of direct connection that allows aboriginals to view their relationship with nature as a family. They see and understand their relationship with nature as a relationship that needs to be nurtured in order to survive and this corresponds to the similar experiences that they have with their own family relationships. In many aboriginal creation stories, like those mentioned, it is illustrated how they were created out of nature. Aboriginals share the common bond of life with nature and these stories illustrate how everything in the world is connected: nature and people. The concept of connectedness and relation parallels their experiences of family and emanates to their concepts about their relationship with nature. Nature is family.

> In the eye of the creator, man and woman, plant and animal, water and stone, all share the earth as equal partners - even as family. "We Indians think of the earth and the whole universe as a never-ending circle, and in this circle, man is just another animal," explains Jenny Leading Cloud of the Rosebud Indian Reservation. "The buffalo and the coyote are our brothers; the birds, our cousins. We end our prayers with the words *all my relations* - and that includes everything that grows, crawls, runs, creeps, hops and flies." (Time-Life, 1997, p. 11)

Aboriginal creation stories relate the idea of being borne from nature. It is, therefore, easy to see nature as a mother. Nature and everything that exists in it can be seen as providing sustenance for life. The sun, water, plants and animals are all aspects of nature that sustain life. Nature is seen as a nurturer, as a being that cares for life. This can

be paralleled with the concept of family. Our experiences of family, mother, father, brothers, sisters, grandparents etc., embody the concepts of care and nurturance. Our family takes care of us. A mother gives life and nurturance; a father provides stability and is a guardian; brothers and sisters provide support and friendship; grandparents provide wisdom. Comparatively, nature in aboriginal culture is also seen to provide the qualities of a family. The earth and nature as a whole, who gave us life and sustains it, is a mother. The sky, who provides stability through its atmosphere, is a father who also stands above and watches over us. The plants and animals of the earth provide support and friendship like brothers and sisters. The spirit and mystery of nature are like grandparents because they hold the wisdom of time. Nature is a family because it supports life like a family. Jan Hartke (1990) wrote in the introduction in Ed McGaa's book, *Mother Earth Spirituality*, this account of the family metaphor in aboriginal culture,

> I used to think the Indians were talking metaphorically about sister mountains and brother buffalo, but I have now known the quest and seen the vision. I am beginning to understand! If there were no rocks, my body would have no minerals and I would die. If there were no sun, the plants would not grow and I would die. If there were no water, my cells would dry up and I would die. If there were no Great Spirit moving in all aspects of the vast creation, I would not have awakened with a consciousness of this cosmic dance of life. (p. xvi)

In aboriginal culture, the familial tie to nature is not just spiritual or mystical. It is understood in a physical way. Their physical ties to the land as well as their own physical experiences of family are reflected in nature. Even before there was science to prove anything, aboriginals, through their stories and from viewing the world around them, saw the inherent forces of nature and saw how everything in it, including themselves, were

nurtured by these forces. Just by watching the world around them they understood how everything was balanced and interdependent, just like members of a family.

> Viewing the workings of the world around them led virtually all of the indigenous peoples of the Americas to envision concepts of duality and balance. "For every action there is an opposite reaction" is both a law of physics and Native American common sense. Rain falls from the sky and the grass grows up from the earth. Together the sky father and the earth mother give birth to new life. All of us, human beings, animal beings, plant beings - even the stones, the water and the wind - come from the body of the same Mother Earth. It may simply be said that the Earth and the People are one, just as the mother and her biological child are one. (Bruchac, 1997, p. 13)

The aboriginal experience establishes a philosophy for a familial relationship with nature. They view nature through the same eyes through which they view themselves: through the experiences and bonds of family and human kinship.

Aboriginal cultures rely on human kinship and a sense of community as a way of living. The family experience underlies the foundation for their community as a people and as part of the world community, which includes nature. The concept of family is sacred because it reflects the sacred ways of respect and interdependence that the Great Spirit created and which they can observe in nature. Concepts of respect and interdependence are learned and practiced in family experiences (blood-related or nature) and they promote balance and harmony and the continuance of life. In order for a family to survive they must respect one another and acknowledge their interdependence. This belief runs strong in aboriginal cultures. The concept that family is very sacred and must be nurtured and respected extends to nature, and aboriginals realize the sacred role that

must be played in their relationship with nature. Chief Leonard George (1997) of the Tsleil-Waututh Nation of the traditional territories known as the Burrard Inlet, illuminates the Nature is a family member metaphor and the concept of respect for nature.

> The core of the centre of the earth which we call the great grandmother to the surface of mother earth where everything grows out of we call the mother, to the father that is our Sky that builds our beings with clouds and rain and sunshine to the great grandfather which is the galaxy that we travel in. Everything between the great grandfather and the great grandmother is relative to each other. That is why we say all my relations. We're smart. We know that between those two beings everything is relative and in order for us to survive all our relations have to survive as well. (1997, oral presentation)

The family experience establishes connection. Connection created through respect and interdependence is sacred because it allows for everything to be nurtured and for everything to live in balance and harmony. If these connections are broken, balance and harmony is threatened.

> Native Americans believe that if they act in accordance with sacred tradition, they maintain harmony between humans and other elements of the natural world. If they violate the sacred ways, however, the orderly workings of the natural world are thrown out of kilter, and the imbalance may cause bad things to happen – sickness, accident, disaster. (Time-Life, 1997, p. 10)

This belief in aboriginal culture is easily verified to them by the events that have happened and continue to happen around them. For example, when the white man took away land from the aboriginals and placed them on reservations and in residential schools, the traditional and sacred ways of practising community and family were devastated. This forced abandonment of traditional and sacred ways created disharmony and imbalance in the aboriginal community and the societal effects continue today. Comparably,

devastation to nature through deforestation, strip mining and widespread pollution of air, water and soil, is threatening the harmony and balance of nature and all the exists on Earth.

In aboriginal philosophy, the understanding that the world is a related whole symbolizes that the entire world is a 'living' entity, regardless of the 'scientific' understanding of living. Understanding the world as a *living* whole is a key link that supports the concept of nature is a family member. Opposed to the nature is a resource metaphor, where abstract, inanimate aspects of nature are highlighted, the nature is a family member metaphor highlights the concrete, living aspects of nature and this plays a vital role in the conceptual reality that it creates.

THE VITAL LINK BETWEEN FAMILY AND NATURE

Life is one of the most important aspects that arises from the aboriginal's family concept of nature. If nature is a family member then it is understood as a living entity. This understanding connects it to our own existence. In general, we do not view ourselves as a resource having only monetary value. We humans are living beings, and we intrinsically know that we possess value that exceeds the notion of a monetary resource. If we summed up the monetary value of our human parts it might sell for a couple of hundred dollars . You chuckle at this value because you know a human is worth more. Why? Economically, that is what a human body is worth. But there is more to a human

than its bodily resources. Chief Leonard George eloquently spoke to this value:

> The whole problem is, I think, that in approaching the state of the world, is that we do it, we don't do it, without the whole of ourselves, and what I mean by that is that I, the way I look at it is that we have the word *human being* that makes up, that gives us an explanation of the whole of what we are, and the word is separated, and I think it is separated for a specific reason. I think that the *human* part of us means our physical makeup and the *being* part of us is our soul, our spirit We think today that those things automatically go together, and they don't, we have to work at the relationship of that. (1997, *my emphasis*)

Here, Chief Leonard George illuminates the concept of the soul or spirit that in conjunction with the body, makes us whole. Our 'living' is dependent on a spirit or soul as well as a body. The spirit bears no monetary value because, as of yet, its existence hasn't been 'proved,' yet it is a part of us that is invaluable in making us feel whole. The concept of spirit is very important to aboriginal cultures because it makes them whole as human beings. *Spirit is everywhere and it connects them with everything else that exists.* This is a fundamental principle in aboriginal culture.

> Spirituality and a sense of the sacred permeated all aspects of Indigenous community. Life was sacred, relationship was sacred, Nature was sacred, and the tribe was sacred. Each of these processes and structures was a creation of the highest thought and tied to the guiding myths and foundations of the religious expression of a tribe. (Cajete, 1994, p. 174)

This is why traditional ways are so sacred, because the stories and rituals that exist in aboriginal culture maintain this spiritual connection. This connection creates a grand scheme of existence that generates awe and humility among the aboriginal peoples and it is in this existence that the aboriginals are able to see beyond the concept of nature as a resource and value nature in itself just because it exists, because it is, just like them. The

concept of spirit as a part of everything creates a connectedness to all things and it encourages the connected experiences that aboriginals have with nature. The idea of spirit travels into territory that exceeds the concept of monetary value. It allows for a value to exist in the world that isn't determined by economics.

