

Place as educator, concepts of nature: Children, summer camp and environmental education

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A consummate naturalist and environmental educator, his work continues.

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Abstract

This research documented the role of the summer camp experience in fourteen campers' (seven males and seven females, aged seven to fifteen) concepts of nature and their relationships with the more than human world (Abram, 1996). Investigated were: (1) campers' concepts of nature, (2) if and how campers' relationship with camp had influenced their concepts of nature, and (3) if and how place, and the experience of camp, had acted as an educator in the development of campers' concepts of the natural world. Using a hybrid method of phenomenography and ethnography, data was collected at Camp Arowhon in Algonquin Provincial Park during the summer of 2003 using workbooks, semi-structured interviews and participant observation.

This study was undertaken with the hope that the results of this research could lead to a better understanding of what nature is to these youths, as well as an understanding of the role that a place like summer camp can have in the process of connecting to the more than human world.

The research findings demonstrated that campers' concepts of nature fell into seven distinct categories: (1) attributes which describe relative complexity; (2) attributes which denote agency; (3) attributes which denote value; (4) attributes which relate to, or are based on, concepts of human manipulation of nature; (5) sensations; (6) a place and (7) an activity or experience. Campers' sustained embodied relationships with Camp Arowhon facilitated their relationships with nature and informed their developing concepts of nature. All campers believed that they had experienced nature at camp and that nature was an important part of their camp experiences. Through the act of becoming-camper, a re-definition of what it is to be human and the location and type of power that can exist between the camper and non-human others, campers developed a relationship with the more than human world and ascribed value and worth to that world. Through these relationships, the land that these campers came to know as Camp Arowhon became an environmental educator. Integral to these experiences were the following qualities: (1) a perceived distance and difference in independence, on the part of the campers, from home life; (2) the permission, based on the act of becoming-camper to redefine relationships to the self, the land, the natural world and the wild others that surround the camp; (3) the milieu of growth that exists due to the synergistic effects of personal and biospheric development; (4) the sensuous, embodied experience of the land, the camp, friends and the place, and; (5) the opportunity for continuity over time and space: to stay for up to eight weeks and return year after year to the same place.

Recommendations were made for further investigation of children's conceptions of nature and relationship to place in urban environments. These recommendations included a responsibility for environmental educators to seek and share urban experiences which expose those who live in urban settings to an embodied and sensual experience of the natural urban world and the modification of what practices are seen as environmental education so that space is created for new ways to connect to the land.

1. Introduction

If someone were watching you this morning, it would have looked like you disappeared into the forest. You, however, know the secret of your disappearing act. The worn path through the forest that you are on now is well hidden from view along the gravel road. No longer bordered by trees on the road, you are surrounded by them as you walk towards a small log building, no larger than a camper cabin inside this forest. As you walk along this path, you notice on your left and right, the dappled, pattern shadow and light play on the forest floor that surrounds you. Looking back towards the road, you see the hole, now bright and backlit, through which you entered. You were warmed by the sun as you walked along the road, but now that you are sheltered by the shade of the canopy overhead, the heat of the morning sun is replaced by a certain feeling of respite.

It is, by all accounts, a beautiful morning. Walking up the steps to the screen door, you look at the thermometer screwed into one of the building's log supports. It looks to be about twenty two degrees in this mottled shade. As you walked to the Main Lodge for flagpole earlier this morning, you noticed that the grey-greens of the spruce trees across the lake were now more vibrant and visible: it seems to be a bit less humid today than it was yesterday. It's a comfortable temperature. For mid-morning it's warm, and while you're comfortable in your sandals, shorts and a tee-shirt, the sweatshirt you started the day with comes off as you walk into the lodge. To greet you, a light breeze blows through this big screened-in building and across your arms. The little hairs on your arm move just enough to register the fact that the atmosphere is moving. From the periphery come the noises of a typical camp morning: feet running along the gravel road, distant shouts between cabin mates and the sound of a sudden gust blowing through the upper boughs of the near-by White Pine.

The screen door slams as a young boy enters the building and you are reminded that this lodge is not a secret, the forest path not a surprise to most: today, like yesterday, you are charged with the responsibility to share your insights and wonder of the natural world with the campers that are now joining you in this nature lodge.

"What are we gonna do today?" the boy asks as the screen door quickly closes behind him. Before you get a chance to reply, he's off to one of the terraria that you set up earlier this month. "What's in here today? Is the toad still here?" The questions are coming quickly with little time to respond. You can feel his excitement.

The door opens and shuts again, with a young girl entering the nature lodge this time. Looking towards the door and back to the forest

opening, more bodies duck into the forest and make their way along the path towards the cabin.

The young girl, hearing the earlier questions moves over the terrarium and answers the boy. “We caught a kind of frog yesterday after we let the toad go.” The girl pauses for a moment “I think we caught...it’s called...a wood frog?” She turns to you, looking for some sort of agreement. You nod your head. “Yeah,” she continues “it’s was a wood frog. It looks like it’s wearing a black mask. We caught it behind the Junior Boys’ cabins yesterday. It was in some moss.” She speeds up as she continues to share the story. “It kept hopping away. Man was it hard to catch!”

This period, lasting for an hour, you decided, will be spent looking for insects along the shore of the lake. Inevitably, you’ll come across Others, like a garter snake sunning itself, or perhaps, if you are as lucky as you were last week, another garter snake in the process of eating a green frog it managed to catch.

Regardless of the final inventory, you know that the experience, for the campers here this morning will be one of discovery and excitement. Stories to answer the inevitable “what is it?” will be shared as you move along the shore on your hunt. You smile at the anticipated enthusiasm and excitement that you know will come of this experience. Walking towards the door of the cabin, you collect magnifying glasses and nets and gather the group. The boys and girls collect outside in a gaggle around you.

If someone were watching you this morning, it would have looked like you were enjoying yourself.

Assumptions about nature

To investigate nature is not a simple undertaking. Nature has been described as “perhaps the most complex word in the language” (Williams, 1976, p. 184). Complex, due in part to the density of meaning that is incorporated into that single word. Neil Evernden (1992) describes the history of the word nature; how it was created by pre-Socratic thinkers to describe, in one word, the multiplicity of phenomena that surround. Evernden explains the significance of this word:

The possibility of having a thing called nature is as significant a development as a fish having a ‘thing’ called water: where there was once an invisible, preconscious medium through which each moved, there is now an object to examine and describe. (1992, p. 20)

The word nature is not necessarily a “word”—something to understand once it has been looked up in a dictionary. Nature has become more of a synergistic concept; a term where complexities and history of meaning matter more than the proper dictionary meaning (Williams, 1980). So, it is acknowledged that there is more than just one meaning, more than just one concept for the word nature. The particular meaning of nature that I am interested in investigating has been described in many different

ways. For example, geographer Yi-Fu Tuan describes nature as the land or air untouched or virtually untouched by humans (1998, p. 20). Environmental philosopher, Val Plumwood argues that nature is not “hyper-separate” and “lacking continuity with the human” (2002, p. 107). She believes that humans are part of nature, and to ignore so is to be anthropocentric. Andrew Stables believes that “our conceptions of nature are thus mere simulacra; our realities are textual, virtual and socially constructed, and they have no stable meanings” (2001, p. 249).

At the heart of this discussion lies the question: does a true nature exist or is it socially created by humans? This investigation assumes two things about nature: first that external phenomenon, that which includes rocks, atmosphere, water, plants and animals do indeed exist and second that nature is socially invented. This first position is somewhat in opposition to the tenets of a strong post-modern approach to nature: one where nature is a socially constructed or socially invented object or place. This position, I believe, is anthropocentric in its approach. To conceive of the natural world as ceasing to exist when we close our eyes or when we disappear from the planet promotes a limited perspective in our approach and interactions with those objects that fall within our conceptual sphere.

However, the possibility exists for individuals to “create” nature. I believe that, in fact, each person holds a subtly different interpretation of just what those external phenomena *are*. Thus, I am interested in what my participants perceive as nature, and the similarities and differences that exist in their interpretations.

Nature, natures: a word on semantics

Given the fact that I believe that there could be more than one concept of nature that exists for the participants of this study, it is worthwhile spending a moment discussing how the language that I use in this document will support this idea. My philosophic approach to this research is to allow for different concepts to emerge and exist in the data. Therefore, while I could write of “multiple natures” or “an individual’s concept of nature,” and support my philosophic approach, I find that these terms are unwieldy in a literary sense. Thus, for simplicity’s sake, when I speak of these multiple concepts of nature, I plan to still use the word nature rather than writing more convoluted and awkward phrases.

My relationship to camp: origins of the study

Over the course of eighteen summers, I have had the opportunity to “go to camp.” Reflecting upon my experiences in a personal and professional way, camp has been, without a doubt, the most important thing to have happened to me thus far in my life. My experiences as a camper and staff have furnished me with more memories, opportunities for growth and true friendships than I could have hoped for that first time I was driven to camp as an eight year old.

Camp, for me, is a place where nature surrounds. For the last five years, I have worked at Camp Arowhon, located in Algonquin Park, Ontario. I have also worked at a camp along the shores of Lake Erie, and another beside Chesapeake Bay. Together with my experiences as a camper at a camp in Muskoka, my encounters with the natural

world at camp provided me with experiences that supported my interest in the natural world and helped me develop my own environmental ethic.

While I was supported at home to take an interest and develop a relationship with the natural world, my experiences at camp provided me with a unique immersive experience in my *own* nature. Returning to camp year after year, I developed a connection to that place, one where I had stories about paths, names for my own hidden places, and a relationship with the land. From this relationship to land, I learned more about the natural world and was able to grow.

So it was with these experiences, not quite as well enunciated as they are here, that I began working at camp. Interestingly, for the first nine years that I worked at a summer camp, I was the nature instructor only once, and that was at age seventeen. During that same time, I was involved in environmental education working as a naturalist, program co-ordinator and outdoor education specialist for non-profit organizations, school boards and businesses. My experience of other camps' nature programs discouraged me to take on the challenge of being the nature instructor again. So, for the balance of the summers I worked at camp, I worked as an instructor of other activity areas.

From 1998 to 2003, I worked at Camp Arowhon, which in size, program and location, closely resembles the camp that I attended as a camper. For the last four years at Camp Arowhon, I worked as the program director, supervising instructors and programs, and reviewing programs and staff. Over my time at Camp Arowhon, the nature program had consistently underperformed in the number of campers that it attracted. Thus, my previous apprehension about camp-based nature programs was consistently raised and reinforced. I was perplexed because in seeming opposition to my own experiences as a camper, it appeared to be almost universally unpopular.

It was at this time when I began to think about the role that nature and place has in the summer camp experience. I had a hunch, a feeling that there was a deep, intimate connection that existed at camp between the place and the relationship that campers developed with the natural world. At the time, I realised that this was in fact, a kind of environmental education. An environmental education that was different than those I had experienced or was involved with at the time. While I was a camper, new knowledge of the natural world was taught to me by instructors. However, these are not my most fond or vivid memories of the time that I spent at camp each summer. Upon reflection, what I have the best memories of was my own time, alone or with others, spent interacting with the land; different because no human had set curriculum expectations or set aside specific time for instruction. The land fostered my own personal connection to the natural world.

During my tenure at Camp Arowhon, I began my post-graduate studies in environmental education and environmental thought. It was through this venue that I decided to investigate the inconsistency that seemed to exist at camp. One where children who spend up to eight weeks in the middle of Algonquin Park appear not to participate in the nature program. I was concerned if a connection between the campers and the natural world was being made at all. I was troubled and wanted to look for answers. Through my formal studies, I became interested in nature and culture. More specifically, I am interested in Western society and its detachment from the more than human world. Since I believe that part of any environmental education program's goals should be to provide experiences that allow participants to make a meaningful

connection with the natural world that surrounds, I worried that the important experiences that I had as a camper were somehow being lost or missed by the current generation of campers at Camp Arowhon.

The confluence of all of these streams brought me to the study at hand. I decided that I wanted to investigate two related concepts: youths' conceptions of nature and the role of place in a child's summer camp experience. My motivation lay in the anticipation that the implications of this research could lead to a better understanding of what nature is to these youth, as well as an understanding of the role that a place like summer camp can have in the process of connecting to the more than human world. I hope that such insights into the connection between the human and more than human world can ultimately lead to improving environmental educational experiences, at summer camp and elsewhere, through incorporating the connotations of this research.

Previous research on youth and perceptions of nature

To date, there has been little research completed in the field of education looking at youth and their perceptions of nature. Rejeski's 1982 article in the *Journal of Environmental Education* specifically investigates environmental perception and education with children through a semi-structured survey method. The ultimate goal of the study was to "work towards the definition of a developmental model" (Rejeski, 1982, p. 30) of environmental education. Children in his study were offered a sheet of paper with the words "Nature is..." on the top of the sheet and they were "free to give responses in any semantic or grammatical category of their choosing" (Rejeski, 1982, p. 30). The study was completed in six public schools with 385 subjects, in grades 1, 4 and 8. The sample population was broken down by grade, socioeconomic status and gender. Qualitative analysis of the responses was completed through the use of content analysis, each response analysed for the following, previously assigned, semantic representations: species, environment, relationships and transformations. The results of the study discussed the finding that each age group "displayed normative characteristics which have associated psychological antecedents" (Rejeski, 1982, p. 30); meaning to say that the responses from the children could be classed into three categories: literalism (age 6-7), organization (age 9-10) and moralism (age 13-14). Rejeski (1982) then went on to discuss that:

...many of the views and themes exhibited in the responses are neither new nor are they confined to childhood. Many people in different times and places have seen nature in similar ways and often, in a moment of recollection, they have recaptured a vision of the natural world that their age had obscured. (p. 30)

Rejeski's (1982) article was very much an attempt to connect theories of developmental psychology and learning processes to how children come to know their natural world. Rekeski (1982) assumes that there is a dominant linear stage theory of child development without problematising it. In contrast to this, David Hutchinson (1998) writes that "it seems clear that child psychologists have 'invented' different children through the ages" (p. 62); in essence he argues against the notion of one singular truth that exists about a child's development. Therefore, it can be seen in the methodology and language used that this study had a positivistic slant to it. Though

ostensibly a qualitative study, samples were taken, populations split, and results were applied to pre-existing “psychological antecedents” (Rejeski, 1982, p. 30). Another weakness of Rejeski’s study was in the application of its analysis categories. If a child drew or wrote something that did not necessarily fit into one of the predetermined categories, bias in categorization could have occurred; rather than making a new category, the researcher would have had to discard or make the finding fit. What was potentially lost was a richness and robustness in the results of these children’s environmental perceptions. Additionally, this article was not necessarily interested in children’s definition of nature, but rather applying a developmental framework to children’s changing *conceptions* of nature.

A similar article written by Engel (1991) describes the “distinction between children’s direct and symbolically mediated interactions with the physical world” (p. 42). Similarly to the Rejeski (1982) article, the paper was interested in the developmental changes that children go through as they grow older. The purpose of the paper was to describe how symbolization, illustrated in children’s expression of nature, creates change in the relationship between children and their physical surroundings. Engel (1991) took seven-year-olds outside into the schoolyard and asked them to “just walk around together and observe with all of their senses” (p. 44). The children then returned inside and were asked to think of “words to describe what they remembered hearing and seeing” (Engel, 1991, p. 44). Five categories were then generated that described the “different ways children connect to the environment through writing” (Engel, 1991, p. 44). The categories were: (1) Children experiencing themselves in relation to the environment; (2) specific aspects of the environment evoke or create feelings; (3) images of the environment are described; (4) children organize information about something in the environment and (5) the environment is experienced in relation to the self (Engel, 1991, p. 45). Engel (1991) suggests, from the analysis of the categories, that “the different ways that children write about nature reveals the complexity and multiplicity of ways of knowing the environment, as well as knowing oneself as a part of the environment” (p. 45).

Similarly to the Rejeski (1982) article, Engel (1991) could be described as having a positivist approach to qualitative research. Engel (1991) improved over the Rejeski (1982) article by categorizing responses after they were collected, thus potentially avoiding selection bias and encouraging the inclusion of outliers. However, no description existed within the article as to how the writing was categorized and how the categories were generated. As with the Rejeski (1982) article, children in the Engel (1991) study are in school. In the Rejeski (1982) article, children are able to reflect on experiences of nature outside of the classroom, however no mention is made as to how the setting of the study may have affected the outcomes of the study. In the Engel (1991) study, however, research only took place in the schoolyard. Engel (1991) fails to mention the multiplicity of experiences that can occur outside of the school environment. Through Engel excluding the experiences that children have of the environment outside school, an inference is made on the part of Engel, conscious or not, that there is more value in the experience that takes place during school. Again, no mention is made as to how the setting of the study may have affected the outcomes of the study.