Life is spirit, spirit is life. For aboriginals, there is no clear division between human beings and the spirit world. That is, in general, they believe spirit is everywhere and spirit connects and affects all that exists. Aboriginal life is connected to nature not only physically but also spiritually. They go hand-in-hand and are developed in their stories and traditional practices. The following examples of sacred practices illustrate the ways in which the physical and spiritual worlds are united, and in doing so, reinforce the connection between humans and nature.

Aboriginal culture creates a vital link between its people and nature. It portrays nature as a living entity and this allows human experience to establish a concrete concept of reality. It is the major difference that lies between aboriginal views of nature and Western science. "The premise accepted by aboriginals and rejected by scientists: the world in which we live is alive" (Deloria Jr., 1995, p. 55). Nature provides us with food, water, sunshine and the air we breathe. These aspects of nature connect with the human experience of life and of motherhood. A mother cares for and nurtures her children. By understanding nature as family aboriginals can use their own experiences of family relationships to understand nature and visa versa. Family and nature are intricately

connected by their common affinity to life. Aboriginal culture illuminates the interconnectedness that exists between family, nature and life.

In many aboriginal stories there exist animals who take on the role of a mother or guardian to provide wisdom and protect all life from harm. For example, in Tewa Nation stories, Grandmother spider is an entity that has assumed this role. In the stories, when one doesn't listen to the words of Grandmother spider, bad things can happen. In the story of *How the Tewa Found Their True Home*, Grandmother Spider tells the wandering Tewa people to "Look to the south. Far in the distance is Turtle Mountain. It is a golden place. When you have reached it, you will have reached your true home." As the Tewa began travelling south they began to quarrel, and counter to Grandmother's spider's words, smaller groups travelled to the east, west and north. The Tewa that travelled to the north towards the beautiful white covered mountains could not grow corn and froze to death. The Tewa that travelled East were warned by Grandmother Spider that the Red Eastern Mountains were red because they were stained by the blood of people who died there, but they did not listen They were killed by rampaging Comanche. The Tewa that followed the path of the sun west towards the Black Mountain, went to where Grandmother Spider had said not to go because corn will wilt before it can ripen. When the Tewa arrived at Black Mountain, two angry War Twins told them to go away and that they should have listened to Grandmother Spider. These Tewa then headed back and were crying for Grandmother Spider. She was now in the sky and the Tewa ran to her and joined her in the sky. The Tewa that listened to Grandmother Spider's words travelled through many

beautiful lands until they came upon Turtle Mountain. It was there that the Tewa settled in the shadow of Turtle Mountain beside the Rio Grande River and still, to this day, it is the place the Tewa call home (Max, 1997, pp. 20-22).

This story relates many facets of the intricate weavings between the concepts of family, life and nature in aboriginal culture. The entity of Grandmother Spider brings together the family, life and nature concepts. Firstly, a grandmother signifies a familial bond. It also means that she herself has given life, has cared for and nurtured life. By using the concept of grandmother, an ancestral bond is created between the grandmother, the Tewa and even the listener. Within aboriginal families, a grandmother or other elder is highly respected because they represent wisdom. Their wisdom is respected because it is gained from having lived a long life and this enables them to give wise reflections on life. The grandmother, as an incarnation of a spider, nourishes the notion that nature and humans are one. That nature (ie. the spider) is an ancestral part (ie. grandmother) of humans.

This aboriginal story, like many others, founds its tale in the physical formations that exist in nature today. The Black Mountain with its twin peaks lies in the Black Mountains range on the border of Nevada and Arizona just southwest of Las Vegas. The Eastern Red Mountains divide the Southwest and the Plains in the USA, and Turtle Mountain lies in the Upper Rio Grande Valley between Santa Fe and Taos, New Mexico. Seeing these physical formations around them remind the Tewa about their kinship with

nature and the respect that they must have for nature to maintain balance and harmony in life. The physical formations that appear in aboriginal stories are considered sacred sites because of their significance to life on Mother Earth. Here are some examples of sacred sites in aboriginal culture. The Black Hills (*Paha Sapa* in Lakota Language) in South Dakota (Paha Sapa, 1993). The *Sipapu*, considered the 'place of emergence' among the Hopi, which is located at the bottom of the Grand Canyon (Indians of the Southwest, 1995). The *Arafura Swamp*, and its surrounding landscape is the sacred landholding of the Rrarigurak Gurumba Gurumba clan of the Murngin Nation in Northern Australia. The landscape was created by Kurko Akowar, the ancestral human-canine figure of the clan, when he emerged from the underworld (Knudston & Suzuki, 1992, p. 139).

The kinship between nature and aboriginals is very strong and it continues with the retelling of stories to new generations. In Australian aboriginal culture there exists a living record of the earth's origins in what is known as the *Dreamtime*, *Dreaming* or *Creation Time*. The entire natural surroundings in which the Australian aboriginals travel act as a sacred map that has recorded the origins of life and all that exists.

> In the Dreaming - that timeless epoch of creativity that gave form to the diversity of life, set in motion nature's cycles, and left its enduring imprint upon the earth's crust - all species, including kindred humans, were subtly entwined within a transcendant web of meaning that renders eternally sacred the processes, places, and personages of the natural world.(Knudtson & Suzuki, 1992, p. 39)

Held in the Creation Time stories of the Murngin, Yarralin and Aranda People of Australia is the fundamental notion that human and animal existence is transformable. In

many Creation Time stories the transformation between human and animals is an ongoing occurrence. For this reason Australian aboriginals have a particular kinship with animals and they identify themselves in smaller communities of clans which carry a specific animal as a totem.

Humans, animals and landscape unite in the Creation Time stories. For example, among the Aranda, the Krantji Kangaroo Clan identify themselves with the red kangaroo and there are specific Creation Time stories that relay the origins of the red kangaroo. The place that the Red Kangaroo Clan consider the most sacred is a single natural spring known as Krantji. This is the home of the original ancestor of the Krantji Kangaroo clan, Krantjirinja. It is from this spring that Krantjirinja himself sprang to life as a true kangaroo after being awaken from an eternal sleep beneath the crust shield of the earth. At night Krantjirinja would take on human form and dance and sing in ecstacy until dawn. This story of life continues in present day where ceremonies at the spring honour the fertility of the great ancestor Krantjiringa.

> Beneath the sun-dappled waters, say the Aranda, an ancient sunken shield has lain for centuries. Beneath this shield are several sacred stones known as tjurunga. It has long been the traditional duty of each generation of the Red Kangaroo clan to honour ceremonially and care for these stones, not simply because they are passive symbols of the clan's enduring bond with the red kangaroo but because they are remnants of the living tissue of Krantjirinja, their common ancestor. In this sense, the tjurunga at Krantji are visible embodiments of some part of the fertility of the great ancestor. They are biological reservoirs of reproductive energy from which all kangaroo ancestors arise in batches, emerging first in the form of kangaroos, then assuming human bodies. (Knudtson & Suzuki, 1992, p. 130)

It is clear that in aboriginal culture the notion of a connection between humans and

nature is deeply rooted in their stories and traditional practices. The notion of connection provides a link that plays itself out in the concrete experience of family. Nature, people and everything that exists, are part of a great family.

THE FAMILY LINK

By definition, family is "a group of people related by blood or marriage; relatives." Another understanding of family is "a collection or union of things having common source or similar features" (Webster's Dictionary, 1958). The creation stories and cultural traditions that aboriginals experience connect and embody the "common source" that they have with nature and this essentially creates a family by definition. Using their 'blood-related' family experiences they transfer these concepts to the experiences they have with nature. To them the transfer of family experience to nature is not an abstract operation but rather a concrete experience that is verified in the physical evidence around them.

Aboriginals' familial relationship with nature is reflected in everything they say and do. To them, nature is a family member. Nature is a relation that should be respected and nurtured in the same way one respects and nurtures a brother, mother and grandparent.

Many aboriginal cultures exist within developed 'Western Cultures' and yet they still retain their own conceptual realities about the world they live in. The nature is a family member metaphor is an example of a differing reality that exists between aboriginal

and 'Western cultures.' What concepts does this metaphor highlight? How does it differ from the nature is a resource metaphor and why is it important? Let us examine the nature is a family member metaphor a little more closely.

NATURE IS A FAMILY MEMBER

A metaphor, as illustrated in previous chapters, is more that just 'decorative' language. It is deeply embedded in the cultural environments that we live in. We have seen how the nature is a resource metaphor established itself from the historical events of the 18th century and how it continues to endure through our language and everyday experiences. However, there are many different realities and different experiences that exist in the vast background of today's cultural presuppositions. It is in these other cultural presuppositions that one can find other ways of conceiving and communicating a concept.

> The very systematicity [of metaphor] that allows us to comprehend one aspect of a concept in terms of another (e.g., comprehending an aspect of nature in terms of a resource) will necessarily hide other aspects of the concept. In allowing us to focus on one aspect of a concept (e.g., the resource aspects of nature), a metaphorical concept can keep us from focusing on other aspects of the concept that are inconsistent with that metaphor. (Lakoff & Johnson, 1980, p. 10)

In aboriginal cultures, the nature is a family member metaphor highlights aspects of nature that are inconsistent and even contrary to the nature is a resource metaphor. To begin our linguistic examination we will first illustrate the logical generalization of the nature is a family member metaphor. Following the classical syllogism, if X is in category

A and A is in category B, then X is in A and B, the logical pattern of thought for the nature is a family member metaphor, based on known definitions, would be:

Nature is a Family Member (X in A) and,

Family Members are related (A in B) then,

Nature is a relative (X in B) (adapted from Lakoff, 1991, p. 213)

With our understanding of family as a relation that is connected by blood or by a common source or similar feature, it is only logical that when the nature is a family member metaphor appears in language, it conceptualizes nature as a being that is related and therefore, possesses the same qualities, care and experiences that would accompany a family member.

What qualities and care does one give to a family member? What concepts are highlighted in the family member metaphor? Let us look at some ways that family is understood. As per its definition, a family member is seen as something that shares a similarity such as blood or source. With this understanding a family member needs to have something in common with the original family. The concepts that a family member *looks like, resembles, takes after, is moulded from* must mean that there is a *connection, continuity, succession, ancestry, lineage, or relation* and therefore, he or she is considered *kin*, or a *mother, father, brother, sister, grandparent, cousin or ancestor.* All these aspects stem from the concept of family (Roget's Internet Thesaurus). If we conceive

nature is a family member this way, then all the aspects above can be used when talking about nature.

When aboriginal people refer to the Earth as Mother, the Sky as Father, the animals as brothers, sisters and cousins, the Cosmos as the Great Grandfather and the core of the earth as the Great Grandmother, they are acknowledging a kinship and familial connection with nature. It is a connection that involves emotion and feeling. It requires an emotional involvement that echoes what we share with family members. It is based on an understanding that includes the observer as a participant. The Western approach to nature lacks this personal involvement. "Science insists that the observer must be as detached as possible from the event he or she is observing" (Deloria Jr., 1995, p. 55). The nature is a resource metaphor reflects this way of thinking. The concept of resource is detached from any type of emotional involvement. There is no personal connection, no meaning given to the resource except for its monetary value. In aboriginal culture, an emotional connection with nature, understanding it as an extended family member, is reinforced and nurtured from birth. They understand that for harmony and balance to be sustained in life and in nature, there must be a relationship of respect and honour with all the exists. It is valuable because it exists.

> The Lakota was a true Naturist
> - a lover of Nature;
> he loved the earth and all things of the earth,
> the attachment growing with age.
>
> The old Lakota was wise.
> He knew that man's heart away from Nature becomes hard.

He knew that lack of respect for growing, living things
soon led to lack of respect for humans too.
So he kept his youth close to its softening influence.
(Chief Luther Standing Bear (Lakota) p. 21)

Here nature is embodied with human emotion, the emotion of love, which comes from the heart. The heart is a very important concept in aboriginal culture. It represents full involvement of oneself. The human heart represents life and the centre of emotion. If a person does not involve their heart in everyday learning and teaching, aboriginals believe that one does not learn or teach fully. The heart can not be exempt from the process of living. In Coast Salish language, one says "O siem" after speaking or after listening to someone speak. Translated, it means 'from the heart.' This is how they say thank you. The role of emotion plays a very important part in the nature is a family member metaphor and its significance will be discussed further in chapter five.

In aboriginal culture, the involvement of the whole person is necessary in a relationship with nature. The concept of emotion can not be excluded. It is what allows relationships to be caring and nurturing. Without these emotions, respect is lost and eventually, the relationship will also be lost. One can see how this concept works simply by looking at the damage that is happening to nature by Western societies.

THE EDUCATIONAL LINK

Now that we have an understanding of the way that aboriginal cultures view nature. How would this understanding of nature, as a family member, be used in environmental education? It is clear that a form of environmental education in aboriginal cultures is taught from birth and is presented through stories and traditional ceremonies. There are now a few environmental education books and guides that embody the language and philosophy of aboriginal culture. They present and foster the nature is a family member concept, and stress the importance of respect towards nature to sustain harmony and balance in life. The following passages are taken from some of these books and illustrate the different ways of approaching our relationship with nature.

> Because Indians see themselves as *part* of nature, and not apart from it, their stories use natural images to teach both about the relationships between people, and between people and the Earth. To the Indians, what was done to a tree or rock was done to a brother or sister. This outlook has important implications throughout this book where it deals with environmental problems and solutions. Native Americans emphasize a close relationship with nature versus control over the natural world. (Caduto & Bruchac, 1989, p. xxiii)

This paragraph is taken from the introduction of *Keepers of the Earth - Native Stories and Environmental Activities for Children.* Right from the beginning, the authors point out the different way that Native Americans see a relationship with nature. The beginning of the book spends a lot of time illustrating how the book can be used. They understand that in order for the teaching and learning to be worthwhile, a deep understanding of the different way of seeing is necessary. In the "Tips and Techniques for Bringing this Book to Life" section, the authors also state the importance of emotion and

personal involvement in our relationships with the earth.

> It is important to foster caring, nurturing and compassion in children's lives. Empathy is the tangible sense of our interconnectedness. When we feel what another person feels and understand that the Earth is a living organism whose parts also have an awareness, even though different from our own, we want to help because we share that emotional experience. (p. 11)

It is through the familial relationship that aboriginals share with nature that this empathy is able to exist. Here is an example of one of the stories that *Keepers of the Earth* uses to teach about the earth.

> The Lakota (Sioux) people say that in the beginning everything was in the mind of Wakan-Tanka. All things which were to be existed only as spirits. Those spirits moved about in space seeking a place to manifest themselves. They travelled until they reached the sun, but it was not a good place for creation to begin because it was too hot. Finally they came to the Earth, which was without life and covered with the great waters. There was no dry land at all for life to begin upon. But then, out of the waters, a great burning rock rose up. It made the dry land appear, and the clouds formed from the steam it created. The life on Earth could begin. So it is that the rock is called Tunka-shila, "Grandfather Rock", for it is the oldest one. Because of that, the rocks must be respected. In the sweat lodge, when water strikes the heated stones and that mist rises once again, it brings back the moment of creation as the people in the lodge sing to Tunka-shila, the Grandfather, the old one. (p. 57)

This story sets the foundation for learning about geological concepts such as how rock is formed and even the scientific story that molten rock of the Earth's crust gave off water vapour that formed the clouds and rain. These concepts could be learned from reading a geology textbook, and often this is case; however, when these same concepts are taught through the eyes of aboriginal story, one also learns the lessons of relationship and respect. One is also introduced to how this is done (through the sweat lodge). It is impossible not to see that this type of learning creates a different way of seeing the natural

world. It teaches us about the natural world, but it also teaches us much more. It presents us with issues of morality. It shows us a natural world that is alive and full of spirit. It suggests that we are all (animate and inanimate) connected. These things are excluded from Western teachings and are, therefore, excluded from our experiences.

Another guidebook that encourages a connected relationship with nature that is based in aboriginal philosophy is *Rediscovery – Ancient Pathways – New Directions*. The book contains the philosophy, ideas, and activities of the Rediscovery program that runs as a camp for youth. This information has been presented in a guidebook that can be used by others as an educational tool. Throughout the book, an emphasis on personal, hands-on experience is used to promote an empathy for nature. In the book's introduction it states that,

> By drawing from the strength of native traditions, the wisdom of elders, a philosophy of respect and love for the land and each other, and with a focus on the spirituality of all life, Rediscovery emerges today as a new direction for youth camps. (Henley, 1989, p. 19)

I see this statement as a vision for a new direction in environmental education. There are programs out there that foster this type of learning and it is important to include this type of learning in our Western learning practices. The language that we use in Western culture only represents one truth. "Language permits us to express ourselves, but it also places limits on what we are able to say" (Highwater, 1981, p. 6).

> In contrast to the relatively one-dimensional reductionist Newtonian - Cartesian view of Nature, Indians perceived multiple realties in Nature – that experience by our own five senses was only one of many possibilities. In such a perceived

> "multiverse" knowledge could be received directly from animals, plants, and other living and non-living entities. They perceived that animals and plants have ritual ways of behaviour that interact with one another. All life and Nature have a "personhood", a sense of purpose and inherent meaning that is expressed in many ways and at all times. (Cajete, 1994, p. 75)

It is this way of seeing and understanding that we need to bring to environmental education. We need to foster personal experiences and a language that embody the empathy and personal involvement with nature that Cajete is talking about in the above quote. The current language that we use in environmental education limits this possibility and we need to be conscious of it. We also need to awaken ourselves to the other ways of seeing that exist and then introduce these ways and the complementing languages into our own environmental education practices. We need to find a way of speaking about and understanding nature that will give balance to the Western objective understanding of nature as a resource that now prevails. We need to begin understanding nature as family, as a vital member that belongs to and experiences, the same sensuous world we live in.