Bixler & Floyd (1997) published a article investigating the “positive and negative perceptions of natural environments” (p. 444). Based on previous studies, three

variables were selected to represent negative reactions to wildland environments. These variables were (1) expectation of encountering feared objects in situations, (2) disgusting sensitivity, a variable which describes the “expression for the ‘dirtiness’ of wildlands” (Bixler & Floyd, 1997, p. 447), and (3) a narrow comfort range due to constant exposure to modern comforts. The study sample consisted of four middle-school schools: two rural, one suburban and one urban. A description of the ethnic cross-section of the sample was provided in the article. Data was collected during class by a “research technician” (Bixler & Floyd, 1997, p. 450), in questionnaire form. Results were then analyzed and presented in statistical form. Results showed that “negative perceptions of wildland environments were related to lower preference for wildland environments and activities and, to some degree, positively related to preference for indoor environments activities” (Bixler & Floyd, 1997, p. 461). Outcomes showed that these preferences are found predominantly within the rural and suburban sample; contrasting to the assumption that urbanites tend to react negatively to natural environments (Bixler & Floyd, 1997).

While the Rejeski (1982) and Engel (1991) papers were qualitative in nature, the Bixler and Floyd (1997) paper is a quantitative analysis of what, in nature, invokes disgust in students. With the questionnaire method, used in the study, it can be argued that it is somewhat limited in its ability to grasp the nuances of particular behaviour. In the Bixler and Floyd (1997) study, no mention is made of the limitations of the results based on this research tool. Additionally, given the fact that the researchers focused exclusively on “negative perceptions,” the assumption is made that negative perceptions of nature are more important and have more impact on an experience than positive perceptions of nature do. I question the focus on investigating the relative importance of negative perceptions of nature to the exclusion of positive ones.

Loughland, Reid, & Petocz (2002) examined young people’s conceptions of environment, using a phenomenographic approach. The research itself is part of a larger Australian research project, whose aim is “to ensure the development of more appropriate and student-centered environmental programs and curricula” (Loughland et al., 2002, p. 189). The research method was a questionnaire, administered to students from seventy schools across all districts in New South Wales, Australia. This paper focused on the responses given by 2249 students aged nine, twelve, fourteen and seventeen. The students were asked to state what they “understand by the term/word “environment” (Loughland et al., 2002, p. 189). The responses were then analyzed phenomenographically. The effort was to focus on the qualitatively different ways that the students “understand the notion of the environment” (Loughland et al., 2002, p. 190). From the students’ comments six qualitatively different conceptions of the environments were interpreted. The categories were then placed in a hierarchical order from the least sophisticated to the most inclusive and expansive. These categories were: (1) the environment is a place; (2) the environment is a place that contains living things; (3) the environment is a place that contains living things and people; (4) the environment does something for people; (5) people are part of the environment and are responsible for it and; (6) people and the environment are in a mutually sustaining relationship (Loughland et al., 2002, p. 192). Loughland et al. pointed out that conceptions one to three were dualistic in nature whereas conceptions four to six incorporated a more integrated and expansive model of the environment. Discussion centered on the need to develop environmental education programs that acknowledge

the variation in young people's understanding of the environment and that focus on helping students "shift their awareness from the limited, objectified views to the more expansive, relational views" (Loughland et al., 2002, p.196).

There were many strengths to the Loughland et al. (2002) paper. By applying a phenomenographic analysis of the research material, the researchers ensured a situated and second order analysis of what the concept of environment meant to the students surveyed. However, conducting phenomenographic research from the results of a written questionnaire is somewhat suspect. Ashworth and Lucas (2000) discuss in their paper on a practical approach to the design, conduct and reporting of phenomenographic research that "the most appropriate means of obtaining an account should be identified, allowing maximum freedom for the research participant to describe their experience" (p. 300). The most common phenomenographic research method is the unstructured interview. This offers the researcher the opportunity to obtain a "detailed and rich encounter within the lifeworld of the student" (Ashworth & Lucas, 2000, p. 302). In the case of the Loughland et al. (2002) paper, it could be argued that the researchers, while managing to secure a large sample size, did not allow for the maximum freedom for the students to describe their experiences. Due to this methodological error, the potential exists that the students involved with the research did not have the opportunity for maximum freedom in the description of their experience. The results of this study then, are at best, incomplete. Additionally, students were sampled within a school setting and no mention was made of the impact that this setting may have had on the statements that the students made.

Finally, Loughland et al. (2002) did not discuss the issues surrounding the term "environment". It could be argued that the word environment is somewhat like the word nature; it has many different meanings, ranging from natural environments, that Loughland et al. (2002) were interested in, built, social and even organizational ones. In phenomenographic research, what the researchers believe a concept "means" should have little bearing on the findings of the research, due to the interest in a second order understanding of the phenomenon being studied. In a second order approach, it is "the experience of the phenomenon as described by others that forms the basis of the researchers description" (Trigwell, 2000, p .78). However, if the researchers do not choose a word that appropriately conceptualizes the phenomenon that they wish to study, they risk misrepresentation.

To provide an analogy, it is inappropriate to ask students what they think of the sea if the researchers are, in fact, interested in what the students think of fish. I would argue that in the case of the Loughland et al. (2002) paper, to ask students what their conceptions of the environment, a nebulous and ill-defined term, are with no opportunity for the students to engage with the researchers, or vice versa, potentially leads to a situation ripe for misinterpretation. This could lead to a "blind researcher" effect; reporting on data believed to be x when it is in fact y . The danger of this effect lays in the fact that researchers are unaware of this possible fallacy; the outcome potentially being that study results are not representative of what the researchers were originally interested in investigating and yet they are reported as such.

2. Method and design

Study Purpose

As I began my formal studies in environmental education, I began to examine my own experiences as an environmental teacher and learner. What drew my attention were my experiences of environmental education at camp. From my perspective, it appeared that even though I worked at a place that I saw as being immersed in what I conceived of as nature, the program that was specifically designed to encourage an interest in the natural world was disliked by the camper population. Given my own experiences as a camper, and my connection to the natural world through the place of camp, I was puzzled and it was this puzzlement that was the initial source of this study.

For this investigation, which took place during the months of July and August, 2003, I was interested in studying the connections that children develop with a place, in this case, a children's summer camp. Specifically, I was interested in investigating these lines of inquiry:

1. Campers' concepts of nature,
2. If and how campers' relationship with camp had influenced their concepts of nature, and
3. If and how place, and the experience of camp, had acted as an educator in the development of campers' concepts of the natural world.

Given these interests, I decided that an investigation combining the methodologies of phenomenography and ethnography would best inform the method and associated research tools for this inquiry.

Context of the study

Personal context

My personal relationship with, and ethic of, the natural world

I have held an interest in investigating the natural environment from a young age. Many experiences of my childhood were centered in the natural world. Growing up in a family of naturalists, much time was spent discovering the flora and fauna of southern Ontario at the feet of my parents and grandparents. A sense of wonder for the world developed and has stayed with me. It is within this setting that my relationship with the natural world and personal environmental ethic developed.

While I am hesitant to label my own personal environmental ethic for fear that it pigeonholes my beliefs and ethical justifications, if I was to identify with an established "-ology" or "-ism," I would choose biocentrism. For Peter Hay, biocentrism and ecocentrism are analogues which he describes as "the belief that the earth and its bounty

are not the sole preserve of a single species, *Homo sapiens*, and that the key ecological insight of the interconnectedness of life should inform conceptions of what is ‘good behaviour’” (2002, p. 18). To expand on my proclamation of biocentrism and how I interpret it, my ethical and philosophical guidelines are informed by the notion that all of my actions have an effect on and affect others. In this case, I expand my definition of others not only to include humans, but to include all living organisms that I interact with.

I am, however, not paralysed by these values as I believe that in order for there to be life, there must be death. Death is not something that should be feared or avoided. Death is a part of life: biologically speaking, all heterotrophs need to consume others to meet their energy needs or perish. Autotrophs are the exception to the biological rule, however, they still need to consumer energy external to theirs existence in order to exist. With the exception of life based on chemosynthesis, all life on Earth is, in essence, modified sunlight. So, with this biological truism, all organisms have an equal right to life. This may smack of misanthropy to some, but in fact, I celebrate the life that humankind has. However, I also equally celebrate the life that my dog has, as well as the spider in my shower, the fern in the living room, the lettuce in my salad and the tomatoes in my sandwich. Would I myself want to avoid being eaten, for example, by a mountain lion? Undoubtedly. Would it be *wrong* if a mountain lion killed and ate me? No.

My personal relationship with summer camp

I would describe the experiences that I obtained as a camper and as a staff member at summer camps as some of the most important of my life. I look back on my days as a camper with fondness. Each year I looked forward to camp, so much so that on the mornings of my departure to camp I would demand that we left as early as possible. During these drives breakfast was to be avoided, and stops were to be as short as possible. It was my goal to get to camp as soon as possible.

Summer camp, to me, was a special, magical place. My camp was located in Central Ontario on a large lake. The rituals of place returned each year: the first swim test in the tannin-stained lakewater of Ontario cottage country, the games played in the surrounding forests, campfire, sing-song in the dining hall, and the canoe-trip with cabin-mates. At one point in my childhood, I told my parents that if I died that I wanted my ashes scattered at camp. While I’m not quite sure what my parent’s reaction was to that news, my wishes spoke to my deep connection to my summer camp experience.

My professional relationship with summer camp

As a younger camper, I enjoyed interacting with the counsellors of my summer camp. I saw them as very special people, the kind of people who I enjoyed being around and wanted to emulate. To me, they held extraordinary skills. As I grew up at camp, I decided that I wanted to be one of those people that I looked up to. I wanted to work at camp. At the age of sixteen, that is what I was able to do.

My first camp job was at an Easter Seals camp, where I worked as a counsellor for my first summer. I returned to work at Easter Seals camps for another three summers. I worked as a counsellor, instructor, and head counsellor. At the age of twenty, I

decided that I wanted to work for a camp that was similar to the camp I went to as a camper. That summer, I took a position as an instructor at Camp Arowhon. There were a few factors that influenced my decision. Primarily, the camp was located in Algonquin Park. At the time, I saw Algonquin Park as an opportunity to experience a special place: working in one of the best-known provincial parks added a certain cachet to the experience. Additionally, when not at camp, I worked as a Nature Interpreter. A summer spent in Algonquin Park proved appealing because I was interested in getting to spend time on the lakes and in the forests that surrounded Camp Arowhon, with the end of becoming a better natural historian in mind.

My experience working at Camp Arowhon the summer of 1998 exceeded my expectations. While I did get to spend the summer in Algonquin Park I, unexpectedly, also experienced the opportunity to meet people with whom I have built strong friendships and personal relationships. And so, since that summer, I returned to Camp Arowhon in different positions. My last four years at camp were spent as a program director working closely with one other person reviewing programs and program staff. Program director is a position at camp that is considered to be middle management and as such, I was supervised by a camp director (Figure 1). I supervised head instructors and, in turn, they supervised their own staff. Because of the nature of working with another program director, we split the programs that we supervised.

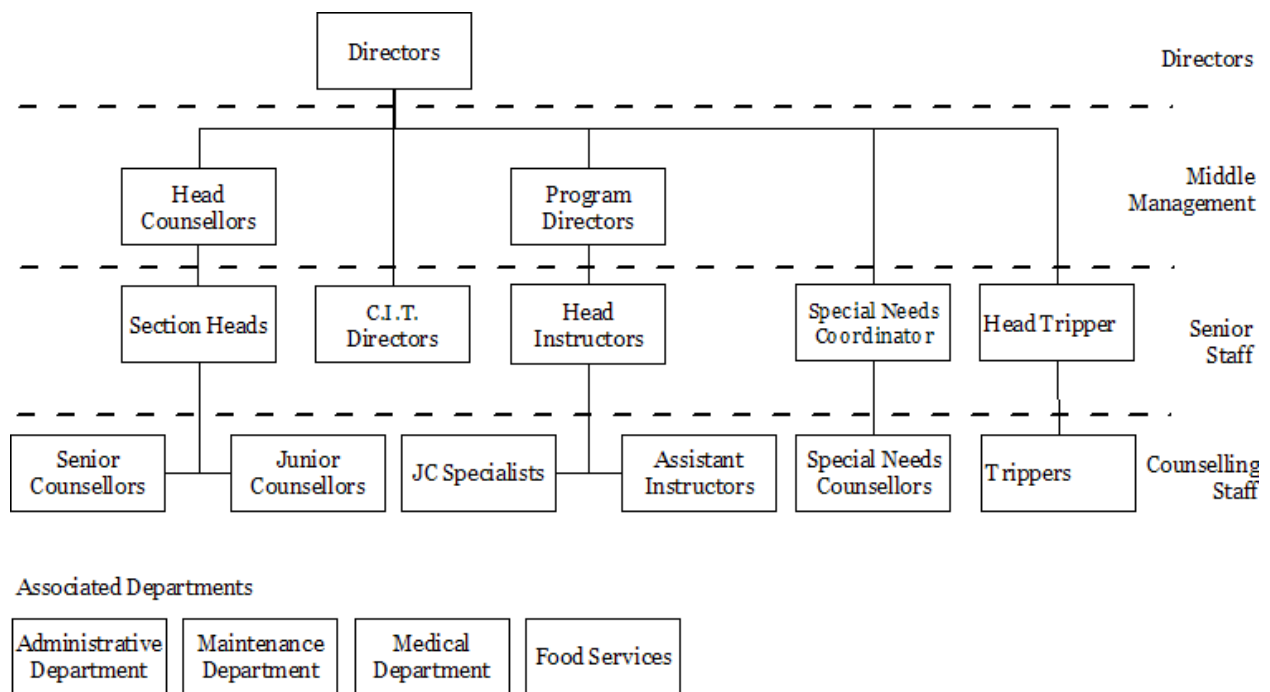


Figure 1: Camp Arowhon staffing chart

Study site: Camp Arowhon

This study took place at Camp Arowhon, which is located in Algonquin Park, Ontario, on Tepee Lake, one portage and one lake north of Canoe Lake and the Canoe Lake access point. Arowhon is accessible by car from Highway 60 along a twelve kilometre private road, located fifteen kilometres from the West Gate of Algonquin Provincial Park. Algonquin Park is the oldest provincial park in Ontario, and at 7725 square kilometres, it is one of the largest provincial parks in Ontario (O.M.N.R., 1997). Algonquin Provincial Park is found in central Ontario, a three hour drive north of the Greater Toronto Area.

Algonquin Provincial Park: physiographical and biotic context

Camp Arowhon is located on the Western side of Algonquin Provincial Park, where the major physiographical influence in the area is the Algonquin Dome, a Precambrian formation that rises 580 meters above sea level (*Natural Areas Report: Algonquin Provincial Park*, 2004). This elevation is 250 meters higher than the surrounding elevation to the east and the west of the dome and thus plays an important role in the climate of the area. Due to the combination of the proximity of the Algonquin Dome to Georgian Bay, prevalent Western winds and the process of orographic lifting, the process through which moisture in the atmosphere is “pushed” up, condenses and falls to the ground, this area of Central Ontario receives a comparatively high amount of precipitation (220–240 mm of precipitation during the three months before the growing season) but growing degree days are more comparable to that of land 100 kilometres to the north (Chambers, Legasy, Bentley, LaBelle-Beadman, & Thurley, 1996, p. 9). Algonquin Park is known for the mix of “northern” and “southern” species that can be found within the park, due in part to the physiography of the area.

On a local scale, Camp Arowhon is located along the western shore of Tepee Lake. Tepee Lake is 421 meters above sea level and is approximately one square kilometre in size (Chrismar Mapping Services, 1996). This lake flows into the Oxtongue River, which is within the Georgian Bay Watershed. Rising from the western shore of Tepee Lake is a ridge that extends the length of the western shore of the lake and parallels the shore of the lake. This ridge is approximately forty to fifty meters higher than the lake, and reaches its highest elevation 300 to 400 meters inland from the shore. On a practical scale, the further inland you walk from the lake, the higher you walk. There are two small lakes to the west of camp, known as Hidden Lake and Lost Lake. Hidden Lake, approximately 500 meters from camp, is an old beaver pond and its major biological feature is a ring (or donut) bog. Lost Lake is approximately 800 meters from camp. Both of these water features drain into Tepee Lake. The eastern shore of the lake rises abruptly from the water to an elevation of fifty meters in less than 100 meters. Towards the south-eastern end of the lake, there is a 10 meter exposed rock cliff. To the north and south of the lake, the land slopes gently upwards and there are no physical features that visually dominate.