> We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. (Aldo Leopold, 1966, p. xviii)

CHAPTER FIVE

> There is a part of every human being that yearns to be whole - connected to every life form that is, from the smallest cell to the most complex creatures. When we know and live and teach our connection to all that is, then we shall know wholeness. (Foundation for Global Community, 1994, p. 100).
>
> We are as much alive as we keep the earth alive. (Chief Dan George, 1982, p. 52)

Looking out the window, I am inspired by what I see. I am driving on highway 16 between Skidegate and Masset on Haida Gwaii, also known as the Queen Charlotte Islands. My friend sits in the passengers's seat and has the same look of wonder and awe. It took us thirty six hours to arrive here. We drove 19 hours from Vancouver to Prince Rupert, had a good night's sleep under the stars and, at eleven a.m. the next morning, boarded the six and a half hour ferry ride across the Hecate Strait to Skidegate. It was an amazing journey. Every kilometre that we drove further from Vancouver allowed us to re-exercise our senses, the ones that had become dull from the daily routines of city life. We travelled through many different landscapes and stopped several times along the way just to sit and observe the wonders that surrounded us. We opened our ears, our noses, focussed our eyes differently and explored our tastebuds and touch. We were like kids again, let loose to explore with no sense of limitations.

In the valley between Cache Creek and One Hundred Mile House, we pulled over and when we exited the van, we felt the hot air hit us like a brick wall, instantaneously seizing any available moisture that existed. After adjusting to the climatic change, we

noticed a sweet smell lingering into our noses. After some exploration, we discovered that the source of this smell came from the sage that grew abundantly in the yellowish-grey soils of the arid steppeland landscape that surrounded us.

In Williams Lake and Prince George we experienced a rude nasal awakening from the smell that permeated the air from the local paper mills. But, the landscapes that accompanied this smell almost made it bearable. The gorge that runs alongside Williams Lake is breathtaking and left us wondering how something so grand came into existence. West of Prince George, the sun began to set and while we sat on a hill admiring the grand colours, we talked about the different illumination that existed here. The light that radiated from the sun, when reflected off the land, created an incandescence unlike anything we had seen before. The land glowed. So did we.

When we continued on our way to Prince Rupert we commented on how the passing landscapes were very sporadic. There were fields and forests, rivers and lakes, mountains and flatlands. Something for everyone. Definitely something for us. I could sense a unique bond beginning to form not only between my friend and I but also between us and nature. Actually, nature was acting as the catalyst for a bonding that was occurring between my friend and I. The connectedness that we were experiencing with nature was creating a special connectedness between us.

We are travelling to Haida Gwaii to participate in a Master's course that is being

offered by SFU among the Haida Nation. My friend is accompanying me so I do not have to travel alone and because I know that she is interested in native culture and wishes to learn more about it. She also really loves the outdoors and we plan to get out on the land after the course. The course is being taught in Masset, which is located on the northeast shore of Graham Island, about one and half hours north of Skidegate. Masset, is one of the villages of the Haida Nation. Without even having been there, I know it will be a special place.

To try and help set a tone for the type of learning that we are going to become a part of, I brought along an audio book tape to listen to in the van while we are driving. It is entitled, *Mutant Message from Down Under*, by Marlo Morgan. It is the fact-based fictional story of an American woman who, through an act of fate, accompanies an Australian aboriginal group on a walkabout through the central part of Australia. It is her narration about the people, the land, their ways of being, and the personal journey that these people take her on. It is a very powerful story about a different way of seeing things and about a different way of being a part of this world. Having read the story before I thought it would be a perfect backdrop for my friend, as well as a reminder for me as to the type of setting that we were about to enter into.

We are about five kilometres north of Skidegate on highway 16 when we see three deer on the left hand side of the road. A mother with two young. They are feeding on the grasses at the edge of the road, and even though the mother keeps an eye on us, the deer

are not startled by the moving vehicle. As we drive by them we are totally excited. Cooing over the adorable babies who still had their spots and marvelling over our close proximity to them, we both exclaim "Oh, we are going to love it here!" Only seconds later we see more deer on the right side of the road. We can't believe it. Then, an opening in the trees on the right reveals the water and the beautiful shoreline that accompanies it. The tide is high and the waves are crashing against the shore and rocks. We open the windows more and the sounds of the waves greet us with a thunderous welcome. We are euphoric. Our excitement bubbles out of us. Our senses are on overload but they do not cause us any stress, only inner peace. Over the first fifty kilometres, we count eighteen deer, six blue herons, and about ten eagles. Feeling very pleased with all our sightings and maybe a little confident, my friend blurts out, "I'm not leaving this island until I see a bear!" We both laugh. In my mind, I think about encountering a bear. I would love my friend to see a bear. Actually, I've never seen a bear except for at the dump. I think that seeing a bear would be pretty special. How am I going to make this happen?

I think about one of the stories in *Mutant Message from Down Under*, the one when Marlo was told to lead the group on their walkabout. She led the group and for two days they never came across any food or water. All the while, a taunting rain cloud stayed just ahead of them on the horizon. Her throat and tongue were swollen, she was tired, she felt like she was actually going to die. She pleaded vocally with the others to help her, desperate to have them tell or show her anything so that she could find some food and water. They must have known, they do this all the time. The members of the group just

smiled at her with a look of support. She understood that they must know that this was a lesson of some sort for her because they too were hungry and thirsty. As Marlo led on, her thoughts turned to her life. Since she felt like her life was ending she thought about what she had experienced and accomplished in life. About what she would miss. At the end of it all she said, "Dear God, help me understand what is happening."

Instantly the answer came to her. Although she had travelled thousands of miles from America, she had not budged one inch in her thinking. She came from a left-brained world where logic, judgement, reading, writing, math, cause and effect are the ways one experiences reality. Here in the middle of the desert, dying, she realized she was immersed in a right-brain reality. These people were masters of using creativity, imagination, intuition, and spiritual concepts to survive. Communication occurs silently, through prayer, meditation, body language, heart to heart, individual to the universal consciousness that links all life together. These people were one with nature. All this time Marlo had only been an observer. She had kept herself separate from these people. She considered herself different. She realized she needed to become one with the universe and communicate as the group did. She acknowledged its presence and felt her humility. She mentally cried out, "Thank you" to the source of this revelation and expressed that she could learn. *Help me if that is what is to occur for the highest good of all.*

The intuition that came to her was to *be* water. How does one become water? It didn't make sense. She shut out her left-brain with its logic and opened herself up to her

intuition. As she walked, she used all her senses. She could smell water, taste it, feel it, hear it, see it. She was cold, blue, still, ice, vapour, steam, rain, snow, wet, muddy, rippling, melting, nourishing, splashing, expanding. During this process Marlo began to feel a different kind of connection with water, herself, and the universe. She knew that now she had created a relationship with water that was based on an understanding of respect, gratitude, and oneness.

Before long, the group arrived at a rock on which Marlo sat down. The group smiled at her and she thought about how supportive and unconditionally they had loved her. As Marlo leaned her left hand back she felt something wet. There, behind her, was a rock pool filled with the beautiful crystal clear water from the previous day's rain cloud.

I think back to the bear. How can I think about the bear to encourage its presence before me? I decide that saying "I'm not leaving this island until I see a bear" isn't the way to go about it. Perhaps I feel that this statement and the thought processes behind it are an example of what Marlo was trying to illustrate in her story about the water. The statement does not create a connection of respect towards the bear. It does not acknowledge that the bear has anything to do with the experience and it leaves me being an observer rather than a participant. So I try to find a better way of thinking about an encounter with a bear that would convey this belief that I have about the world. Mentally, I say to myself,

O Great Creator, it would be wonderful to be honoured with the presence of brother bear. To experience his strength and wisdom and to sense the connectedness that we all share. O siem.

I refocus on driving and then, right there, on the left-hand side of the road, a bear. He stands up on his hind legs, looks right at me, nods his head twice, falls on all fours and goes into the forest. I am speechless. Corrie is talking away, so excited that she just saw a bear. Inside, my heart and spirit are smiling. There is no disbelief in what just happened. I was given a sign. I honoured the circle of life and so it honoured me. I feel the spiritual life force of the earth. We are one. I now know there is a connection with the world that can satisfy our deepest yearnings, and it presents itself to us when it is respected. I want to cry because I am so happy. Because I feel whole.

EMBODIED METAPHORS

> Every organism - from the smallest bacterium through the wide range of plants and animals to humans - is an integrated whole and thus a living system. The same characteristics of wholeness are exhibited by social systems - such as family or community - and by ecosystems that consist of a variety of organisms and inanimate matter in mutual interaction. (Capra, 1994, p. 22)

Wholeness. Where does the feeling of wholeness come from? From my own experiences and observations, it comes from experiences that make you feel like you are a part of something. As Fritjof Capra suggests in the above quote, experiences of family or community exhibit characteristics of wholeness and these same characteristics and experiences inherently exist in nature. As a result, it is an intelligible extension to

understand nature as a family member to create a sense of wholeness within oneself.

This is an understanding and fundamental principle of aboriginal peoples. *Humans are only part of a greater whole, a whole that also includes all of nature - animate and inanimate, and all these parts are dependent on each other.* It is because of this belief that aboriginals and others who understand nature this way can feel and understand wholeness. They see themselves as part of a bigger whole.

Generally, those in Western culture experience nature as a resource and do not see or feel the same connection of wholeness with the natural world. The concept of nature as a resource is so abstract and devoid of life that that is exactly what it creates – an understanding of nature that is dead and too abstract to be sensuously experienced, leaving humans alone and alienated from the natural world.

> "Nature," it would seem, has become simply a stock of "resources" for human civilization, and so we can hardly be surprised that our civilized eyes and ears are somewhat oblivious to the existence of perspectives that are not human at all. (Abram, 1996, p. 28)

The nature is a resource metaphor excludes any type of sensuous experience with nature, and therefore excludes a sense of wholeness. The concept of nature as a resource is so abstract and objectified that it eliminates any true sensory experiences in nature or chance of having a mutually respectful relationship. It is a relationship of domination, humans over nature, where there is no room for respect. This type of understanding doesn't allow for any personal participation beyond its own abstraction, and it can not

embody any of the sensuous experiences that create a personal wholeness between humans and the natural environment. The concept and experience of family, however, can.

The metaphor of nature is a family member is less abstract than the resource metaphor. We all have personal experiences of family and community and many of those experiences involve our senses: our mental, physical, emotional, and spiritual senses. The family metaphor embodies a wide range of sensuous experiences. The experiences of caring, nurturing, loving, hating, living, dying, connection, and continuity, to name a few. When nature is understood through these types of experiences, it creates an understanding that includes the participant. This, in turn, builds a basis for understanding that the participant is part of something, part of a greater living whole. This sense of wholeness, of being a part of something, encourages a relationship built on respect in order to maintain the mutual relationship and the sense of wholeness that one feels.

I feel that this is what is currently lacking in the language that we use today in environmental education. We need to begin to use language, when talking about nature, that embodies the senses and experiences of wholeness. To envision a nature that is alive and part of a greater whole of which we are also a part. The aboriginal understanding of nature as family embodies a new vision for a new direction that Western culture can use to see and better sense nature. It is this way of understanding and talking about nature that I feel has for the most part been missing in the discourse of Western culture and in environmental education. If we want to attain a mutually beneficial relationship with

nature we need to consider this new way of talking about and experiencing nature.

RELATION AND "THE OTHER"

> That living wholeness and unity of the tree, which denies itself to the sharpest glance of the mere investigator and discloses itself to the glance of one who says *Thou*, is there when he, the sayer of *Thou*, is there: it is he who vouchsafes to the tree that it manifest this unity and wholeness; and now the tree which is in being, manifests them. Our habits of thought make it difficult for us to see that here, awakened by our attitude, something lights up and approaches us from the course of being. (Buber, 1958, p. 126)

Martin Buber in his book *I and Thou* presents a theory that there is the possibility of experiencing a relationship that transcends objectification – an experience that allows one to experience "the Other". Buber states that such a relationship leaves behind the *It* and in place creates a *Thou*. This type of relationship is achieved by using our *whole being*, mind *and* body. Buber believes that "*Thou* - can only be spoken with the whole being," and "*It* - can never be spoken with the whole being" (p. 3).

It is in this relationship of *I and Thou* that Buber contends a sense of *mutuality* occurs. There comes an understanding of the sense of *being*, although a sense of being that both participants share, yet one which also sets them apart, creating "the Other." It is in that moment of acknowledgment of a *Thou* rather than an *It* that one is impacted by a unique otherness. Here the feeling that one is not alone becomes apparent; a knowing that there is another; a living sense of a greater existence that the *I* is now a part of. This type of relation negates the concept of object and especially the utility aspect of an object.

Here, the concept of relation simply becomes a new way of looking at the world which allows it not to be subjected to the will of humans, but left to its own nature. *It* becomes a *Thou*. The world exists just as *it is*, in *its own right*, independently of our purposes.

It is in this type of experience with nature, understanding nature as a being, that I see the possibility of an attitude change towards nature. Such an experience creates a relation with nature, a relation of connection, an experience of relation that sets the scene for a greater understanding. Not in the sense of better, but as in more, one has the ability to have a second sight and to see something differently. This new way of seeing is independent of the first sight but still part of the same set of eyes. We can never abolish our previous experiences, but we can add to them, embody them, make new sense of them. This is what I have experienced and I see the concept of relation and the experience of "the Other" as a door to obtain this second sight. These experiences often begin as moments or revelations, but eventually, with personal reflection, the relation with "the Other" can grow into a new way of understanding and relating with the natural world. It opens up to a new and sensuous world that awaits to be reexperienced.

David Abram is an advocate for experiencing the sensuous side of nature. It is in the process of sensing nature that we are open to a meeting with "the Other."

> The diversity of my sensory systems, and their spontaneous convergence in the things that I encounter, ensures this interpenetration or interweaving between my body and other bodies - this magical participation that permits me, at times, to feel what others feel. The gestures of another being, ...all gradually draw my senses into a unique relation with one another, into a coherent, if shifting,

> organization. And the more I linger with this other entity, the more coherent the relation becomes, and hence the more completely I find myself face-to-face with another intelligence, another centre of experience. (1996, p.127)

It is at the point where we allow the body to sense, where our senses come together, that a relation with 'the Other" can begin. Only when we allow our body to be a part of an experience can we truly experience "the Other," because it is only then that we are dealing with the world on a level that it is able to reciprocate communication. Nature's language is alive and is filled with sensuous voices. We need only to communicate with nature using the same vital senses that we ourselves possess. When we discover our similar sensibilities, we will find a relation of mutuality and reciprocity with nature.

Aboriginal cultures have always understood this concept of relation with nature. From birth, their stories and traditional ceremonies familiarize the people with the concept of "the Other," and encourage contact with "the Other" as part of their life learning process. Many aboriginal traditions are focussed on connecting with "The Other." Traditional dances and songs are aimed at creating a trance-like consciousness in the dancer or singer to facilitate a sensuous union with "the Other." The sweat lodge and vision quests are ceremonies that aboriginals use to create union with "the Other." They focus on becoming fully bodily aware in order to create a space within which participants can begin to communicate with "the Other." It is in this connected space that the individual is able to talk to "the Other" and "the Other" is able to speak and offer guidance to the individual.

> Native American people, through their ecological educational processes, evolved a natural response to the other – the other being, the natural world - and allowed the other to define itself to them, rather than imposing preconceived intellectual meanings. (Cajete, 1994, p. 77)

Through this process, aboriginals open themselves up wholly. In doing so, they connect with "the Other." It is here that the relation occurs: a mutuality between entities; a point where two different sources come together and find connection, working together to create mutual understanding. David Abram refers to this point as "the Chiasm", which he obtained from Merleau-Ponty's work. The word "chiasm" is derived from an ancient Greek term meaning "crisscross" (p. 127). This chiasm occurs when the interplay of the different senses allows the body and the earth ("the Other") to crisscross (p. 128). It is here that "we feel ourselves listening with our eyes and watching with our ears, ready to respond with our whole body to any change in the other's behaviour." (p. 129) I believe this chiasm is also the point of the *I* and *Thou* that Buber speaks about. It is the reciprocal understanding between two materialities. It is the point when two entities "crisscross" and create new meaning.

When I think about this chiasm, this sensuous, reciprocal connection that creates new understanding, I can not allow the notion of empathy to escape recognition in this powerful phenomenon.

EMPATHY IN THE FACE OF "THE OTHER"

> The Earth is a living thing. The mountains speak. The trees sing. Lakes can think. Pebbles have a soul. Rocks have power.
>
> (John Fire Lame Deer, 1990, p. 63)

How does Lame Deer know this? How is he able to experience this? I would like to suggest that it is because he has an empathic relationship with nature. The concept of empathy has been tossed around and sometimes ignored in philosophical investigations. I would like to offer my notion of empathy. This notion is built upon the notions of the early empathists (Dissanayake, 1992) and I will illustrate how this notion of empathy plays an integral part in the process of developing a relation with nature.