Behind the camp, towards the ridge, is a typical mixed hardwood forest of the St-Laurence / Great Lakes forest region. Dominant species in proximity to Camp Arowhon are immature sugar maple (*Acer saccharum*), interspersed with mature yellow birch (*Betula alleghaniensis*), white birch (*Betula papyrifera*) and balsam fir (*Abies balsamea*). Older white pines (*Pinus strobes*) and hemlock (*Tsuga canadensis*) can also be found. The age of this forest is relatively speaking, young. Mature black cherry (*Prunus serotina*), which can be described ecologically as a pioneer species, can be found in places, and there remains a relatively thick understory of sapling sugar maples. This combination speaks to the forest's youth. The age of the mature sugar maples are assumed to be forty to seventy years based on size. The mature yellow birches are assumed to be approximately 100 years old. Logged at the turn of the 20th century, stumps from this era are still visible throughout the forest and provide explanation as to the age distribution of the local forest species.

The forest floor has a number of common plant species. White, red and painted trilliums (*Trillium spp.*), indian cucumber root (*Medeola virginiana*), mayflower (*Gagea lutea*), wood sorrel (*Oxalis acetosella*), various species of *Lycopodium* and a diverse selection of fern species (division *Pteridophyta*) grow. As you descend towards the edge of the lake, tree species change, with coniferous trees (such as balsam fir, black spruce [*Picea mariana*], white spruce [*Picea glauca*] and white pine) outnumbering deciduous ones. Looking across the lake, the vista is dominated by coniferous trees and white birch. The south-west cliff is surrounded by red pine (*Pinus resinosa*) and, at the precipice, oak (*Quercus spp.*) can be found, illustrating the dryness of that micro-climate.

Fauna that are common around Camp Arowhon depend on the time of year. Due to the temperate climate and the associated cold-weather months, many species migrate away from the area, go into some sort of dormancy or simply live their adult life cycle in a summer season. Year-round residents that have been seen or heard at camp include black-capped chickadees (*Poecile atricapillus*), grey jays (*Perisoreus canadensis*), nuthatches (*Sitta spp.*), golden-crowned kinglets (*Regulus satrapa*), woodpeckers (*Picidae* family), barred owls (*Strix varia*), ravens (*Corvus corax*), moose (*Antilocapra americana*), deer (*Odocoileus virginianus*), fishers (*Martes pennanti*), otters (*Lontra canadensis*), wolves (*Canis lupus lycaon*) and humans (*Homo sapiens*). Common summer residents include many species of passerines, broadwing hawks (*Buteo platypterus*), common mergansers (*Mergus merganser*), black duck (*Anas rubripes*), species of blackflies (*Simuliidae* family), species of mosquitoes (*Culicidae* family), species of dragonflies (order *Odonata*), snapping turtles (*Chelydra serpentina*), garter snakes (*Thamnophis sirtalis*), Dekay's snakes (*Storeria dekayi*), green frogs (*Rana clamitans*), wood frogs (*Rana sylvatica*), bullfrog (*Rana catesbeiana*), spring peepers (*Pseudacris crucifer*) and American toads (*Bufo americanus*).

Camp Arowhon

Camp Arowhon was built to be a family camp in the woodcraft movement and nature studies tradition of Ernest Thompson Seton in the mid-1920s (Kates, 1998). Camp of the Red Gods, as it was originally known, ran out of money and was abandoned at the end of the 1920s. The lease for Camp of the Red Gods was purchased and began operating in 1934 as Camp Arowhon (Watson, 2002, p. 8). Presently, some buildings

from this era still remain standing. The Main Lodge, the camp dining hall, is the largest building remaining from this era, and is also the largest building on the camp property.

Physically, Camp Arowhon can be described as being located prominently on the western shore of Tepee Lake. Strung out along 800 meters of the shore, buildings are no more than 100 meters from the lake. The cabins are all located within the surrounding forest; trees, interrupted by gravel roads and pathways, dominate the camp environs. The camper cabins are split along an imaginary east-west line that transects the Main Lodge. To the north is girls' camp and to the south is boys' camp. Main camp includes the junior boys and girls section as well as the intermediate boys and girls section. At the north and south extremities of camp are the curve and the point, the senior girls and senior boys sections, respectively. There are nine docks that dominate the lakescape, the largest being the sailing dock, which is anchored during the summer by a cabin and approximately fifteen sailboats.

Looking at the camp from the lake, care has been taken by the owners and the Ontario Ministry of Natural Resources to reduce the visual presence of the camp for those who are travelling through the park. To this end, during the summer season, many of the cabins are not visible from the lake and any new building that takes place at camp must occur away from the lake, unless it is meant to replace a building that already existed.

The Camp Arowhon camper population

Camp serves a population of 300 campers; boys and girls who age between seven and sixteen years. Camp Arowhon's camp runs for eight weeks each summer. There are two sessions, each lasting four weeks. Only the youngest campers (aged seven and eight) have the option of staying for two weeks. Campers do have the option of staying for a full eight weeks. Of the campers who come to camp each year, approximately seventy percent are returnees and approximately a quarter of all campers stay a full eight weeks (Saliba, 2004). The female to male ratio is 1:1.05 (Saliba, 2004). The majority of the camper population is Canadian and the majority of Canadians are from Toronto. When started in the 1930's, the family running the business strove to attract campers from nearby American cities as well. Because of this fact, Camp Arowhon still attracts a large population of its campers from the United States of America. Finally, Camp Arowhon also attracts campers from Mexico and outside of North America. Please see Appendix A for a summary of 2004 camper statistics.

The Camp Arowhon program

Camp Arowhon's mission and philosophy focuses on a camper-centered atmosphere, where each camper is provided with a safe and caring surroundings as well as promoting campers to pursue their chosen interests (Watson, 2002, p. 7). Campers live in cabins that house eight campers and two counsellors. Campers, based on age, are split into one of three sections: Junior, Intermediate or Senior. Juniors are between the ages of seven and nine, intermediates are between the ages of ten and twelve and seniors are between the ages of thirteen and fifteen. Sections, in addition to being split by age, are also split by gender, so that there are six sections in total. Campers can return one final year as Counsellors in Training (C.I.T.), a leadership program designed to prepare

campers to make the transition between the camper and counselling world. C.I.T.s, however, do not participate in the normal camp schedule as they have their own leadership program to follow. Residential summer camps generally fill their daily schedule by providing two kinds of programming: skill & activity instruction and large group games. Camp Arowhon focuses on skill and activity instruction and provides five hours of such programming each day (see Appendix B).

Campers choose what activities (see Appendix C) they are going to attend each day from a selection provided by their section head. This provides a certain amount of choice on the part of the camper as to what activity they go to. Camper cabins are the only gender-segregated aspect of Camp Arowhon: campers attend activities and eat meals in an integrated environment. The majority of programs offered at Camp Arowhon have an associated award system. While achieving awards at camp is a common experience, Camp Arowhon has its own award system, with each activity having three levels of achievement. "Thirds" are the easiest to achieve, "seconds" are more difficult and "firsts" have the highest level of skill associated with their achievement. Requirements for attainment of awards obviously change from program area to program area; however, a camper could achieve a "seconds" [sic] award over a four week session. Typically a camper may work over their entire summer or a number of summers to achieve a "firsts" [sic] in an activity.

The Camp Arowhon nature program

The nature program has had two names over the summers that I worked Camp Arowhon. For the first five years, it was known as W.E.P., which is an acronym of "wilderness and environmental pursuits." Today it is simply known as "nature." As W.E.P., the program's curricular focus was based on campcraft and nature. Campcraft is a camp term used to describe the skills that are associated with camping. Learning to build a fire, building shelters and cooking over a fire were some of the kinds of campcraft programs that would have been typically offered. During my time at Camp Arowhon, the instructors with the W.E.P. program attempted to design awards that echoed the award structure in place at other activities. Achievement of such awards was based on natural history and campcraft knowledge, as well as campcraft skill.

For the four years that I was program director, I supervised, among others, the W.E.P. program at camp. During my time at Camp Arowhon, the nature program consistently attracted the least number of campers of any program. In informal surveys of program popularity at camp and after the summer was over, the nature program often appeared as the least popular program in campers' responses. As I have written, from my own experiences as a camper, the nature program was something that I really enjoyed. The time that I spent at *Swamp Lodge*, as the nature program was called at the camp of my youth, are now among highlights of my camper experience. Because I had made my original decision to come to Camp Arowhon partially based on its location in Algonquin Provincial Park and the perceived uniqueness of the place, I was frustrated with the kind of status the program had with campers. I was left wondering: "What are we doing wrong with this program?" and "Is nature no longer relevant to these campers?"

During 2002, I offered to run the W.E.P. program. I examined my apprehension about the nature program and attempted to provide a different kind of experience. In

order to do this, however, I felt as though I wanted to make a few changes. Pedagogically speaking, I shifted the focus of the program away from the campcraft realm and re-focused it solely on the natural world. I renamed the program “nature” to reflect this. I decided that I wanted the program to be experience-based rather than knowledge-based. Because of my belief in a child’s innate sense of wonder associated with nature and the natural world, I wanted to focus on and cultivate this. It was my belief that a program that focused on providing experiences leading to knowledge (rather than knowledge leading to experiences) would allow campers to recognize and realise this sense of wonder. Awards had been a part of the program in the past. During the last years, the award program at W.E.P. had not been used and so for that reason and others, I decided to not have awards associated with the program. Finally, I had the physical location of the program changed; a new nature lodge was built in main camp. The previous building was a gazebo located away from main camp.

Because I still had my responsibilities as a program director in addition to my work with the nature program, I tried to offer nature programs as often possible. What this meant from a programmatic sense was that the nature program was not offered each day, though it was offered most, and not offered for a full five hours. The program eventually was offered on average one to three hours a day, three to five days a week over the eight week season.

Methodology

Phenomenography

Phenomenography is a “empirical research tradition that was designed to answer questions about thinking and learning” (Orgill, 2002, ¶ 1) where the understanding of the qualitative variation and discernment of a phenomenon becomes the outcome of the research (Trigwell, 2000). Orgill (2002) writes that the aim of phenomenographic research is to “identify the multiple conceptions, or meanings, that a particular group of people have for particular phenomenon” (¶ 3) The results of a phenomenographic inquiry are a “set of ‘second order’ categories” (Richardson, 1999, p. 64) that attempt to describe how relevant phenomenon is experienced; the sum of these categories is called the outcome space.

In order to discover the students’ outcome space, Ashworth & Lucas (2000) describe the researcher as needing to enter into the student’s lifeworld. Relevant phenomenon is described by researchers from the reports or inferences of their subjects (Richardson, 1999, p. 64). Because these categories of description “must depend upon an earlier invocation of students’ *very own* description of their relevant experience” (Ashworth & Lucas, 2000, p. 297), research procedure refers to the need for the researcher to “bracket” their own experiences (Ashworth & Lucas, 2000, p. 297; Richardson, 1999, p. 63). This term refers to the need for the researcher “to set aside his or her own assumptions, so far as it is possible, in order to register the students’ own point of view” (Ashworth & Lucas, 2000, p. 297); it is students’ experienced world that research bases itself on. Ashworth and Lucas (2000) also noted that the bracketing of presuppositions can never be fully achieved and that the researcher should accompany this bracketing with the use of “empathy” and a “variety of analytical techniques” (p. 307).

The most common phenomenographic research method is the unstructured interview. The practice of phenomenography has been criticized due to its dependence on “discursive accounts” which demands a “constructionist interpretation of ‘conceptions of learning’” (Richardson, 1999, p. 68). This criticism is noted, and a modification to the unstructured interview format will be used. Phenomenography, “in actual research practice, cannot—and must not—be seen as the application of a set rules of procedure” (Ashworth & Lucas, 2000, p. 307). Meaning that the researcher, in order to enter the lifeworld of those being studied, may require more than a prescribed research method to achieve their goals; the researcher must pay attention to interviewing skills, empathetic understanding and the premature closure of categories.

Ethnography

Ethnography is a research method that is used to “describe a culture” (Byrne, 2001, p. 82) and the “...origins, values, roles and material items associated with a particular group of people” (Byrne, 2001, p. 82) with the goal of fully describing, interpreting and understanding “the characteristics of a particular social setting with all its cultural diversity and multiplicity of voices” (Holloway & Todres, 2003, p. 348). It has been described as a research method as well as a methodology (Brewer, 1994, p. 231), originally used in the discipline of anthropology (Hall, 2003b), but not limited to it. In fact, ethnographic investigations have “become pervasive across a wide range of disciplinary applications” and “escape ready summary definitions” (Atkinson, 2001, p. 1). Hall (2003a) offers some direction as to the guiding questions of ethnography. She suggests that asking “How do members of a particular group perceive of or understand a certain social or cultural phenomenon?” and “How is a certain social or cultural practice socially constructed among members of a certain group?” are central to the ethnographic investigation (Hall, 2003a, ¶ 4).

Summer camp is a social setting where I believe a culture emerges. Campers and staff live together in the same community for eight weeks a summer, year after year. Emerging out of these relationships is a one of a kind social setting that, while at camp, defines a camper’s way of life. Camp is a place where values are formed, new words are created and traditions are built and maintained. Given that camp leads to such experiences, investigating the culture from an ethnographic slant allows for a description of such place and the role that it has in the lives of the campers.

Participant observation and interviews have been the primary research methods of ethnography (Byrne, 2001, p. 82). To simply interview participants is not seen as being an immersive enough method to be ethnographic; if the researcher locates themselves physically within the phenomena and context to be investigated, a richer more contextual meaning emerges (Byrne, 2001, p.82). Critiques of ethnography lie with the capacity of the research method to “represent the dynamics of cultures which are strange, and some anthropologists have questioned the capacity of ethnographers objectively to represent foreign cultures” (Brewer, 1994, p. 232). Additionally, the construction of “one form of ethnographic ‘truth’” (Manias & Street, 2001, p. 235) in typical ethnographic texts has been critiqued from a postmodern perspective. To argue that there is one truth speaks to an underlying positivist perspective on knowledge that then leads to the belief that, that one truth applies at all times and universally for that

particular group. It is important to challenge and “explore the complex, multiple truths inherent” in ethnographic study (Manias & Street, 2001, p. 240).

Phenomenography and ethnography

When selecting a methodology, the need exists to “respect as much as possible the primacy of the topic and phenomenon to be studied and the range of possible research questions by finding a methodological approach and strategy that can serve such inquiry” (Holloway & Todres, 2003, p. 347). In order to respect the topic under study, I decided that a hybrid method based on the methodologies of phenomenography and ethnography would best suit my research goals. I made this selection based on a critical examination of methods associated with both, where I assessed their methodological strengths and weaknesses in the context of my own research philosophy and goals.

Influencing my choice lay the contested ground of modernism and post modernism. I have come to the personal conclusion that people have the power to define their own realities. While people do have this power, it does not operate within a vacuum; social and cultural contexts play a role in the realities that we create for ourselves.

When examining the natural world, this means that each individual has the mental aptitude to decide what nature is and what it is not; to create their own meaning. This belief disregards and discredits modernity’s belief in a singular, true knowledge. Too much of how we conceive and create meaning occurs at an individual level to assume that this will lead to a homogeneous truth.

However, I do not agree with post-modernity assertion that a “true nature” does not exist: that it is a cultural artefact; that without humans and their contextual knowledge, there would be no nature. It has been written that the perspective that postmodernists take, rather than being revolutionary, “rationalizes the final step away from [a] connection” (Shepard, 1995, p. 25) to the natural world. In essence, I am accepting a phenomenological belief that there is an objective world that exists out of my reality and outside the reality of those around me. Perception of the world is a fusion, as Katherine Hayles writes, of interactivity and positionality: “Interactivity points toward our connection with the world: everything we know about the world we know because we interact with it. Positionality refers to our location as humans living in certain times, cultures, and historical traditions: we interact with the world not from a disembodied, generalized framework but from positions marked by the particularities of our circumstances as embodied human creatures.” (1995, p. 48) There is a physical and biological world that precedes personal knowledge. Therefore, I believe that phenomenography, in attempting to discover the “multiple conceptions” that a group has towards a phenomenon, allows for the space to exist for various meanings of that world to emerge.

Throughout phenomenographic texts, however, mention is made of the need for researchers to set aside pre-conceived assumptions of the phenomena under study to ensure that the researcher enters the participant’s “lifeworld;” the result of which can be an outcome space of second order categories generated, in theory, by the participants. I find these practices positivistic due to the assumption that the researcher can remove (through bracketing their beliefs) themselves from the study.

I believe that in this research, I bias my results even before I begin attempting to bracket beliefs, simply through the process of choosing a method. By choosing phenomenography, I am bringing my pre-conceived beliefs to the data I collect and analyse and while I did my best to “bracket” previous knowledge, I reject the notion that I can do this completely and objectively.

Yet, while completely bracketing my previous knowledge is impossible, the practice of examining what biases a researcher brings to their data can be an important result of this practice; to bracket allows space for the voices and stories of participants to emerge. The act of bracketing can allow the researcher to set aside assumptions, and in so doing, a respect for the multiplicity of voices can exist. Thus, for this research, my attempts to bracket were based on my belief that multiple concepts can exist in a population simultaneously and, hence, as a researcher, I needed to make sure I allowed those concepts to emerge in the work.