Current expressions of empathy in the minds of many scholars can be summed up as: I feel, therefore I can understand what you are feeling. This may make many people dismiss empathy theory because from experience they do not see this as a viable definition. Just because I feel doesn't necessarily mean I understand what you are feeling. There is more to empathy than the feelings. I believe that the key component in understanding and feeling empathy is the creation of a reciprocal relationship or union with "the Other." So, I feel, therefore I understand how you feel, does not necessarily create empathy. It is rather, *I feel what you feel because we feel* ***together***. One entity understands an emotion about another entity because it is able to recognize and then *share* a similar emotion. Empathy is not just an exercise in observation. It is an exercise in *sharing* and being able

to give oneself fully to the other and visa versa. When "the Other" is nature, the *sharing* begins when one is able to bring their bodily expressions to the foreground. By approaching nature as a sensuous living being, one acknowledges the sensuous, living being in nature, and as a result this is what enables nature to communicate on a reciprocal level. This allows nature, "the Other," to share its emotion. This is when the mountains will speak. The trees will sing. When lakes will think, pebbles will have a soul, and rocks will have power. This will also be the time when one will speak, sing, think, have a soul and power. Empathy creates a place where as "we learn about the world, we will also learn about ourselves, the two are inseparable (Dissanayake, 1992, p.149)."

Empathy, then, is not just a recognition of emotion in "the Other," which in itself is an accomplishment in Western culture, but more importantly it is the *merging* of emotion. It is the point of *sharing*, of *relation*, of the *chiasm*, of the *Thou*. What is missing in discussions today about empathy is the recognition that a shared reciprocal relation is a crucial component that gives empathy validity. This is especially so in education because one can not deny that it is in the process of sharing that we learn. The sharing of knowledge is a founding element of education, and nature, "the Other, " becomes a teacher in an empathic relationship.

When we achieve empathy in a relationship with nature, we are exposed to a whole new set of lessons. Aboriginal cultures have been learning these lessons since the beginning of their creation. Their stories reflect this learning and this learning is passed on

from generation to generation. They cherish and sustain their empathic relationship with nature. It is because of this empathic relation with nature that nature can easily be understood as family. Nature *is* family. They know how precious an empathic relationship is and how it must not be taken for granted. They sustain this relationship by living and practicing it in their everyday experiences.

The body and our sensibilities, which are the basis of empathy, must be exercised the same way we exercise our minds. It will be through these empathic relations with nature that humans will find a balanced way of seeing and understanding nature. Empathy brings our bodies into a new understanding. It is the *vital* part of understanding that makes us feel whole. I believe that this is why most of us feel alienated. Because we have not only alienated ourselves from nature and "the Other" but we have alienated ourselves from ourselves. Our bodies and our sensibilities allow us to feel a part of, to belong to our understanding. It makes our understanding *lived* – real, not abstract or external. It is hard to feel a part of something when it is always understood externally. The early empathy theorists understood this, but their theories had no scientific reasoning to back up their intuitions. Current neurophysiological findings are beginning to understand this phenomenon. In Ellen Dissanayake's (1992) book *Homo Aestheticus* she reconsiders the "empathy theory" and provides a whole chapter on the current "biological" understandings that would found the theories of the early empathists. In her summary, she states that

> the sensation (in bones and muscles, in the being) that the [early] empathists wished to explain - of union or communion between viewer and object, listener and musical work, reader and poem - is real, not illusory or only metaphorical "and

> that "to make something special is to make use of or intentionally to draw attention to its empathic properties, to engage and to accentuate its emotion-rich associations. (p. 187)

To make nature special would allow us to engage in its emotion-rich associations. When we create a relation with nature, when it becomes family, it is special. We hold it in our hearts and this allows us to understand with our hearts and feel the heart of nature. I know that we can not escape our objective Western minds completely, but they can be balanced with a concept of relation with the natural world. A sense of relation with the natural world allows for the possibility of value that transcends the economically driven world in which we presently live. As Donald L. Berry says in his book *Mutuality, the Vision of Martin Buber* (1985),

> Our standing in relation to the natural does not preclude our using the natural as a means for the satisfaction of our needs; that using, however, must be consistent with allowing the natural now and again to be what it is apart from our purposes for it. (p. 37)

It is in this the act of balancing, creating empathy, that we will be able to achieve a balanced relationship with Mother Earth. We can not separate body and mind. Our senses allow us to communicate with nature in ways that the mind can not. We are bound together with the world physically, and mentally, and the world with us, by means of mutual involvement and interaction. Our knowledge of our relational reality is, therefore, neither subjective nor objective, but a balance of both. It is an "experientialist alternative," as Lakoff and Johnson label it (1980, p. 226), and it is achieved by opening up the senses, including the body, rather than dismissing our corporeality, as the objective Western

culture suggests we should.

We are *human beings.* Body and spirit. Our bodies are part of who we are. The body, mind, and spirit are inseparable. Working together, as a whole, the body, mind, and spirit can create an understanding that is greater than their individual parts. If we begin to give greater attention to our sensibilities, we can achieve an empathic relation with "the otherness" of nature. In doing so, we will be able to unite body, mind, and spirit, and achieve an understanding that connects us to our world in a wholistic and coherent manner, thus leaving us feeling more whole and less estranged from the world of which we are a part.

The question now is: how does one begin the process of establishing an empathic relation with nature, particularly in Western culture? For a lucky few, the sensuous experience in nature generates a thinking process that allows them to question their own understanding of nature. For the majority of people in the Western world these types of opportunities are especially rare because our society in general doesn't acknowledge or encourage them. This is where I see language playing a very important role in environmental education and in life as a whole. An empathetic relation with nature can be presented in the form of language, which in turn, affects all of our actions.

If we look at the language of aboriginal cultures, their understanding that nature is family, appears as a metaphor in their language. When one hears or reads this language,

one is introduced to a way of understanding nature – as family. The same applies to the understanding of nature as a resource. If the language that is present in one's culture renders nature as a resource then these are the thoughts and experiences to which one has access. Language can be used as a tool to introduce and give access to alternative ways of understanding. These new thoughts, if complemented with daily experiences that support the thoughts, can eventually change the way that a given culture understands themselves, and, in turn create a new paradigm for that culture.

THE NEW LANGUAGE

> I almost see it as politics....that we are trying to create new languages and new concepts and not only create them, but teach them to you, and we ourselves repeat them over and over again, and you feedback into this and then we refine the mean. Then a mean is like a gene; it can be replicated. We have not seen language as the playing field of the creation of the new paradigm, but that's really where it is. We can transform ourselves no more quickly than we transform our language and the way we transform our language is by really pushing on the envelope of the active communication. (Terence McKenna, 1995)

This thesis is an attempt to "push the envelope of the active communication" – by questioning the active communication of the western world and how it relates to environmental education. How is language being used in the active communication of environmental education? What is the language that is being used? What is it saying? Is there other language that can be used? What does it say? How does it differ? What does it embody that the present language doesn't? In writing this thesis I have not only theorized about, but have also experienced, another way of seeing nature and I believe that

this other understanding of nature is more beneficial for creating a harmonious relationship between humans and nature.

This thesis has illuminated another way of seeing – a second sight. It offers the choice of a perspective and language highlighting the living, familial aspects of nature that challenges the mass acquiescence supporting the present-day economically-based or capitalist system of the Western world.

Those involved in environmental education and action can play an important role in usurping the credibility of the nature reality that is highlighted by the nature is a resource metaphor. Those in environmental education can build up a sense of democratic participation in the creation of a counter hegemonic discourse by involving students in exercises and experiences that strip away the verbal camouflage that hides the natural living familial bonds that connect humans with nature.

In making a choice of perspective and language, a step is thus being taken towards the democratization of nature discourse. A larger step may be taken by using new metaphors to replace present ones, to in turn effect future thought. Language that presents Brother eagle, Mother Earth, nurture, care, and respect, can be substituted for resource, commodity, control, and manage, in order to challenge the established way of viewing nature. This new set of concepts would introduce a new language that not only differed symbolically (resource vs. nature), but also contains subjective conceptions (i.e.

love and respect).

It is essential to become fully aware of the powerful role the choice of perspective and language plays in the structuring of nature reality. The process can be meaningful for the speaker as well as the listener because the former may gain a sense of democratic participation in the creation of the new counter-hegemonic expression and the latter may become aware of a new way of looking at reality. This action would begin the process of "pushing the envelope of the active communication" that McKenna is talking about.

Language is a form of power both as a product and as an expression of the distribution of power in society. The more language we use about nature that reflects the aboriginal voice, the greater the power of creating a connection with that way of seeing. I believe that when this new language is introduced to environmental education, it will open a new door to those who have felt an alienation from the world and from themselves. The holistic view of a familial understanding of nature is very strong because it is founded on concrete, sensuous, and personal experiences. Nothing is more powerful in understanding than personal experience.