While I liked the phenomenographic methodological approach while collecting data, I found that I had some criticisms of the role that the researcher plays in the analysis of the data. I found that in order to describe the research outcome space, I had to collapse many categories into what I would describe as super-categories. I felt as though the fine detail that was present after my coding would be lost. More importantly though, I felt as though that this was a very constructivist way of analysing the data—I was, on my own, deciding what categories were important and what categories were to be collapsed. Ashworth and Lucas (2000) write that a “variety of analytical techniques” (p. 307) can be used while working with data and so, this is where ethnography enters.

In addition to attempting to discover campers’ conceptions of nature, I was interested if, and how, campers’ relationships with camp had influenced their concepts of nature, and if, and how, place had acted as an educator in the development of their concepts of the natural world. To this end, I asked questions in the semi-structured interview that would help provide perspective on these subjects. However, as I continued to work at camp during the summer, I realised how my experiences as a member of the camp community, through interactions with everyone at camp, were integral to the campers and my own perspective on the questions I asked. This realisation influenced my work by wanting to include more than interview data into my analysis, I felt as though the observed interactions that I made as a member in the community added to my inquiry.

Typically, ethnographic investigations fall into the dualistic category of *etic/emic*. These two terms are used in reference to the location of the researcher in relation to the culture and participants studied. An *etic* perspective would belong to an outsider of a particular culture whereas an *emic* perspective belongs to that of an insider. Interestingly, I believe that this summer at Camp Arowhon, I was able to gain both perspectives through the combination of these two methodologies. Being the nature instructor and a member of the community I was obviously taking an *emic* perspective to the role of camp as an educator; being a member of the community allowed for this view.

However, through conducting a phenomenographic investigation, I attempted to take a more *etic* perspective when investigating. Second order knowledge demands that the experience of the “phenomena as described by others...forms the basis of the researcher’s description” (Trigwell, 2000, ¶ 19). If an insider’s perspective is one where previous knowledge has the potential to bias the results, then through my attempts to

bracket my assumptions about the data, I believe that I was able to gain more of an “outsider’s” perspective; bracketing provided a tool through which I could examine my own beliefs and conceptions and attempt to identify and address them. *Etic*, in this sense, meant a deliberate examination of the bias that I had as a researcher of the group that I was studying. That said, given the fact that I was a member of the Camp Arowhon community at that time, I could never have a truly *etic* perspective on the community and the data created.

Simply, I believe that the synergy between the methodologies of phenomenography and ethnography allowed me to gain a greater critical perspective of the questions I asked.

The act of bracketing

Because the act of bracketing is so important for the reliability of this research, I would like to describe what I did in order to ensure that I was bracketing my own assumptions. Before I began the study, I wrote, and told myself, that I would pay attention prior to each interview to insure that bracketing of my assumptions took place during the dialogue. Prior to conducting this research I really did not know what that meant. It was fine to say that I was going to do this, but I could find no explicit description of what it was to bracket assumptions. As a researcher, I also did not realise the importance of bracketing. While choosing a methodology and method, it was just another thing that I needed to pay attention to; at the time I did not know what actions I would take to ensure it took place.

What I realise now is that “to bracket” is a nebulous thing. There’s no switch to pull, or exercise to complete that would ensure that bracketing took place on my part. That explains, to some degree, why I did not really know what I was going to “do” in order to bracket. However, because I knew that I was interested in campers’ own perceptions, I knew that I had to be aware of my own perceptions. I decided that if I began to hear different to my own, the act of bracketing was to accept and investigate those rather than rejecting them and moving on.

Thus, I reflected on my own conceptions and prepared to conduct the study. Through my experiences with this research method, I have come to realise now that bracketing is hidden until you are presented with different, contrary or unexpected concepts. Bracketing was the process through which I said to myself, during an interview, that something feels *different* here. Often, different felt confusing, and led to an internal uneasiness about what I was hearing. I attribute this uneasiness to the clash of conceptions that was occurring. This was my warning that I needed to pay attention to what was being said and how I was interpreting it.

As a researcher, I felt this clash first when I interviewed a fourteen year old male about his concepts of nature. He described nature as being, in fact two distinct “things.” I was not used to hearing nature described in this way. His descriptions were different; I was confused and had the feeling of uneasiness. So, rather than ignoring what he had to say, I addressed my sense of uneasiness, recognised that something important was being said, and began asking questions that would help me understand his perspective. In a word, bracketing is about respect: respecting any different concepts that you hear and in so doing, reserving judgement on the value and worth of any perspective. To bracket is to attribute worth to all perspectives.

Bracketing also took place as I listened to, transcribed, read and coded the interviews. I again, made no attempt to actively disguise concepts or make them fit a pre-conceived notion on my part. While working with the data, I attempted to listen, again, to the voices of the participants and accurately and authentically reproduce what they had shared with me.

While I did not know quite what it meant to bracket when I began this investigation, through my own reflection on my concepts of nature, my attentiveness to uneasy feelings in interviews and the willingness on my part to respect all perspectives being shared with me, I have developed a personal definition of bracketing. Based upon my definition, I listened to the different voices in this study and bracketed my own conceptions.

Method

Initially, after choosing a methodological framework, the first step of this study was to develop a method or methods that best suited the goals of the inquiry. To investigate campers' conceptions of nature, a phenomenographical research tool, the semi-structured interview was chosen. I decided to modify the semi-structured interview method slightly. Based on the work conducted by Rejeski (1982), I added a non-verbal component to the tool.

This non-verbal component was a worksheet to be completed before the interview was to take place. At first, I had two sheets titled "Nature is..." and "Me and nature..." I added this non-verbal tool to attempt to address Richardson's criticism of phenomenography on the dependence on "discursive accounts" (1999, p. 68). It was my intention that campers could fill these sheets out in any manner that they saw fit, including both drawing and writing.

Then I developed an initial set of five questions to be posed (see Appendix D) during the semi-structured interview. I believed, at the time, that these five questions would provide sufficient data.

In between the completion of the research proposal and the beginning of the data collection, I decided that I was also interested in what kind of relationship that the campers had with camp. I suspected, based on my own experiences, that there was the potential for a relationship to exist between their conceptions of nature and camp. To this end, I added a third question to the worksheet: "Camp is..."

Ethical review

When I had a preliminary method in place, I approached the directors of Camp Arowhon with my research proposal; I asked if I could conduct this proposed research while working as a program director and nature instructor during the upcoming summer. I received their permission and support.

Once I had secured permission to conduct the research at Camp Arowhon, I developed my informed consent document (see Appendix E). Given that I was proposing to conduct research with children, I needed to seek permission from their parents and legal guardians. However, while campers are at camp, Camp Arowhon acts *in loco parentis* (legal guardians), and so I needed a camp director's signature in order

to receive permission and conduct the research ethically (substitute consent). This simplified the process significantly.

Yet, on the other hand, I believed that if parents did not know that their son or daughter was potentially part of a research project, that my research would be ethically suspect. So, with that in mind, I wrote a letter which was sent to all camper parents (see Appendix F). Finally, because the campers themselves were a part of the research, yet, did not have to sign any informed consent document due to their ages, I developed a verbal consent document (see Appendix G) that I read to them after they agreed to be a participant but before any work was completed so that they had the option of not participating. It should be noted that this verbal text was an outline and I took liberties to change how it was delivered, based upon the camper's age. I took great care to ensure that every participant understood what they were consenting to, felt comfortable with their role in the study and that they were indeed interested in participating.

Pilot Study

Before I began my research, I piloted my study. For the pilot, I solicited participants through an announcement in the Main Lodge. From that announcement, I was able to secure five interested campers (two boys, both intermediates and three girls, one from each section). I followed my proposed procedure: I handed out the worksheets, and conducted the interviews based on my five questions.

I came to a number of conclusions based on the outcomes of the pilot study. The interviews that I had conducted were too short: some no longer than fifteen minutes. I believe the interviews were brief because campers were not comfortable talking in long passages about the questions I asked, they did not elaborate on their answers to my questions and I did not extensively probe their responses. The original five questions were not enough to elicit the detail that I felt would be needed and were "too big" and too abstract for most campers to really feel comfortable answering. As I listened to the interviews, I addressed the problem of the original questions being too big and too abstract by noting what additional questions I had asked when I attempted to flesh out answers. I found that I clarified and followed up in similar ways in all interviews and I incorporated these into a new set of questions.

An additional problem with the initial set of questions was that between the time that I developed the original questions and the time that I piloted the study I became interested in the role that camp had in a camper developing a relationship with the natural world. None of the original questions were related to this new line of inquiry about camp as a place. Thus, I added questions that I believed would help answer queries I had about the relationship between camp and the natural world. With these in hand, I spoke to my advisor and developed a final set of questions; a set that has significantly more questions on a wider variety of topics related to the inquiry. See Appendix H for the set.

I also listened to the kind of answers I heard from the campers. From this, I attempted to critique my own interviewing techniques. My inexperience as an interviewer showed. I remember at the time reflecting on how hard it was to listen to what was being said and simultaneously attempt to come up with a thoughtful question to prompt more discussion. What I discovered was that I often did not get a camper to elaborate on statements made and so, while I would have an answer to a question that I

asked, it was often an incomplete thought. I realised that when a camper said that something was “cool,” for example, that I could not take for granted that I knew what “cool” meant. Therefore, as I carried out the main study interviews I attempted to have the campers describe what they meant when they used a generic word. To this end, I attempted to ask campers questions that clarified and defined statements that they made.

Main Study

Participant Selection

In phenomenographical research, Ashworth & Lucas (2000) discuss that the “selection of participants should avoid presuppositions about the nature of the phenomenon or the nature of the conceptions held by particular ‘types’ of individuals while observing commonsense precautions about maintaining ‘variety’ of experience” (p. 300). When selecting participants for this study, I attempted to choose a group of campers that represented a cross section of the larger camp community. To that end, I selected fourteen participants to interview. Of the fourteen campers that I selected, ten lived in Canada, three lived in the United States of America and one was an international camper. In order to echo the camp’s gender split, I interviewed an equal number (seven) of boys and girls. Intermediates are the largest section in camp and so, I interviewed six intermediate campers (divided evenly by gender). I then selected four junior campers and four senior campers (divided equally by gender). See Appendix I for a summary of the ages, gender and sections of participants.

While this selection of participants echoes the characteristics of the greater camp population, the results from this study belong to the group of fourteen campers; I will not suggest that the results from this study are applicable to youth other than the participants themselves. That said, given that I paid attention to participant selection, I was able to ensure the robustness and reliability of the group chosen.

While I had solicited “self-selection” in the pilot, when I started the main study, I chose and approached campers to see if they wanted to participate. I attempted to conduct one interview per day. Given my other commitments and that campers were involved with programming all day long, finding a mutually convenient time that was long enough was a challenge. Eventually, two specific times of the day worked out as best interviewing times: rest hour and staff hour (see Appendix B for the camp’s daily schedule). Both hours worked because they were “hang times” for campers and I was able to find an interested participant with some time to spare.

I chose participants based on the established criteria. Other than representing the camp’s distribution of gender, age and home location in my participants, I had no formal procedure for contacting participants. I had a few methods that worked best. Because I knew what gender and section I was interested in interviewing, I would often go into that section during a meal and ask a camper that I knew if they would be interested in helping me. I also selected campers through the nature program. As I was leading a walk or exploring with a group of campers, I would ask a particular camper if they would be interested in helping me with my work. I also asked section heads if they had a camper who was talkative and then approach them. Finally, knowing that I was interested in interviewing a junior boy, for example, I would walk through that section

during rest or staff hour and find a camper who would be interested in being a participant.

Critically speaking, my procedure for selecting participants is potentially biased in that I could hand pick a group of campers. However, the method used was the best that I had at my disposal. I was not in a position to randomly select campers to participate. While I approached campers with whom I had a relationship, or who were participating in a nature program and may have introduced some selection bias, I do believe that my personal relationships with campers added to the research. As I had worked at Camp Arowhon for five previous summers, campers didn't just know me as a "researcher" or "nature instructor." I was also known as a "canoe instructor" a "ropes instructor," a "program director" and, perhaps as "that guy who sings at campfire." I believe that because these campers knew me as much more than "that guy doing research" allowed for a comfort and honesty in the interview setting.

Once I had made initial contact with a potential participant, I asked them if they would like to help me with my school work. If they had said no, I would have no longer considered them as potential participant. That said, no potential participant approached declined my request to be interviewed. When they said yes, I informed them as to what would be involved, modifying my explanation of what was involved based on the potential participant's age (see Appendix I for age range). If they were still interested, I then either scheduled a time to meet and conduct the interview or conversely if the present time was good, conducted the interview.

After a participant had been identified, contacted and had accepted to be interviewed, the interview took place outside, on a cabin porch or in the nature lodge. Interviews were interrupted on more than one occasion by others: asking what was going on or campers wanting to show me something they caught. I particularly liked the setting within which the interviews took place. I liked the idea that this was a study about camper's conception of nature and they could easily point to the lake, or a nearby tree and share a thought or insight; the study setting had more authenticity.

Collection

After verbal consent was granted on the part of the camper, I would begin by giving each participant the worksheets. On top of those sheets were the words "Nature is...", "Me and nature..." and "Camp is..." I instructed the participants that they could fill out the sheets using any form of expression appealing to them. Most participants chose to complete the worksheets by writing short answers and some drew illustrations in addition to their short answers. Once this activity was complete, I asked the campers about their work. All dialogue was recorded for later transcription and analysis using a Sony IC Recorder and I would begin recording when I asked campers about their worksheets. I asked campers to read what they wrote or describe what they drew and followed up asking related questions.

Once they had finished describing their worksheets, I began to ask the questions that I had developed (see Appendix H). With my evaluation of my pilot interviewing techniques in mind, I paid special attention throughout the interview process to attempt to ensure that my interview style allowed as full and descriptive answers as possible. I also attempted to get the most detail possible from the participants through the use of probing techniques such as follow-up questions and questions that were related to a

participant's answer but not necessarily on the sheet of questions to be asked. Digital audio files of these interviews transferred to my computer and stored.

Transcription

With the fourteen interviews complete, and the digital files on my computer, I transcribed the interviews myself. Each interview took approximately nine hours to transcribe, depending on length of interview and other associated factors (such as my typing speed and quality of source audio).

I decided to transcribe the interviews myself because of the relationship that I wanted to have with the work. The interviews were transcribed with attention paid to accurately reflecting the emotions and emphasis of the participants (Ashworth & Lucas, 2000). I believed that another person would have difficulty accurately reflecting these emotions and emphasises because not being present at the interviews they would lack the contextual knowledge that I had of the interview. Thus, as I transcribed the work, if a camper laughed, I would include that in the transcription. If a camper was emphasising a point, I italicised those words which had force behind them. While I paid attention to the emotions and emphasis, most interviews were free of highly emotive or forceful dialogue. I do admit that I may have missed intended emotional meaning in passages, as I had no way of truly knowing what emotive state the participants were in when they were in the interviews. Additionally, my own emotional "palette" may not be as well developed as others; I may have missed meaning that another would have picked up due to differences in interpretation. However, because I did attempt to pay attention to these characteristics as I transcribed, I believe that this led to a higher quality transcription; one which authentically represented the interviews, including what and how it was said.

Coding

I used qualitative research software called HyperRESEARCH (Gaskin, 2003) to code and manipulate my research data. Prior to using the software, I had begun to hand code my data. I was not pleased with the work because of the length of time of time it took to code and my concern that I was not getting as finely detailed data as I wished. By using this piece of software, I was easily able to add a code and manage the coding process without getting lost in the data. To that end, when I completed my coding of the data, I had 829 total codes that described the outcome space of the entire study (see Appendix J). The final number of codes speaks to the richness of detail that I wanted to exist with this work.

I would begin by opening a transcript using the qualitative research software and proceed to read the transcript. When coding, I had two general categories of codes. The first was a code that described what the camper had said. The second type of code was an overall category, using my own words. For example, when a participant was asked why animals were important to her, she responded, "Just 'cause they're so nice to see playing and they make nice noises sometimes and they're cute." The phrase was coded using the following codes:

- Animals, are cute
- Animals, make nice noises

- Animals, nice to see playing
- Sensory

In this case, the first three codes are descriptive and fall into the first category, whereas the last is an example of the second type, or overall category. Sensory was chosen as the category because the camper hears the animals making noise, which indicates sensory perception. Because I attempted to use the words of the participants as well as separating each concept into a code, I was working towards rich detail in the initial description. I believed that this was important, given the methodology that informed the study, as attention to this detail would help ensure that the breadth of description on the part of the campers was accurately reflected by the codes that I generated.