PERSONAL EXPERIENCE AND STORY

> The feel of leather reins and horsehair, the sound of a horse blowing, the smell of fresh hay and horse lather: my senses first stirred in the world of horses. (Roberts, 1996, p. 35)

> Well before I could walk, horse geography was as familiar to me as the human kind.(p. 35)
>
> I would learn, much later, while starting horses in a round pen, a rich code of signs and subsigns. Keeping my mouth closed invited the horse's discomfort, opening it slightly was fine. Opening a fist on the side of my body away for the horse drew him in, while opening a fist close to him sent him away. Fingers open stirred one response, fingers closed another. Hands above my head with fingers splayed provoked true panic (perhaps it triggers primordial memories of cat claws). Whether I am moving, standing still, facing the horse, or away; all this matters as the horse reads my body language and I read his. I can now enumerate about one hundred or more signs the horse will respond to, and the vocabulary is still growing.(p. 23)

The above quotes are taking from Monty Robert's novel *The Man Who Listens to Horses*. To me, this story is an example of a person who has grown up in Western culture and yet has had the sensuous experience of "the Other" (horses) in his life. Monty experienced rejection throughout his life over his way of understanding horses. His understanding of horses and later deer, came from a sensuous empathic relation with them. He began understanding, and then relating to them through bodily expression. His personal experiences with these animals evolved into a new understanding towards them, himself, and life. This different way of understanding comes through in his retelling of his personal experiences; in the language he uses. The language has a different feel. It is a different language, a language filled with sensuous words and images that embody the empathy and connected relation that he shares with these animals. When one reads language like this, one can easily relate to it because it is based in sensuous experiences, regardless of our own actual experiences with horses. Other people's personal stories about empathic relations with nature are empathic for us also. As we read the stories, the

language they use sensuously invites us to *share* in their empathic relations, thereby creating an empathy not only with nature but also with the storyteller and ourselves. In this sharing, we are able to feel and see nature through another set of eyes, allowing us to reconsider our own sight.

This is what I experienced on my way to Haida Gwaii. Listening to Marlo Morgan's *Mutant Message Down Under* reminded me of a different way of relating with nature. It made me reconsider the way I related with nature: the way I thought, and the way I acted. Her story affected me and, in turn, affected my own personal story, just as the stories presented here, in this thesis, may make readers reconsider their own understandings. Personal experience is the basis of our understanding. When we share our experiences, we are sharing our understanding; we are sharing our stories, our sense of truth. This is what story is.

In aboriginal culture, stories of the empathic relationship with nature are constantly told and retold. This practice allows the message to reach new ears, as well as remind the old ones of this special relationship with nature. It is then up to the listeners to validate the experience through the telling power of their own experiences. In aboriginal culture, as mentioned before, there are many ceremonies and rituals that offer an individual access to these types of experiences.

Environmental education should stress opportunities for students to listen to, and

experience personally, empathic relationships with nature. The use of aboriginal stories and the stories of others who have experienced empathic relations with nature need to be introduced into environmental education curricula. In turn, the personal empathic relationships with nature that students experience should be encouraged and shared. In this way, the language and "active communication" being used in environmental education will begin to expand and reflect an understanding of nature that differs from the abstract, alienated understanding of nature that is currently dominant in the language of the Western world.

Nature is alive. It speaks with voices that are filled with rich emotions. So do human beings. It is time to reconnect the links, create a coherence between human beings and the natural world. To celebrate and to share life. It is time to bring sense to nature. To reunite our family. It is time to go home.

CONCLUSION

I would like to end this thesis with a story. My story. A personal account of an experience that brought this thesis journey to an end; only to begin another journey. This experience only happened because I allowed my mind ***and*** my heart to be open to a new world of possibilities. It allowed me to have second sight, to sense a different understanding, a different truth. A rare sensation into a world so connected, one wonders how we ever got so alienated. Join me on this final journey and I hope it inspires you to

begin your own journeys and share your own stories.

Stories are open to the world.
They attract meaning rather than effecting closure.
As long as there are people talking, listening and acting,
there can be no final conclusions.
(Rose, 1992, p. 237)

CHAPTER SIX

> Let's sit down here . . .on the open prairie, where we can't see a highway or a fence. Let's have no blankets to sit on, but feel the ground with our bodies, the earth, the yielding shrubs. Let's have the grass for a mattress, experiencing its sharpness and its softness. Let us become like stones, plants, and trees. Let us be animals, think and feel like animals. Listen to the air. You can hear it, feel it, smell it, taste it. *Woniya wakan* - the holy air - which renews all by its breath. *Woniya, woniya wakan* - spirit, life, breath, renewal - it means all that. *Woniya* - we sit together, don't touch, but something is there; we feel it between us, as a presence. A good way to start thinking about nature, talk about it. Rather talk to it, talk to the rivers, to the lakes, to the winds as to our relatives.
>
> (John Fire Lame Deer, (Sioux),1972, p. 119)

Around me the sky is beginning to awaken. It is probably around four o'clock in the morning. I have been lying here on the beach trying to sleep. I have spent the entire evening watching the changing sky while my two friends sleep soundly nearby. Now and again I dozed off, but my mind was too involved with my surroundings to chance a deep sleep. So here I am now, anticipating the arrival of the sun. I have experienced many more sunsets than sunrises. It seems that the only time I have managed to be awake for a sunrise is when I am on the land, away from the mechanical clocks, work schedules and indoor environments that prevent me from being awake when a new day begins.

As the light begins to emerge from the east, casting its rays above the horizon, I remember the evening skies that entertained me throughout the night. I fondly thank them for their company and bid them farewell. I feel a little chill and realize that the fire needs to be stoked. I wiggle out of my sleeping bag and wander over to the nearby driftwood pile. I collect a few branches and return to the fire. I carefully place each branch down in

a circular pattern and then blow my breath underneath them to give life to the coals that lay idle. After a few breaths, a flame arises and the fire is reborn. I sit down gazing into the fire and relish in its beauty. I feel entranced by the fire's flames as they dance for me. My Haida friend Alex, who lays to the right of the fire, told me that the fire protects us when we sleep. It keeps the good spirits present and the evil spirits away. That is why we must keep it lit during the night. It seems that I am the only one who has been guaranteeing this, but the task has not been a bother. In fact, it has given me to a new appreciation for fire. I have always enjoyed fires, but now the concept that the fire is a connection to the spirit world makes it more vital. So alive, that I spent the evening sharing my most inner and deepest thoughts with this near but silent partner. It has been a refreshing time of solitude, though I never really felt alone.

I decide to go for a walk along the shoreline. The sun has appeared and I greet it with love and thank it for showering me with its magnificent beauty, and for providing this earth with life. I roam around for about one and a half hours, beachcombing and experiencing nature. I can not believe how soothing this is and how serene I feel. I walk with nothing but myself, and I feel content.

I sit down on the dry sand about four metres from the rising tide. As I sit with my legs outstretched, gazing out to the sea, I listen to the waves. I feel that the sand beneath me yearns, like myself, to be swept up and away by the tide. To be taken out on an adventure to a far off place. To visit the places that this tide will visit when it recedes

back into the ocean. I lie down and hear the water calling me, encouraging me to feel its being. Its arms inching ever closer with each minute that I linger in its presence. The air is tranquil and I feel very light, like I have become part of it. I feel my spirit. I wonder if what am I am experiencing is the 'place that Indians talk about.' The place where one unites with the spirit world. I lose myself in the visions that dance within me.

There is a large rock, almost a small cliff to my right, that is lit with a single ray of light. Looking closer I notice the rock has a face. The face is of an old man with many wrinkles; he emanates an aura of wisdom. He speaks to me. "Welcome. Your journey has brought you here, and here your journey will begin a new path. Just like the Raven who stole the moon and brought light to the world, you too will now bring your treasure to the world." I think, "What is my treasure? What can I offer to the world?" An eagle appears, circling above me. It then lands on the highest point of the rock. The rock continues, "Be brave, do not fear the unknown, there is nothing to fear when you live from the heart. Whenever you question, go to where the land, water, and sky meet. Here you will find your answer." The face in the rock fades and the light that was shining on it dims. The eagle spreads its wings, flies towards me, circles me four times and then disappears over the trees behind me. I lay silently, afraid to move, not knowing what to do next.

I feel cold and wet. I open my eyes and see that I am lying waist high, in the wake of the tide. I get up quickly and run back a few steps to avoid getting any wetter. Did I

fall asleep? I start to remember my dream and I look over to the rock. I do not see anything. No face. I shiver and I realize I better get out of these wet clothes. I walk back towards the fire to warm up and change into some dry clothes. The fire is still burning and my friends are still sleeping. I change and sit down beside the fire. I think about what happened. Did I fall asleep? Was it a dream or did the rock actually talk to me? What did it say again? One of my friends wakes up and mumbles a "good morning." "How long have you been up?" "I never went to bed," I reply. My friend smiles while shaking her head. "You better be able to hike today. We have a lot of trail to cover." "Don't worry about me, I seem to have an endless supply of energy."