I coded the worksheets in a similar way. Having had the participants read their answers or share with me what they drew, I was able to transcribe and subsequently code the worksheet data. Since phenomenography concerns itself with second order knowledge, I relied on the verbal description provided by the participant. I did not code the actual drawings or text. I felt that to return to a drawing or paragraph and interpret its meaning on my own would result in first order knowledge, that is, I would be describing what was drawn or written as perceived by *me*. Had I analysed the data in this way, I would not have been as true to the methodology of phenomenography, and the validity of this data could have been called into question.

Analysis

To analyse the data associated with the phenomenographical investigation of concepts of nature, I collected the codes in a program called SmartDraw (Stannard, 2001). Then, through manipulating the codes, I attempted to structure the data into coherent categories of description. I worked to avoid “premature closure for the sake of producing logically and hierarchically-related categories of description” (Ashworth & Lucas, 2000, p. 300). Because I was using SmartDraw to organise the categories of description for campers’ conceptions of nature, I copied all nature-related categories into the program. Thus, I did not work with all 829 codes when developing the categories of description. For example, with the “nature is” category, I excluded the code “camp - friends and counsellors influence” because it did not relate to the category. Thus, I went through the alphabetical list of codes, and discarded a code based on my own perception of its irrelevance to the category at hand.

With the remaining categories, I began to place like categories together. Through this process of taking the fine, detailed codes and collecting them with conceptually similar codes, I was able to create larger, second-level categories. I have provided an example of the codes that went into one such larger category (Figure 2). From these second level categories, similarities emerged between categories. I then created larger, categories within which the second level categories would fit. The category “nature is relationships” was also similar to the categories “nature provides,” “nature is a friend,” “nature is uncontrollable,” “nature is purposeful” and “nature is alive” in the sense that all of these categories contained attributes which denote a sense of agency on the part of nature. So, I collected them all in a category “attributes which denote agency.” It is the

overall collection of the second and third level categories which make the categories of description for this study.

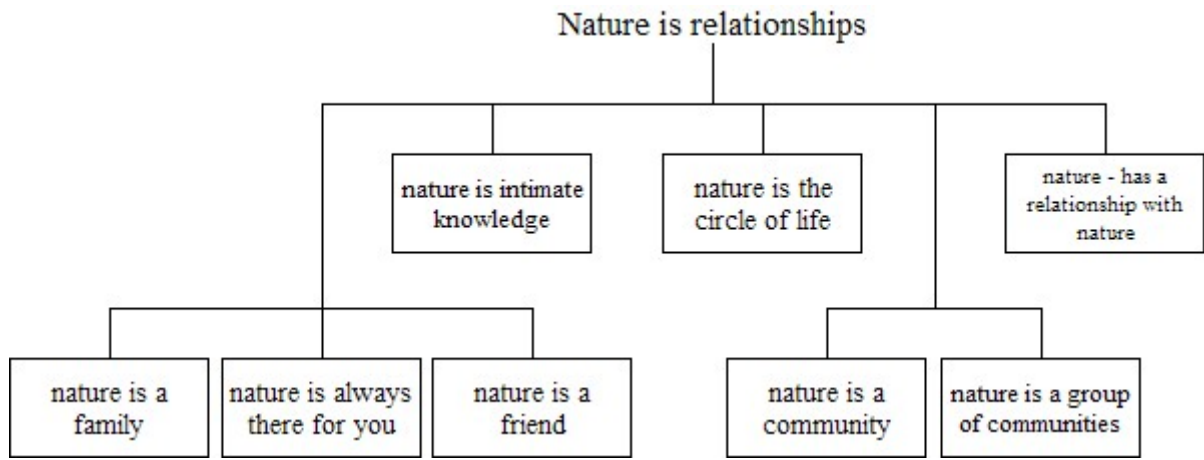


Figure 2: "Nature is relationships" category

While working with the codes and categories, I would return to the source data to ensure that categories created reflected the words spoken. Given the amount of data, I did not do this with every code, but rather with codes or categories that did not easily fit within the created categories. I would examine the original data and make a decision if the current code properly described the data. If it was correctly coded, after referring to the source data, I could better decide what category it fit into, or if a new category needed to be created. If I had made a descriptive or categorical error while coding the data, I would make the appropriate changes, then place the code within the proper category, or create a new one.

For the investigation of “if and how campers’ relationship with camp had influenced their concepts of nature” and “if and how place and the experience of camp had acted as an educator in the development of campers’ concepts of the natural world,” I used data provided in interviews and participant observation. My own perspectives informed this analysis. Given my history and participation within the camp setting, I used my own historical and contextual knowledge to analyse this data and develop theory from it.

Methodological reflections

If I had the luxury of more time during the summer within which to complete the study and through reflection on the whole process, I would have proceeded differently and completed more steps in between the pilot study and the full study. For instance, I would have liked to have tested the new question set. I did a form of piloting this set by taking questions that I asked from the pilot, however, another round of interviews could have tightened up questions I asked and offered me more time to reflect on my interviewing technique. During the transcription and analysis phase, I again ran into an issue with my interviewing techniques: my inability to get campers to expand on

nebulous terms or concepts so that I could understand what they were *really* saying. This opportunity to reflect and change my interviewing techniques would have strengthened the overall quality of work.

It would have been helpful to have been able to transcribe the pilot interviews and attempt to code and analyse them prior to continuing on with the main study. I would have already dealt with a number of issues and concerns with the act of transcription and analysis including choice of software and coding practice; allowing me to move more quickly into and through this section of the analysis.

Finally, in the coding and analysis phase of my phenomenographic investigation, I would have liked to have worked with other researchers. My concern lies in the confirmability of the work with only one researcher working with the codes and developing the categories of description. This would have allowed for a comparison of codes and categories of description. Similarities would strengthen conclusions and dichotomies would highlight possible inaccuracies.

3. Results and discussion

Results

In this chapter, I will be sharing the results of the phenomenographical investigation into campers' concepts of nature, as well as camper's perspectives on the location of "things," concepts and places in nature. I will then discuss the relationship between Camp Arowhon and campers' concepts of the natural world. Within this section I will highlight the importance of the Camp Arowhon experience and campers' perceptions of humans' location in relation to concepts of nature. Finally, I will present how I believe that nature and place are enmeshed at Camp Arowhon. In this section I will discuss the relationship to place and nature through animal others, the act of becoming-camper and as a final point, the role of the place of Camp Arowhon as educator.

Camper's concepts of nature

The following are the results of the phenomenographical investigation of fourteen campers' concepts of nature. I have organized the concepts that are presented into seven larger categories. I believe that given the research method, I should note that these larger categories have been used as a tool for organisation and do not necessarily indicate that in the minds of the campers, the second-order concepts that fall in the same categories are necessarily related. Similarly, it is worthwhile mentioning again that these concepts relate to the entire breadth of responses that were shared with me. No camper conceived of nature in the same way, or conceived of nature using all of these concepts. Table 3.1 provides a summary of these categories of description and the second-order categories which support them.

A word on the presentation of the second-order categories: I attempted, when titling the concepts to use a camper's own words to describe their concept. In reporting these results, I have put quotation marks around these words. When a quotation lacks clarity, I have then added my own title for the category. Because this research inquiry is meant to understand campers' own concepts, I have presented support for the conceptual categories without my own written input. In this way, I hope that the campers have the opportunity to speak for themselves without my own interpretation. I have, however, commented on themes that I felt existed in what they said. Additionally, I wanted to provide the reader with the context of the quotations so as to better understand the campers' perspectives and context¹. In so doing, where appropriate, I have included a section of the transcript. I have also provided, when possible, more than one passage or quote from the research. In doing so, I am attempting to show the variety that exists between camper's conceptions while still organizing their own thoughts into categories. There are, however, second-order

¹ Quotations and passages taken from transcripts have been keyed so that the reader can identify the different participants. Please refer to Appendix I.

categories with support from only one camper. At first glance, describing this as a second-order category may seem erroneous. However, as I am attempting to describe the breadth and variety of concepts, to ignore a concept of a camper solely on the basis of its uniqueness, or dissimilarity to other reported concepts would reduce the richness of this study.

As listed in Appendix H, I had twenty-five questions which formed the frame of the interview. However, no two interviews were alike. For example, probing questions were asked on my part to clarify campers' perspectives. Therefore, unless otherwise noted, the data which supports the following categories and second-order categories comes from all areas of the interviews, and I have chosen them to represent the second-order categories.

Table 3.1: Summary of the categories of description for campers' concepts of nature

Categories	Supporting second-order categories ²
Attributes which describe relative complexity	<ul style="list-style-type: none"> • big • abundant • unorganized • diverse • changes
Attributes which denote agency	<ul style="list-style-type: none"> • gives • relationships • a friend • uncontrollable • purposeful • alive
Attributes which denote value	<ul style="list-style-type: none"> • beautiful • interesting • important • simple • not perfect • amazes
Attributes which relate to, or are based on, concepts of human manipulation of nature	<ul style="list-style-type: none"> <i>Physical</i> • not built or owned • natural <i>Cognitive</i> • whatever you want it to be • is science
Sensations	<ul style="list-style-type: none"> • physical sensations • emotional sensations
A place	<ul style="list-style-type: none"> • everywhere • city-based • camp-based • outdoor-based
An experience or activity	<ul style="list-style-type: none"> • alone and with others • with others, never alone <ul style="list-style-type: none"> • through activities • through activities at camp

² Categories arranged in order that they are found in text

Attributes which describe relative complexity

In the following second-order categories, campers' notions of nature are based on characteristics that indicate a presence or lack of complexity.

“Nature is big”

G: Have you experienced nature at home?

IF2: Yeah.

G: And where have you experienced it?

IF2: Like as I said, in my backyard.

G: You said you've got trees in your backyard? And you watch animals there?

IF2: It's a big forest. –ten year old female

OK. Nature is beautiful, big, surprising, green, astonishing, breathtaking, unorganized, Camp Arowhon. –eleven year old male (IM1)

Umm... at my old house, there's this thing, we called it the forest, and we called it the forest because there was a bunch of rocks, a big tree and bushes and it was really big and it was pretty fun... –nine year old male (JM2)

“There's so much”—nature is abundant

I mean that, at home we have television set which we watch countless hours of television and um, witty, witty remarks and here our television sets are nature, is nature because we can watch nature for hours, we can go and see all these interesting kinds of animals, all these interesting kinds of things and it will never get boring. Because there's just so much to see. –twelve year old male (IM2)

There's two kinds of different kinds of- there both really different sorts of nature. Like I'd say the nature at my country house and the nature here are pretty alike but the nature at home, it's just kinda small things that you notice, like you'll never, when you're in the city, you'll never find as many trees as you'll find here and in the country. You'll never see as many mountains, like stuff like that makes it different, like you won't find any chipmunk hole around your backyard, you won't find any snakes or, or um, frogs or salamanders... –ten year old female (IF2)

“Everything's everywhere”—nature is unorganized

Everything's everywhere. It's like there's no clear path to where you're want to go. Uh, it's like let's say you're going on a route- trees are where they're supposed to be, because they just grow up. –eleven year old male (IM1)

Umm, sort of and sort of not, because part of the whole thing that [tree plantations are] planted, not like a forest but like rows and rows and that's kind of not nature. –twelve year old male (IM3)

“There are a lot of things in it” —nature is diverse

G: And what, and what, why do you think plants and animals are interesting?

JM2: Well, I like plants because what they look like and uhh, what they do and animals, I guess the same thing: what they look like and what they do. – nine year old male

G: I see. Is nature important to you?

JM1: Yeah, a lot.

G: Why would you say it's important?

JM1: There are a lot of things in it, surprises, and I love it. –seven year old male

“...it won't be the same” —nature changes

G: Right. OK. Um, if you were to compare camp and home, is there was one place that was more natural?

JF2: Probably here.

G: OK, why is that? Why do you think that?

JF2: 'Cause it has way more, like, just, so much to look at, pretty much. Like at home, it's always the same, I think. But when you get, when you come here, and you go on a hike, the next time you go on a hike you won't see that same place again and if you go to that same place, it won't be the same. –ten year old female

Reflection

In these second-order categories, nature is seen as being relatively complex with the presence of a proportional relationship between the perceived amount of an attribute and “nature.” Simply put, the “more” of the second-order attribute something appears to be, *adds* to the perception of that “thing” being nature. The bigger, the more abundant, the more unorganized, the more diverse, or the more something changes, the more likely that something is to be conceived of as nature.

Attributes which denote agency

In the following categories of conceptions, nature is conceived of holding characteristics which describe nature as an active entity, either entering into affiliation with the camper, or an entity responsible for its own control, outside the control of the camper.

“It's what provides us with everything we need” —nature gives

Nature? Nature is basically what we need to survive. It's what um, provides us with everything we need, it's what we need to provide um, our stuff to and eventually it will, it will become a little, well if we, if one of us fails, then we both fail, as I said earlier, so... –twelve year old male (IM2)

Nature is all the living things that nourish off the elements laid before us, the plants, the trees, the animals, the bodies of water that give us the items needed to live. –fourteen year old male (SM1)

Positives is it gives us oxygen, gives us wonderful things to look at, it gives us the ability to live off of it, eat and things like that. –fourteen year old male (SM2)

G: Do you want to finish this sentence for me? Nature and me are...

JM1: Family.

G: All right. Why are nature and you family?

JM1: [laughs] 'Cause...trees give oxygen and that's what makes us live and so do the trees.

G: Mm-hmm...trees give oxygen, that's what makes us live. Why else do you think that you and nature are family?

JM1: Because there's some rivers and we need some water to live and even if it's not, not drinkable we can always clean it.

Because it's, nature is something that gives a lot. It gives us food, lots of our food, actually all of our food, um, it gives us homes, it gives animals homes and so I think it deserves respect. –ten year old female (JF2)

G: And so how does nature take care of you?

JM1: It gives me some oxygen and water.

G: Yeah, does it do anything else?

JM1: Like sometimes, they grow mushrooms for us that are good for us.

G: Un-hun. So that there is food?

JM1: Yeah, like, blueberries and everything. –seven year old male

“Nature and me are family” —nature is relationships

G: Right. One thing that you say in nature and me is that we don't always get along. What do you mean by that?

SF1: Like, I have the days where I don't respect the nature and I feel like it doesn't like me...

G: Yeah, and ah, there are other days where it's different?

SF1: Yeah. I feel more like, in synch with it.

G: Yeah. Cool. Umm...Do you think it's OK to have days like that, where you feel as though it may be out to get you?

SF1: Yeah, I do.

G: Umm, what kind of stuff has happened to you that makes you feel that way?

SF1: Umm, I don't know, like I don't know if certain things have, but...nothing gets along perfectly all the time. –fifteen year old female

The following example comes from a fourteen year old camper who defined nature as “what goes on around us.” For him nature is “mostly looking out anywhere

and seeing how things go on.” Thus, what this senior boy describes as human nature plays a large role in his conception of nature, and leads to this human-centered quote:

SM2: Umm, well I have seen, in those two senses, I’ve seen a lot of different people, I remember a lot of different people, I forget a lot of different people and umm, still I can think of them, if I see a name, “oh I remember that person” or him when he was in the cabin next to mine and I remember that we played tetherball together and he taught me the j-stroke, she gave me my thirds, like I remember things, I remember how things look out, people look out for me and how people forget me...

G: Sounds like a lot of relationship things.

SM2: Yeah, a lot of relationships, like I said earlier, camp’s all about friends. – fourteen year old male

G: Here’s an interesting question: do you think, do you think of nature as a community?

SM1: Uh, definitely, because nature lives off each other, trees give off oxygen, and plants use the oxygen to give off carbon and that’s a big cycle and that’s a big community that lives off each other, of food cycles. –fourteen year old male

G: Um, what does it mean to be a part of nature?

SF2: It’s special, it’s comforting, it’s like I’m a part of a community.

G: Right. And you feel all of those things. Is there anything else that you feel or any other way that you are a part?

SF2: I guess I do things like we talked about before, like when I do things I’m part of it...um...even when I help other people to feel the same way- not really help but “Let’s go mud jumping that would be fun”. I feel like I am in a way, like, yeah. I’m being a part of it because I’m helping someone else be a part of it. –fifteen year old female

It is also how they benefit the world because in nature, the environment relies entirely on how the living creatures of the environment use and return what they have taken. A living thing know that they, knows that what they do or what they don’t do will have an in fact- impact on the future of nature. –twelve year old boy (IM2)

“It’s always there for you” —nature is a friend

When I go to camp each summer and my country house in the winter it feels as if I’m visiting an old faithful friend. It listens when I speak, it reacts when I play and embraces me for all the rest...nature and me have a silent friendship. –fifteen year old female (SF2)

I guess I could say umm, nature and me are friends. –twelve year old male (IM3)

G: Umm, you said that you and nature are like a silent friend. What does that mean?