Eventually, everyone is up and packed, ready to start hiking. I love hiking. I've always gone hiking with other people, but it is an activity that still allows for personal solitude and reflection. Walking along the trail single file allows for this, but opportunities also arise when you collect as a group; to camp, to share water or granola bars, or thoughts and findings from the trail. Alex is really good at finding things. He sees much better then Corrie and I. Not that he has better eyesight, only that he seems to be more aware of his surroundings. Alex often chooses to walk last and often, further up the trail where Corrie and I are resting, he will arrive with some interesting things that we missed. I am trying to be more aware of my surroundings, rather than just hiking along, being caught up in my own thoughts. I would like to find something special to show to the others.

Now while hiking, I am very caught up in my thoughts. I keep thinking about what happened this morning. Thinking about what the rock said. We approach an opening that leads out of the forest and onto the rocky shoreline. This trail follows the coastline and weaves in and out between the rocky coastline and the forest. I love both landscapes. The forest is a cool damp haven from the hot scorching sun. The trees tower high above us and the moss that grows all around comforts our feet and establishes a sense that we are walking through very ancient ground. The rocky shoreline, on the other hand, is harder to walk on and varies from flat beaches to rugged cliffs. The way is always accompanied by the various voices of the ocean; from lapping waves to thunderous booms where the water smashes against the cliffs. It is in a set of these rugged cliffs that we now hike. I am last in line, lagging behind because I am laboriously thinking. "What is my treasure that I will offer to the world? I don't know. How should I know? Anyways, it was only a dream. Why am I so caught up in it? Maybe it wasn't a dream. Maybe I communicated with the spirit world. If I did, and it wasn't a dream, I would like to ask the spirit world to give me a sign, here, in my waking state, to let me know I can believe in my inner voices."

I continue walking and try to focus on my surroundings. I allow my thoughts to go away and concentrate on observing the land I am immersed in. The scenery is beautiful. It is very hot out, but the sky is blue, the water has that colour that one sees in calendars and the air is fresh. I tell myself how lucky I am to be here. To be with special friends sharing this wonderful experience. Corrie and Alex are up ahead. They motion me

to approach slowly and quietly. When I reach them, they point towards the five metre crevasse in front of us. There, sitting on a rock that jets out from the centre of the crevasse, is a seal basking in the sun. It looks like a young pup. We all smile at each other. Corrie cautiously attempts to retrieve her camera. Unfortunately, it alerts the seal and within seconds the seal plops into the water and disappears. After a shared shrug and laugh, we continue on our way. I take the lead while Corrie is still putting her pack on and Alex is helping himself to some water. As I reach a small summit, I see that beyond, the coastline dips in and there appears to be a sandy beach at the far end of the cove. We will probably stop there to make lunch and spend a few hours lounging so we do not have to hike in the really hot hours of the day. As I walk, I keep looking out to the ocean to see if I can catch a glimpse of a whale or a dolphin. We have seen a lot of things on our hike so far. Seals, eagles, and all kinds of marine invertebrates like sea stars, mussels, chitons, clams and crabs. I have collected a few shells on this hike and I hope to make a rattle with them when I get back. Suddenly, a raven above me starts croaking. I look around to see what has alerted him. I do not see anything. I look up at the raven and I discern that it is croaking at me. I tell the raven it doesn't need to fear me. I'm not going to hurt him. I continue to walk. Again the raven that I have now passed starts croaking. I turn around and look at the raven. I ask it, "are you talking to me?" I walk back towards the raven and as I look down at my footing I see something out of the ordinary laying on the rocks. I bend down and can not believe my eyes. It's an eagle feather! When I pick it up, the raven stops croaking. I am still. I know the significance of an eagle feather. It is very sacred among many aboriginal cultures. I've been told that the eagle is

the sacred messenger who brings messages from our creator. To the person who receives the gift of an eagle feather, it is an acknowledgement of gratitude, love and respect. Here *I* stand with an eagle feather in my hand. I remember that only a little while ago I asked for a sign that the spirit world was indeed talking to me. My heart aches. The love that is swelling inside me finally relieves itself with tears. I see that this feather is the sign. The sign that I am not alone. That the world is living not only outside of me but also *inside* of me. I look around me. I see the land, the water and the sky. *This is where you will find your answer*. I realize that *my* treasure is *inside* of me. It is my own experiences, my own stories. It is these stories that I should offer to the world. Stories that speak of a relationship with nature that is personal, spiritual and unique to each individual. A way of understanding nature that acknowledges our everyday experiences. What we feel, see, think, hear, touch, imagine and create. An understanding that allows one to feel the living 'presence' of nature. To feel the 'Other' and not be afraid. This morning wasn't a dream. It was a vision. My vision.

Corrie and Alex approach me and I know I have something special to show them. I show them the eagle feather. They are impressed and we all feel the power that the eagle feather holds. Alex places a hand on my shoulder, looks at the feather and then at me, and smiles. His eyes tell me that he understands the significance. He is proud to be a part of it.

Beside me as I write my stories lies the eagle feather. The sign that gave me the

courage to share my voice. To tell my stories. It is a message from the creator, a reminder that the voice of nature is alive and inside us all. We must listen for this voice, and when we hear it, feel it, know it, and respect it, then we will understand that *we are all related.*

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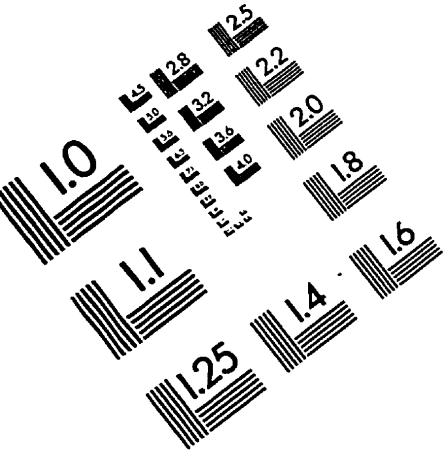
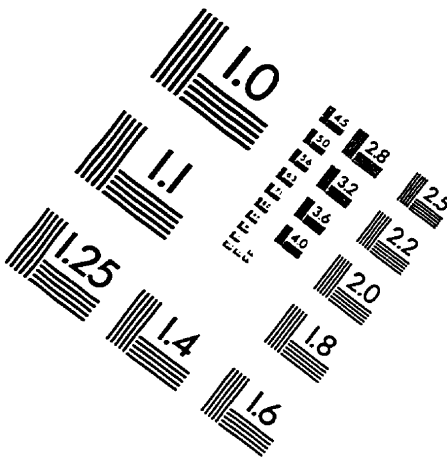
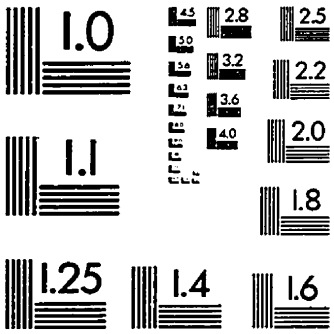
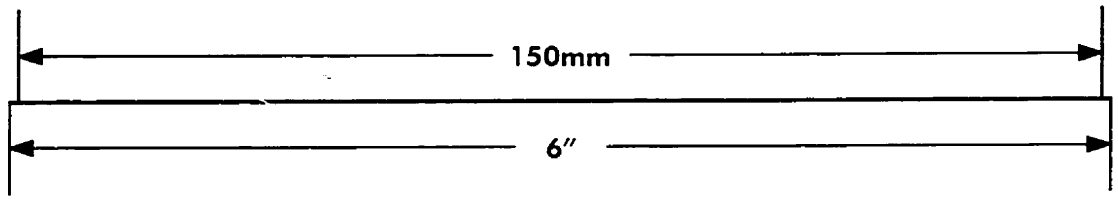
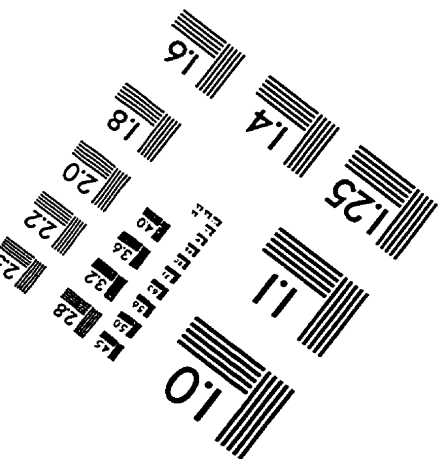
IMAGE EVALUATION TEST TARGET (QA-3)

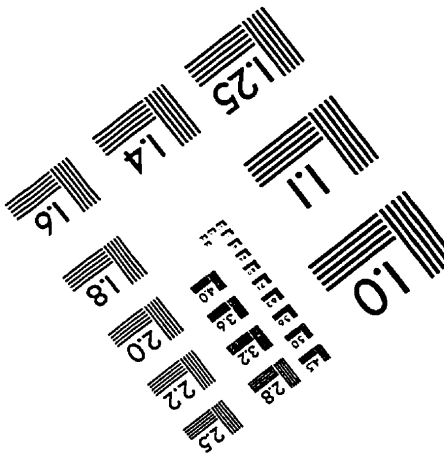












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