SF2: Well, when I'm upset, again, I don't talk to anyone, I never, I never say anything, I just kinda look around and I, I feel like, I feel like this comfort, I feel like this warmth around me, I feel like everything that I do is going to be OK because I'm here and I'm fine and I'm gonna figure it out. It never gives you a time line, never says you have to figure out your problems by this time, it never goes away. Its always...here for you –fifteen year old female

“...and not something we can control” —nature is uncontrollable

G: Yeah, yeah. What do you think it is about sailing that, ah, reminds you or makes you feel as though you're being- being or experiencing nature?

IF3: Well like, the wind, you know, is like natural and not something that we can control, well I guess we could probably speed it up. And like, and it's sorta like you're experiencing something really natural. –twelve year old female

“No matter how big or how small, everything has a purpose”

Nature is what goes on around us. Human nature is what humans do, basic instinct, helps us to think and to do. Nature can also be know as what happens in the wilderness and how animals and other living things react to what goes on around them. Nature itself, in my opinion, is mostly looking out anywhere and seeing how things go on. In the woods, you would probably see animals acting the way that they would naturally do, umm, or if you were just gonna to sit on a bus, you would see how people would act like when they're somewhat relaxed or when they're tense and usually thinking about something because they've got the time, someone else is doing the driving for them and taking them somewhere and they have time to think and time to act out what they would normally do... –fourteen year old male (SM2)

I see nature as how things should be going on and how they're meant to be. If I were walking in the woods, I would most likely see, I would most likely see how things would happen in a natural environment. In civilisation, many things have been altered and changed and so we have had to modify the way that we live to meet the standards of what's been set up. Like in, I see a difference sense, the nature out in the woods, ahh, is a little bit more right then the rest of the world because everything there has been set to suit most things and animals have adapted to it, and in civilisation things keep changing all the time, we have to keep adapting what we do. Twenty years ago if you were to do what you do now, I don't think it would make it very far in the world. So many things have changed and we rely on so many things than we used to. –fourteen year old male (SM2)

Trees and rock are there, everything has a purpose. A rock, like someone, one, like a bunch of people taking a portage, the first person might trip on them and scrape their knee and say “My god, I did not want that to happen, I am going to have a bad rest of the portage.” The second person may not be taking a canoe and

may look down, may turn over the rock and find, like, an insect that has never been found before, if they're, like, someone who is really excited about nature. Everything is different purpose, trees could be there to cast shadows, trees could be there to climb, trees could be there to have houses. No matter how big or how small, everything has a purpose. –fourteen year old male (SM2)

“Nature includes everything that is alive”

Nature includes everything that is alive. It includes, like, pretty much *everything* is nature. [chuckles] –twelve year old male (IM3)

G: Yeah. So if something's not alive, it's not nature? Is that right?

JM1: Yes. –seven year old male

Nature includes anything that is around, that's surviving and living on this planet. Nature includes um, even things that aren't alive, like rocks and minerals and things like that. It includes everything that is alive on this planet and if, even if you don't think it matters that much, it still does. It provides something for us in some way. –twelve year old male (IM2)

Reflection

There appears to be a belief among the campers that nature does indeed hold attributes which ascribe it agency. This is an important finding and the impacts of these attributes are discussed later in this chapter, in the section titled “Camp Arowhon and campers' concepts of the natural world,” where the concepts of agency are explored in context with camper's relationship with the place of camp and the nature found there.

Attributes which denote value

The following categories are cognitive judgements about the worth, positive and negative, of nature.

“I find that nature is beautiful”

SF2: And, it has the same look and I was always attached to how serene and beautiful and un-busy and never faded and it was just...uhh...I don't know, I felt like no matter if it was, like, night or day, it was just always beautiful and always there, always so much to do.

G: Do you think that nature's always beautiful?

SF2: Always. –fifteen year old female

Um, for the nature is, I find that nature is beautiful and I drew some birds, squirrels and butterflies, just 'cause it's nice to watch them and... –ten year old female (JF1)

G: Um, are there parts of nature that aren't beautiful?

IM2: No.

G: No?

IM2: Because every single thing in this world has some beauty. There is beauty in everything. –twelve year old male

“Everything in nature is really, really interesting”

IM3: Because, uhh, I really like nature...

G: ...mm-hmm...

IM3: ...everything in nature is really, really interesting. –twelve year old male

G: What about, in comparison to watching TV, do you like spending time outside in your backyard or inside watching TV more?

JF1: [laughs] I think I like them equal amounts.

G: Yeah? Why, why what is it about each one that you like?

JF1: Well, um, outside you just get to um, see nature at work and it's interesting to see all the animals and everything um, TV, I just like that because its entertainment and stuff. –ten year old female

G: OK. Um, you say that you can find nature mostly in the out of doors or the great outdoors as you say. What do you- you say it's the most common in the great outdoors. What do you, do you think you mean by that?

IM2: Well I mean humans, they build um, they build their own territory, their own places to live. And out- outside those doors is a whole other world waiting for them with tonnes of nature there, tonnes of interesting things and tonnes of adventure. –twelve year old male

G: So in your two years at camp, have you discovered anything about nature?

JF2: That it's really interesting.

G: That it's interesting. Um, is there anything else, so you've discovered that it's interesting, have you discovered anything else?

JF2: Um...fun to learn about um, you can find interesting things and yeah. –ten year old female

IM1: Uh...I don't know. Depends what the thing is. Maybe like, if all trees are gone from the world or from nature um, we couldn't survive because the sun would be too great and we'd all die. But if like little things, like if there were no twigs on the ground anymore, we could live with it, it just might not be as interesting as it usually is.

G: I see. So nature's interesting?

IM1: Yes. –eleven year old male

“Everything in nature is very important to the world” —nature is important

G: And how is nature important to you, if at all?

SF1: Umm. Nature is important to me, just because its, *it is*...I don't know.

- G: Does it just feel like that, like it has to be important to you, or is there a particular reason why you think it is important?
- SF1: Umm, I think it's one of those things that...
[interview interrupted by campers]
- SF1: ...I feel like it's just one of those, like it's an unspoken rule, like I can't quite describe how it is important to me, it just is. –fifteen year old female
- G: I like to think of it that way too. Um, do you think that nature's important to you at all?
- IF3: Yeah.
- G: And why do you think that?
- IF3: Well, 'cause, without nature around, like I said earlier, it would be like a pretty dull place. And so like it's really important to me to have like, you know, like it stays here and like, like if I'm upset about something, I can like go outside and sit at a tree and like think about stuff. –twelve year old female
- G: OK. Um, do you care about nature, at all?
- IM1: Yes.
- G: Yeah? Why?
- IM1: Um, just because like, everything in nature is very important to the world. Without one little thing, the world can't be the way it is. –eleven year old male

“...who appreciate the simplicity of nature...”—nature is simple

- SF2: People like me will always, like, come back to it and love it and look at it and people that don't can learn to...
- G: Yeah, is it important for you to know that there are other people out there that are aware of it and that appreciate it...
- SF2: ...yeah...
- G: ...and why do you think that's important?
- SF2: Umm, because I like to know that there are other people, well obviously that there are other people that feel the same way about me, as me, but um...I don't have many friends who feel that way and I don't have very many friends that like, I don't know, just appreciate the simple, the simplicity of nature, so I suppose that there are other people that do, it's just, it's like, yes, you understand, I don't even have to tell you.
- G: Right. So, that's an interesting thing, like, obviously you've got camp friends and I would assume that you've got city friends as well, would you say that your city friends have more of an awareness of nature or, or is it your camp friends?
- SF2: I think it's my camp friends because they're here and they're surrounded by it. I don't know if they feel the same way as I do, but I know they definitely have some liking for it. My city friends...I think that they love nature, but I think that they love a different nature. –fifteen year old female

“I find that even beautiful things in nature can come at offhand times which aren’t good, like a huge rainstorm...”—nature is not perfect

G: That’s cool. Are you different from nature in any, any particular way?

SF2: The impatientness, the, I’m very stubborn...well I think that nature’s stubborn in some ways. Umm...

G: Well, yeah, that’s an interesting question. Do you think that nature’s perfect?

SF2: No. No. Well, everyone has their imperfections. I find that even beautiful things in nature can come at offhand times which aren’t good, like a huge rainstorm in the middle of the- it also, it also depends on how you take it, though. Do you know what I mean? Like sometimes, I’m on a portage and it’s raining and I’m like “Oh look, this is bad, I don’t really want it to rain, uuhg nature”. But sometimes I’m walking in camp and it starts to pour, it’s like “Yes, I love this, I’m going to go put my flip flops on and jump in the mud. –fifteen year old female

“It’s just so incredible how the world is...”—nature amazes

Yeah. Today we saw a squirrel, he was umm, he was, uhh, putting a pine cone in a hole and he was covering it up and doing a little dance, we gave him to grapes and he ate one. And it was very cool. –nine year old male (JM2)

Nature, it’s hard to explain. It’s just so incredible how the world is, how everything works. How everything just has its own way of um, happening. Has it’s own way of working, as I said earlier. –twelve year old male (IM3)

Reflection

Interestingly, the values shared in these second-order categories, with the exception of one, are positive values and thus it can be seen that nature is valued by these campers. The one exception to this is the category “nature is not perfect.” However, when examining what the camper said about their concept of nature, while nature can be imperfect, that imperfection is coming from the changing perspective of the camper. The perspective on the part of the camper changes; good “things” in nature can happen at times when they are not good, and thus, not appreciated in the same way.

To have nature valued by campers, to have it perceived of in a positive light is an exciting finding. As discussed in Chapter 1, in previous research, Bixler & Floyd (1997) investigated the negative reactions of youth to wildland environments. While the Bixler & Floyd (1997) study and this one are different in many ways, the fact that these campers valued, in a positive sense, their nature, is fundamentally different to the findings of the 1997 study. This current finding may speak to the importance of a sustained, immersive relationship with what a child defines as nature in order to develop those positive values. I will discuss this relationship later in this chapter in the section titled “Camp Arowhon and campers’ concepts of the natural world”.

Attributes which relate to, or are based on, concepts of human manipulation of nature

In the following second-order categories, nature is related to or based on human manipulation of nature. There are two subcategories: physical and cognitive. The physical concepts of nature are related either to the absence or presence of human use of the natural world. Other categories are concepts of nature that require the concept to be interpreted through a human interpretation of reality. In all, the categorisation of nature is made through an intermediate belief of where and what humans are in relation to nature.

Physical

“It’s just there” —nature is not built or owned

G: OK, uh, I’m going to ask you a question and I’m going to ask you whether you think if it’s, it’s part of nature, OK. Um, that, for example that tree over there- do you think it’s a part of nature?

JF1: Yeah.

G: OK, why, why is that a part of nature?

JF1: Just ‘cause it hasn’t been like, built. —ten year old female

G: Right. Can you plant a rock and make it grow?

JF2: No, you can’t

G: But it’s still part of nature?

JF2: Yeah, because it’s not something that, it’s not something that is made, it’s just there. —ten year old female

G: So what do you think nature is?

SF1: Umm...our surroundings, like the wilderness, the trees, the grass...natural stuff... the stuff that wasn’t created by man [sic].

G: Right. So natural stuff um and by natural stuff you mean not created by man?

SF1: Yeah. —fifteen year old female

G: Well um, well maybe I can ask this question: do you think that you’re a part of nature?

IF1: Well I think it depends. Like in the city, when I go to school every day, go in a car or a bus, and um, and I go um, and like buy things and then take the bus, so kinda not really. But like here, this is like beautiful place with like nature everywhere and like trees and stuff and it’s like really, like you can even hear the animals now and stuff. —twelve year old female

“Nature is just nature, there are no words to explain it” —nature is natural

G: What’s, what’s interesting about it?

IM1: It's just, uh...nature is just nature, there are no words to explain it. –eleven year old male

Cognitive

“Nature can be like whatever you want it to be”

Um, well I think it's kinda like, like everything that surrounds us, kind of. Like, parts of nature, like there's plants and animals that live in like forests and stuff and like the water and I don't know. Nature can be like whatever you want it to be. –twelve year old female (IF3)

Nature is science

Nature is the entire planet's beauties and wonders formed into an exciting world of science. –twelve year old male (IM2)

Reflection

In a cognitive sense, human interpretations provided a framework for understanding nature. Science can be simply described as a human interpretation and method of understanding the external world. For the female who described nature as being “whatever you want it to be,” there appears to be a certain amount of post-modern thought in that statement. She seems to be stating that humans have the ability to, when they want to, include or exclude “things³” from their conceptions.

This belief holds true when examining the physical role of humans in nature. While most participants believed that humans were a part of nature, whenever humans were physically involved with the natural world, the natural world was negatively impacted and changed. When asked if a cabin was part of nature, this twelve year old (IM3) male said that: “I think ... humans build things, say this nature lodge, it's made of cut-up trees and doesn't really look like trees anymore it just looks like slice of wood and it's, it's been turned into not nature.” The thought of the intermediate girl who said that nature is “whatever you want it to be” is echoed in the concept that human products should be excluded from nature. For some reason, human manipulation of what is seen as “nature,” makes that object or thing “not nature.” Please see the section in this section titled “Perceptions of humans in relation to concepts of nature” for further discussion of these results.

Sensations

The following second-order categories describe nature as an awareness of stimulation, in which the stimulation can either be of the senses or emotions.

Nature is a physical sensation

³ “Things,” as a term is a bit awkward and non-specific, however, it is used to allow for a neutral label to be given to the entities and items that can be found in campers' conceptions of nature.

G: What is it about flowers that you like?
IF2: I like them because they smell nice.
G: They smell nice. And, uh, so flowers are a part of nature?
IF2: Yeah. –ten year old female

It's, I don't- like, really green and whenever I think of nature, I think of green. And like, the sun made it all grow and stuff and there's no human interaction, well there could be interaction, but like it's like, I don't know, whenever I think of nature, I think of trees and grass. –twelve year old female (IF1)

Nature is an emotional sensation

G: OK. What do you think that nature includes?
IF2: It includes time, patience and...um, calm, being calm. –ten year old female

G: Umm, you said that you and nature are like a silent friend. What does that mean?

SF2: Well, when I'm upset, again, I don't talk to anyone, I never, I never say anything, I just kinda look around and I, I feel like, I feel like this comfort, I feel like this warmth around me, I feel like everything that I do is going to be OK because I'm here and I'm fine and I'm gonna figure it out. It never gives you a time line, never says you have to figure out your problems by this time, it never goes away. Its always...here for you. –fifteen year old female

G: You said nature is...

JM2: Well, nature is very fun 'cause umm, I like going out into the forest and stuff and finding frogs and animals... –nine year old male

Nature is a fun experience to learn about different things like what type of bird it is or any animal and to discover different kinds of objects in nature and animals. –ten year old female (IF2)

Well, well physically it's familiar because like the trees and, I don't know, that kind of thing and it's familiar because it offers the same each time it all- always offering me some type of comfort. –fifteen year old female (SF2)

G: Why do you like the forest everywhere?

JM1: Because forest is really interesting, and you have really, a lot of surprises, I even have a tree house over there. And, that's all.

G: Do you like surprises, in the forest?

JM1: Yeah. They're fun.

G: Yeah, why, why- cause you like the surprises 'cause they're fun?

JM1: Yeah.

G: What else. Why else do you like the surprises?

JM1: Because like the trapdoor spiders, like they pop out like that and surprise us.

G: Something you weren't expecting.
JM1: Yeah. –seven year old male

Reflection

Because nature is something that can be sensed physically, nature appears to be seen by campers as being located externally. To sense physically means that nature exists as an objective entity: it is something that can be touched, seen or smelled. To sense nature emotionally indicates a connection or bond with the physical world. In this sense, nature transcends the physical and also exists as an internal feeling. As nature is sensed both physically and emotionally, a holistic connection exists. I will discuss the role of senses further in the section titled “Camp Arowhon: nature and place intertwined.”

Nature is a place

For the following category, campers saw nature as a physical place. The majority of the data which supports this claim was taken from the campers' answers to the question the following question set:

1. Have you experienced nature? Where?
2. Have you experienced nature at camp? Where?
3. Have you experienced nature at home? Where?

However, if a camper at another point in the interview mentioned a place where they had experienced nature, I included that in this data as well. In reporting the data, I have collected the range of answers to the questions and categorised them, with the exception of the all-encompassing concept of “everywhere” into three groups: city-based, camp-based and outdoor-based. Camp-based and outdoor-based categories differ in the sense that when campers spoke specifically about, for example, Tepee Lake, I categorized that as “on lake at camp,” whereas if they spoke of being on other lake, that was categorized as “on lake.” Thus, outdoor places and outdoor places *at camp* were differentiated. I have also included the participant count for each place that was mentioned. To be explicit, these are not frequency counts. Therefore if one camper mentioned a specific place twenty times and another camper mentioned the same place once, the total participant count would be two, rather than twenty one. The following table (Table 3.2) summarises this data.

Table 3.2 Summary of places where campers described having experienced nature

Place	Participant count
Everywhere	2
<i>City-based</i>	
At home	7
At a park	1
In a ravine	1
In backyard	2
In front yard	1
In garden	1
At grandparents' house	1
In a museum	1
In school	1
In the city	2
Not at home	1
<i>Camp-based</i>	
At camp	14
At the barn	1
Everywhere at camp	2
In the forest	1
In the point ⁴	1
On the lake	1
On trail ⁵	1
Regular places around camp	1
Through a stream	1
<i>Outdoor-based</i>	
At cottage / country house	8
In other country	5
In woods / bush	2
On a beach	1
On a lake	1
On a river	1
Outside	2
Outside the city	1

⁴ The senior boys section is known as “the point.”

⁵ The riding program at Camp Arowhon goes out “on trail” along trails in the local forest.

Relationship with place, relationship with others: the basis of the summer camp experience

In many senses, it is easy to see how “camp” is different from the “city” or “home.” For these campers, the “camp” the *only* place was where they *all* had experienced nature. Camp is also a place where living is fundamentally different than what all campers encounter in their homes. Rather than living with your mum, dad or guardian and possibly associated siblings, as a camper, you live in your cabin with two counsellors and seven other children your age. It is an immersive experience where you do everything together: from the activities of daily life, to unique experiences that only take place at camp. I believe that one of the reasons why Camp Arowhon is such a cherished experience is because of the relationships that develop over the weeks and years of attendance. While home life is also about relationships, there exists a special kind of agency, free from parental control, in the summer camp experience.

For a first year camper, a new world of independence is opened. As a young first year camper, I decided that I did not want to shower. While this seems like a strange memory, this freedom from showers is one of my strongest memories of my early years at camp. Since I was swimming everyday, my logic helped me justify my belief that showers were unnecessary. I see this logic again and again every summer in the Junior Boys section. Small seven, eight and nine year old boys run around camp oblivious to the ever-accumulating grime on t-shirts, shorts and themselves. While showers *are* eventually mandated by their counsellors, as my counsellors did for me, these campers still get to experience what it is like to make personal decisions independent of their parents. In my own experience, if I had been at home, I would have had baths or showers as my parents saw fit and there would have been no agency in my own decision. In deciding not to shower, I was exercising for the first time, in a real and tangible way, my own independence and proclaiming a detachment from my parents.

During a camper’s four to eight weeks in residence at Camp Arowhon, they are responsible to establish, build and maintain relationships with others that are at camp. As this eleven year old (IM1) male stated, “everybody really knows each other.” While the earlier example of showering may not seem to fit immediately, the evidence of independence that they hold to make their own decisions about personal hygiene is part of a larger discovery; campers have the power to make their *own* choices. While I am not arguing that summer camp is the first time that these campers have had to make friends or develop relationships with others, it is one of the first times where they are doing so independently of those who have always been there for them—their family. The result of these initial explorations and growth is that the friendships that develop over the summers can end up defining part of the camp experience, as in the case of this fourteen year old (SM2) male: “Yeah...camp to me is all about friends. Although there are activities and things that I enjoy doing, things that everybody enjoys doing, I know that most of the people come here to be with the people they like, to interact and to do, like to do activities with them...”

So, campers, who are successful in their exploration of what it is like to be away from home and who learn what it is like to live independently away from parents, learn about a part of what it is to be human: life is about establishing and maintaining meaningful relationships, and the essence of residential summer camp is just that—“all about friends.”

While it is obvious that these relationships exist between humans, I also believe that a relationship develops between humans and place, between the campers and the place that they know as Camp Arowhon. Some scholars have suggested that a child developing a connection to the natural world is part of normal human development. Paul Shepard, in his book, *Nature and Madness* (1982), describes a developmental process consisting of three “bonding” events which he believes are integral to human development. The first is the bond to mother, the second is a bond to nature and the third is a bond with the cosmos. John Livingston writes of another developmental process where four levels of self-consciousness (individual, group, community, biosphere) exist (1994, p. 123). In reference to Shepard’s theory, Livingston believes that the bonds that are developed with nature and the cosmos do not necessitate “conscious reciprocity” (Livingston, 1994, p. 123) but rather consists of the “individual acceptance of a greater sense of being” (Livingston, 1994, p.123). This “acceptance of a greater sense of being” occurs through non-linear development, a “lifelong series of overlapping and interlocking events: not linear but spiral, resonating between disjunction and unity, but moving, so that each new cycle enlarges the previous one” (Shepard, 1982, p. 109). Gary Paul Nabhan and Stephen Trimble speak to a certain kind of resonance of the dialectical relationship between humanity and nature, family and child:

Tiny humans begin their journeys in the haven of family—a safe place, we hope. They test their wills against the giants, the grown-ups, as they struggle to define unique relationships to the world. Each moves from there into the land, adventuring. The expanse of sky and ocean and prairie humble and overwhelm. Nowhere, it seems, do humans concerns matter less. And yet, nowhere else is the simple fact of our existence so exhilaratingly clear. Nowhere do so few trivializing and demeaning assaults on egos exist. Nowhere do humans matter more. (1994, p. 22)

While I am not arguing that a particular kind of development is occurring at camp, with specific steps and definite outcomes, I do believe that a connection does develop, and I do believe that concepts of resonance and dialectic relationships can help describe human development. Shepard believes that western society’s current inability to live “in stable harmony with the natural environment” (Shepard, 1982, p. 3) comes from incomplete development, specifically in the bond to nature. Just as campers are developing in a social sense, I believe that campers are also developing in a biospheric sense. In so doing, the campers that I interviewed at Camp Arowhon have developed through their connection to camp, a connection to place and through that, a relationship with what they conceive of as nature.

Nature is an experience or activity

For the following conceptual category, campers saw nature as an experience, or as having experienced nature through an activity. Not surprisingly, the majority of the campers’ responses came from my asking the three questions associated with the experience of nature. However, campers did mention experiences at other times during the interview, and they were included in the count. To examine the range of experiences

and activities that these campers were involved in is to look at what campers did as they experienced nature. Examining these activities provides another avenue of insight into what campers conceive of as nature.

The experiences were divided into three categories: a general category describing who campers were with during their experiences, a category describing activities through which they experienced nature and a final category of activities specifically described as having taken place at camp through which they experienced nature. It should be noted that for the second category, there are activities listed that campers would take part in at camp. However, because no specific mention was made linking that activity to camp, the activity was kept in the more general category. These results are available for examination in Table 3.3.

Table 3.3: Summary of experiences and activities campers used to describe their concepts of nature

Experience	Participant count
Alone and with others	6
With others, never alone	10
<i>Through activities</i>	
Biking	1
Camping	1
Eating	1
Exploring	5
Fishing	1
Hiking	5
Kayaking	1
Reading	1
Through drawing	1
Through games	1
Through viewing	4
Using the land	1
Walking	2
<i>Through activities at camp</i>	
Canoeing	3
On canoe trip	8
Riding	2
Sailing	2
Swimming	1
Through nature program	5

Interestingly, the only activity that a majority (eight) of campers described as one in which they have experienced nature, at or outside camp, was the canoe trip. Each camper goes on at least one canoe trip per summer at camp. While most campers are away for approximately four days, some campers can go “on trip” for up to two weeks

per four week session. Trip length is based upon age and program selection. The campers who shared their experience of nature on trip, echoed similar sentiments as this twelve year old (IF3) female:

- IF3: On trip, like trip is basically like the main nature part of my summer and my trippers have like told me a lot of stuff about like what berries you can eat, leaves, what can make your fire get going.
- G: And why do you think trip is the main nature part of your summer?
- IF3: 'Cause it's when I'm mostly in nature.
- G: So you're, you're canoeing, living in a tent...
- IF3: Yeah, like, not really living in the modern scene, more of the environmental scene. –twelve year old female

This sentiment echoes, interestingly, the belief that human interaction changes nature, as reported in the category, “Attributes which relate to, or are based on, concepts of human manipulation of nature.” Rather than reflecting those results, though, what appears in this data is presence of nature in places that are perceived as untouched by humans. Canoe trip appears to be an activity where campers experience a landscape or place that they perceive as being untouched, or as “not really...in the modern scene, more of the environmental scene.” The act of tripping appears to hold special meaning for some campers in their conceptualisation of nature.

What lies where? “Things,” concepts, places and their location in nature

As my interviews with the fourteen campers continued, the data that I collected began to show an ever-increasing list of “things”, concepts and places that nature includes, does not include, and are seen as existing with one conceptual foot within nature and one foot out. With reference to Appendix H, the final list of semi-structured interview questions, much of the data which informs these results and discussion came from the following questions:

1. What is nature?
2. What do you think nature includes?
3. Do you think you are a part of nature?

As I asked campers what they thought was nature, I would ask additional questions to see where they drew their conceptual line between what was nature and what was not. To this end, I often asked them about other “things” such as trees, water and cars. With reference to trees, I would ask a camper if the following were, according to them, part of nature: a tree in a forest, a log blown over by the wind, a log cut down by a human, a tree in a tree plantation and paper. For water, I would ask them if the following were part of nature: a lake, lake water and tap water. For cars, I would simply ask them if they thought that a car could be considered part of nature.

I am disclosing this part of my method to help explain some of the data that is summarized in the following table. While I did ask specific questions about specific “things”, I also included concepts and ideas that campers shared with me of their own

accord. Thus this list is a blend of investigator-prompted questioning and the campers' individual associations. The results of this investigation have been summarized in Appendix K.

The table is divided into three sections, each section containing one categorical concept: "nature includes," "nature 'sort of' includes" and "nature does not include." Each category is divided into six related sub-categories that I generated based upon categorical similarity: general, living, non-living, feelings or concepts, places and activities. The category "nature includes" generated the longest list of "things", places and concepts to be incorporated.

The concepts that were found within the remaining two categories, "nature 'sort-of' includes" and "nature does not include" are presented in the same row, if applicable, from the associated "nature includes" concept. Finally, in the title for the "nature 'sort-of' includes", the "sort-of" is in reference to the words some campers used to describe the "things", places or concepts within that category.

The following tables are a summary of the contested "things" that are listed in Appendix K. In Table 3.4, those "things" that are seen both as part of nature and as not part of nature by different campers are presented. In Table 3.5, those "things" and places that were seen as being part of nature and as "sort-of" nature by different campers are presented. Finally, in Table 3.6, those "things" that were seen to be, in the minds of the various campers, as part of nature, as "sort-of" nature and not as part of nature are summarized.

Also included are the participant counts for each concept, so that comparison can be made of the number of campers who conceived of the location of the various "things" and places. Highlighted in all of these tables are the categories with ratios less than 3:1, showing most contested "things" conceptualised either as part or not part of nature. In Table 3.4, for example, animals were seen by thirteen campers as part of nature and by one camper as not part of nature. A majority of campers saw animals as living and so it is not a contested "thing." Conversely, more contested were humans, which five campers saw a part of nature and two did not. This ratio is less than 3:1 and so, humans are highlighted.

Table 3.4: Contested “things:” seen as part of nature and not as part of nature

Category	Participant Count (part : not part)
Living	
Animals	13:1
domesticated animals	1:1
humans or people	5:2
Non-living	
Cars	4:9
Logs	3:1
buildings or structures	1:8
Rivers	3:1
Roads	1:2
Rocks	5:2
Stars	3:2
tap water	1:2
the sun	5:1
toxic waste	1:1
water from lake	1:1

Table 3.5: Contested “things” and places: seen as part of nature and as “sort-of” nature

Category	Participant Count (part:“sort-of”)
Living	
Trees	13:2
Non-living	
Soil	1:1
Water	7:3
Places	
Park	1:2

Table 3.6: Contested “things:” seen as part of nature, as “sort-of” nature and not as a part of nature

Category	Participant Count (part:“sort-of”:not part)
Non-Living	
Rocks	5:2:2
Tap Water	1:3:2

Reflection

These contested “things” offer an interesting view into the fractured lines that exist in the camper’s minds as where to “draw the line” between themselves and what they consider to be nature. Nature was often defined in similar terms as this fourteen year old male’s (SM1) definition: “Nature is just everything that’s around us, the plants and the trees, all the animals that we see, like in, right out there.” Seeing animals and trees as part of nature is a common belief on the part of these campers. Other “things” become more difficult to delineate, though. The proper location of humans, domesticated animals, logs, rivers and stars are disputed by some as seen as being part of nature, and for others, not so. As shown through highlighting the results, there are “things” which seem to lie, ill defined, on one side or another of the nature/non-nature dualism. There was a range of ideas about the concept of water as a part of nature, for example. What I believe becomes evident in these “things” is the role of individuals as “the authors of the dualism that facilitates the existence of humans and nature as separate and qualitatively distinct entities” (Evernden, 1992, p. 94).

Investigating this contested space, I believe, offers for environmental education the equivalent of an intellectual lever with which to pull and pry at the margins of this dualism. Engaging campers in an examination of their beliefs as to why rocks or rivers are or are not nature, may offer their first opportunity to enunciate why they hold their particular beliefs. If, by labelling an object as either “nature” or “not nature,” we change our attitudes and behaviours towards it, then this kind of examination could be used as an attempt to break-down this dualism.

Discussion

Camp Arowhon and campers’ concepts of the natural world

The experience of Camp Arowhon

When I am in the city, I feel immense pressures to work hard and live up to the standards that my mentors set. But when I’m at camp, I excel with no extra pushes. It is as if camp brings out the best in me. –fifteen year old female camper (SF2)

The experience of summer camp in the lives of these fourteen campers holds a powerful place in their memories and experiences. Their voices and stories were filled with positive words used to describe their experiences of camp. A ten year old junior girl (JF1) describes camp as “so fun...because you get to do all the things that I just um, said, and it’s nice to swim in the lake and canoe through it ‘cause it’s beautiful,” echoes the words of many other campers. She later describes camp as “a dream come true” for her. A twelve year old male (IM3) describes Camp Arowhon as “really fun and it is like a second home to me” that is “full of exciting things to do that you can’t do anywhere else.” Overall, it is evident that these campers’ summer experiences are both enjoyable and memorable.

There is something in or about the Camp Arowhon experience which leads to such convictions on the part of the campers. I too had similar sentiments when I was a camper, and so identified with the Camp Arowhon campers when they shared their feelings and experiences. However, more exciting than finding out about the connection that campers have to Camp Arowhon is discovering their connections to nature. For many of the campers, it appears as though the natural world is integral to their camp experience. For this fourteen year old male (SM1), “camp is a lot more rustic, you sleep in a log cabin, you- everyday you go to activities that involve the water, that involve, you know, like, archery, shooting at targets and stuff, it’s a lot more rustic has a lot more to do with nature.” Nature appears to be another important aspect in the camp experience for this twelve year old male (IM2) camper: “Well, like I said before, many times, we’re surrounded by nature...if there was no nature at camp, it wouldn’t be camp. It would be still home. And I think the nature- with having all of this nature at camp, it makes it a more enjoyable place to be.” Within this quote is the powerful statement “It would still be home.” A ten year old female (JF2) said that camp was “way different than anything you can do at home, um, and all year most kids wait to see camp and all their friends again.” I continued to see this concept arise again and again in the data: camp was different from home. Consider this conversation with a fifteen year old female on the connection between camp, nature and home:

- G: Right. It’s a part of where you live. What do you mean by that?
SF1: Well, like, I consider camp, like, my home and nature is just such a big part of camp that without nature I don’t know how camp would be.
G: What do you think camp would be like if, if, if there wasn’t nature?
SF1: Um. I don’t think it would be as different from the city.
G: Un-hun. And you think that difference is important for camp to be camp?
SF1: Yeah.
G: Why do you think that is the case?
SF1: Because it provides a very different environment for people to live in.
G: Is that important?
SF1: Um, I think so. Change helps people grow.
G: Right. So the change is in the actual place and the kind of place that it is allows people to grow?
SF1: Yeah.
G: What kind of growth you think goes on?
SF1: Um. Just...learning how to adjust to different, different things, things that they may not always like but happen.
G: Is that’s what happened in your experience, with, with you? Do you think that you have grown because of your experiences here?
SF1: Yeah.
G: How would you say you’ve grown, if at all?
SF1: Umm, I feel more kind towards others...
G: Yeah...
SF1: ...not as...I don’t judge as much.
G: Right. That’s cool. And that you think that’s all because of camp, or in part, partnership with?
SF1: Most of it...probably has to do with camp.

- G: That's good. Um and do you think you would have felt the same way to others if you had been going to a camp...imagine that you just took all the buildings and transplanted them to Toronto.
- SF1: Mmm...the surroundings have a lot to do with camp...
- G: And so, what do you think that...what is it about the surroundings that ahh, that have to do with it?
- SF1: Just the fact that we're out here in the middle, well, middle of nowhere, almost...
- G: ...yeah...
- SF1: ...having the time of our lives.
- G: Yeah...do you ever think about...think that you're in the middle of nowhere?
- SF1: Not really...just at camp...

What is evident in this conversation is the importance of Camp Arowhon in her life (“like a second home”) and the important role that nature plays in making camp what it is (“nature is just such a big part of camp that without nature I don’t know how camp would be”). While she states that camp has allowed her to grow (“I feel more kind towards others”), she connects this concept of being kind to others to the relationship that she has with the surroundings—with the land. Offered the opportunity to reflect on what her experiences would have been like if camp were to have the same people and the same buildings but were to occur elsewhere, she feels as though “the surroundings have a lot to do with camp.” I find this to be an exciting discovery for the practice of environmental education; perceptions of humans in relation to their concepts of nature is where we continue the discovery of these campers’ relationship with the natural world.

Perceptions of humans in relation to concepts of nature

Umm, just because in my...I feel like at one point a lot of the world was like this was nature but it slowly got turned into more, like, city and stuff. So, as I was saying before, I don’t feel like it will change that much...its still nature like...I feel like here at camp we respect the nature a lot, we kind of work with it and around it instead of trying to overriding it, like, in the city. –fifteen year old (SF1) female

I believe that the camper participants in my research project have, through their experiences with camp, developed connections to place and through that, relationships with what they conceive of as nature. Campers saw nature as personally important to them and felt as though it played an important role in their camp experience. However, when investigating the data, I discovered some interesting views on connections that these campers had, and how they saw themselves in relation to their concept of nature. I saw three general trends:

1. humans not existing as part of nature,
2. humans existing as part of nature, but not their products and
3. humans existing as part of nature.

Humans not existing as part of nature

Campers did not directly say that humans were not part of nature. However when asked if they were part of nature, as I listened to their response, tone changed and hedging would often occur. For example, how this nine year old male answered the question:

- G: Right. Umm... do you think that you're a part of nature?
JM2: Yeah, I guess.
G: Yeah? How are you a part of nature, do you think?
JM2: Well, people are mammals so, I guess that's part of nature.
G: So does that, so if we're mammals that also means that we're...
JM2: ...yeah, part of nature but it feels like the other animals are different than we are because they act differently...
G: ...right...
JM2: ...and they don't have bones and...
G: What do you think is different about the way they act then us or then you?
JM2: Umm, well, why would somebody bury your food in the ground? Umm, they look different, and they act different and they talk different.

What is evident from this talk is the concession on the part of the boy that he is a mammal, which on one hand makes him an animal and therefore, part of nature. On the other hand, he “feels” that the other animals are different than humans, due to the fact that the “act and talk different.” He closes with the statement “well, why would somebody bury...food in the ground?” So, one is left with the impression that while there is an initial belief that humans are part of nature, we are still different from it: we “act and talk different” and we do not bury food “in the ground.”

While different is not separate, the following eleven year old male seems to have removed humans from nature:

- G: OK. And is nature important to you if at all?
IM1: Yup.
G: Why is nature important to you?
IM1: Ah, because um, like, if nature was gone, I would just feel bored. I can't look at nature anymore.
G: Right. Why else would you feel bored?
IM1: Because, there's like nothing there, um, to just go look at, like, I couldn't be able to say “Let's go look on the beach for shells” or something because there was no nature anymore.

For this boy, if nature were to disappear, he would still remain. If nature is to include all living things, and all living “things” were removed, he would be hard-pressed to go to the beach and look for shells because he should be gone as well. When asked what nature was, he said that “Nature's just...uh, nature is a place that um, is in the wild that people uh, don't build things on, don't walk through, or even if they do walk

through it, they keep it back the way it was.” Again in his thoughts, people and nature are separate and distinct from in their being from one another.

Humans existing as part of nature, but not their products

The majority of the campers interviewed (ten) either completely conceptually removed humans from nature (two) or believed that while humans individually may be living breathing organisms, humanity, civilisation and the human’s creations are not part of nature (eight). This logic is evident in the following conversation with a twelve year old male:

- G: Cool, uh, great. Um, what do you think is nature, IM3? What do you think nature is?
- IM3: I think nature is pretty much all wildlife, uhh, just stuff that is away from civilisation, it’s and, it’s like forests and that, flowers and stuff like that, it’s all a part of nature. And all plants and stuff and all animals are all a part of nature.
- G: Right. Is there anything else that, uhh, you think is a part of nature?
- IM3: I think all living things are a part of nature, like, everything, pretty much, other than civilisation.
- G: Right. And so, would you say that we’re part of civilisation?
- IM3: I wouldn’t say the humans themselves aren’t, but what they build...
- G: I see. So, does that mean then that humans are a part of nature, then?
- IM3: Humans are, yes.
- G: But what they create, civilisations they create aren’t necessarily a part of nature.
- IM3: Yeah.

This twelve year old illustrates the belief that while humans are part of nature, their products are not. In this case, he uses the concept of civilisation to describe what nature is not. Civilisation, for this camper, seems to be the conceptual opposite to nature, and in so conceptualizing, this male enters into a dualistic view of nature and the natural world. These perspectives are not surprising, given the pervasive limited perspective of the natural world that currently exists within Western society. While seeing humans as part of nature is progressive, seeing their products as separate reinforces or is reinforced by the resilient place of nature/culture, human/nature dualisms that exist within our society (Brown & Toadvine, 2003, p. xii; Plumwood, 2002, p. 4).

The peril in this concept can be seen in the statement that a ten year old (JF1) female made when she said that “I just like all nature unless people make it not beautiful.” According to her, and the rest of the campers who believed that human products were not part of nature, humans and their products play a role in the changing nature. Indeed, humans, through their actions and their “creations” have had an extremely negative effect on the Others that exist on this planet. However, to see humans as making nature “not beautiful” is the conceptual “starting block” in the race to thinking that humans and nature are separate and distinct.

Val Plumwood (2002) writes of the idea that human life “takes place in a self-enclosed, completely humanised space that is somehow independent of an inessential sphere of nature which exists in a remote space ‘somewhere else’ is of course a major expression of culture/nature dualism” (p. 51). If we, culturally, were not living in this “self-enclosed” space, the connection would be made that if nature disappeared, so would we. The dualistic thinking evident in the belief that humans are somehow separate from nature blinds us to the true relationship that we can have with the more than human world.

Additionally, to assume that only humans have the power to change environments, perhaps to make them “not beautiful,” indicates an underlying logic that has led us to believe that we are the only agents of choice. While humans have the ability to use the natural world, that use is what life is based on. And to see our ability only to make things “not beautiful” means that we can not see our own ability to make changes to our behaviours. Neil Evernden summarises when he writes that “in accepting this dualism we agree to remain ignorant of our degree of involvement and interrelatedness” (1985, p. 77). Making things beautiful, or better yet, having positive effects on our environment, is not often seen as being within our abilities as a species and all campers shared this belief, save one.

Humans existing as part of nature: reciprocity

There was at least one dissident voice. A twelve year old male held a more holistic belief concerning nature.

- G: Great. You say that nature can be found everywhere. What do you mean by that?
- IM2: Well, we’re nature aren’t we?
- G: Yeah, well I would agree. Yeah. So, so we can be found lots of different places. So, I guess my question for you might be then is there anything that’s not nature?
- IM2: Um, no. Because I think that as long as it’s on this planet, it’s nature, it’s considered nature.

Initially, when I began to think about this concept, I wondered if it was facile. It is potentially intellectually easy to argue that *everything* that exists on earth is nature. In a sense it struck me as a statement which was so general that it could not be proven. However, as I continued to ask this camper why everything is nature, he said that “we’re all a part of nature because we take part of nature. If we take part of nature, then we become nature. And if anything on this planet needs nature to survive, then that means that we need, and that means they’re nature, that they’re a part of nature.” What this boy is speaking about begins to hint at what I will call a reciprocal-based concept of nature, or what Plumwood describes as seeing nature as a “something to be known for its own sake, not just a means to power over it” (2002, p. 50). “To take” from nature, however, is only one part of this reciprocity. This camper shares, when asked why nature is important to him, that in addition to taking from nature, he is giving to it as well, “Mm, nature is important to me in the sense that I’m taking from nature and I’m giving to nature, so that makes me a part of nature and if I’m a part of something, I’m

going to dedicate myself to it.” The core of this argument strikes me as being extremely sophisticated: everything is nature because everything that exists becomes nature simply through the act of taking from and giving to others. Relationships become subject/subject rather than subject/object, and a new awareness of the place we are occurs.

Camp Arowhon: nature and place intertwined

“All the world is placed with wonderful nature surrounding every person, in one way or another.” –fourteen year old (SM1) male

There is strength in the connection that campers have to the place that Camp Arowhon is. Arguably for campers, their concepts of nature and place are intertwined. For some, such as this ten year old female, camp, as they know it, would not exist if nature was not around:

JF1: Uh, it would just be a bunch of buildings.

G: Yeah, yeah. And what would that be like?

JF1: Boring, very boring. [laughs]

G: Boring?

JF1: If nature wasn't here, there wouldn't even be a nice lake to swim in and trees to um, make, even make cabins with.

For some of the campers interviewed, nature has the ability to share and project its attributes; to make something, when located in what is perceived as nature, part of nature too. When asked if camp and nature were connected, this twelve year old male said that:

SM1: I think that nature and camp are connected because camp is in the middle of nature, it's well, it's pretty much like, nature and camp are, like, right, like I'm sitting in this building but right outside the building are forests. All around is a forest, so, it's like nature and camp are together.

G: Right. So, if we took these buildings and plopped them down in the middle of downtown Ottawa, do you think the camp, would it be the same?

SM1: No, it would be completely different, because, like, there wouldn't be nature there, it would just be, you would be in the city. Well what would be the difference?

For him, nature and camp were connected, and camp has become the same thing as nature: If the camp buildings had been removed from their present location, in what he conceives of as nature, and placed where he conceives nature does not exist, camp would no longer be the same. In essence, it would cease to exist because it would no longer be any different from the city. Perhaps one of the strongest connections between a camper's conception of nature and camp can be seen in the words of this twelve year old female:

“I learn something new every year that I come here and like every year something stays the same with me about nature is I guess the smell of everything is always the same. When you go to camp and you walk off the bus, and you see everyone there smiling and looking at you and then you’re waiting for that moment to see what cabin you’re in. And you get off the bus and immediately you smell the camp, like that’s just my favourite moment, like walking off the bus and smelling camp and realising everything and recognising all the trees and stuff. Like you can know where each tree is every time you come here, you recognize it and stuff.”

This twelve year old knows that she’s arrived at camp when she steps off the bus and recognises “all the trees and stuff.” More so, she goes on to link the importance of nature and place for her by saying that “you can know where each tree is every time you come here, you recognize it and stuff.” Scent, sight and familiarity all add to her embodied knowledge of camp, which points to the importance of embodied learning and teaching. A holistic sensation of nature, as described in “Campers concepts of nature,” is an integral part of this embodied learning. There are more examples of an embodied knowledge of place. This seven year old male camper described his experience as cool because “when you sleep its cool because you hear the rains [sic] when it’s there.” These embodied experiences connect not only the camper to camp, but connect the camper to the natural world; the two at camp are synonymous.

Being aware of the place where we are requires more than a look at a map and a glance about. This awareness requires approaching the world and altering one’s perspective so as to give significance and meaning to that which is within our world. The world in which we inhabit and our selves are deeply connected (Abram, 1996). Reality comes from the “mutual inscription of others in my experience, and (as I must assume) of myself in their experiences” (Abram, 1996, p. 39). Sensuous, embodied knowledge, attention to those others around you, allow you to become aware of place; it is this embodied knowledge which allows “a recuperation of the living landscape in which we are corporeally imbedded” (Abram, 1996, p. 65). Through embodiment, you become aware of where you are present, and through your attentiveness to place, you become connected.

What appears to connect these concepts of nature and place, are the daily experiences of a camper. Arriving on the bus, walking around camp, going to activities and even sleeping provide opportunities for corporeal experience, and from that embodied knowledge: camp is full of first-hand experiences and knowledge. A camper at camp is busy all day at activities. Those activities, interestingly, have the possibility to be seen as nature, or associated with it. Canoeing, canoe trip, riding, sailing, swimming and the nature program at camp are all activities where campers described as having experienced nature⁶. During this summer, I was the nature instructor and took some of my pedagogical inspiration from Peter Kahn when he wrote that one “must invite students to look and to see, not as to acquire another fact about nature but rather to value it, through experiences lived and intimacy felt” (1999, p. 222). When I read this statement, it spoke to me and I felt as though it had validity. I attempted this summer

⁶ See Table 3.3: Summary of experiences and activities campers used to describe their concepts of nature

to design experiences where learning could take place, not through me providing “another fact”, but through providing experiences where the experience spoke for itself.

What I mean by this is that I attempted, through my nature programming, to provide lived experience with the nonhuman world and to provide opportunities to reflect on those experiences so that those experiencing would have the opportunity to feel intimacy (though they may not call it that) and grow to value. After my experience this summer, I still feel as though Kahn’s belief holds true. While it is important, as the leader and mentor to provide some structure to experiences, it is equally important to let those experiences in nature be lived ones. That is, when mentor shows the intimacy that exists between the more than human world and him or herself, as I attempted to do, the experience is meaningful and rich. Lived experiences of the natural world were also taking place around camp. A fourteen year old male said this of their canoeing experiences:

SM2: When I go on a paddle to point or curve bay, I think of nature, I see what goes on, like they try to incorporate it into the lesson, like you know the rock near the, uhh, the big rock cliff...

G: Where? In the bay?

SM2: Over that way...

G: Yeah, un-hun...

SM2: ...yeah, like if we were going to go there for Brahmbo’s Kids⁷, or early morning paddle with a couple of canoeists, uh, we would, I don’t know, paddle for another 100 feet more and see a moose and her two calves...and I just think about nature then ‘cause um, the whole thing about perspective...when I look there, that’s my perspective, that’s what I think of nature, that’s what I see.

Canoeing is seen as more than just an activity: it is also seen as a vehicle, in both a medium and means of transportation sense, for nature. A fifteen year old female shared this with me about canoeing:

G: Canoeing is a pretty neat activity: you’re in a boat, sitting on the water, with a paddle, is, I mean, would you consider it, I mean, how does it fit into nature, would you say?

SF2: Um...I think it fits into nature, I think, because it’s almost like it was not even made for travelling, it was made for viewing. Like, here’s a craft we’ll give you, it’s made by nature, almost, it’s wood, and you can sit and look. You can view and, I don’t know, I feel like its nature’s sport, almost.

Sailing, in the eyes of this eleven-year old male not only is an opportunity to experience nature, but that experience makes him curious about what exists around him:

G: No. OK. Um, do you have a favourite outdoor place at camp, if any?

IM1: Uh, I like being on the water.

⁷ The name given to the camp’s canoe club

- G: Yeah? Why do you like being on the water?
- IM1: Because I'm a big water-sports kind of person. But uh, I guess the water's also a part of nature, so.
- G: How's the water a part of nature?
- IM1: Because there's still wildlife and things in the water and even though the water has boats on top of it and things, you don't look, you don't really look inside of it, and in water. Um, there's just stuff to explore.
- G: Right. So you don't really look inside water when you're sailing?
- IM1: Um, I think about it, I think to myself "I wonder what's under me that I'm going on top of."
- G: Right. It, it makes you want to, you're curious about it.
- IM1: Yeah.

For all of these campers, nature was experienced through these activities. James Raffan has, in fact, described four principal components to sense of place: experiential, toponymic, numinous and narrative (Raffan, 1993). The experiential component describes precisely the kind of activities that these campers were doing over the summer, "personal experience on the land" (Raffan, 1993, p. 44.). The other components that Raffan describe as related to sense of place can be found at camp as well. Toponymic, which is the component having to do with "place names and with process of naming places" (Raffan, 1993, p. 43) can be seen throughout camp: existing all over camp are places with distinctly local names. The Point, the Curve, Main Camp, the Lagoon, Curve Bay, Hidden Lake, Lost Lake, Green Leech Island and Gibraltar are all places around camp that hold meaning and indicate attachment to place. The third component is narrative, where stories exist on "how the land came to be, or how things used to be and tales of current travel on the land" (Raffan, 1993, p. 43). While there are not creation stories of the land, there exists the story of camp. I would argue that there are powerful parallels between camp and land, and so, for the camp community, these narratives, although more time-limited, play a similar role. Stories of what it was like to be at camp ten, twenty, thirty even sixty years ago exist. For example, one late summer day saw the arrival of a white-bearded gentleman. He walked into camp and into the office and announced his arrival: he was the first fencing instructor at camp. Fencing as a program no longer exists as a program at camp, but this former instructor then proceeded to spend the afternoon speaking with various campers about his experiences of the summers spent at Camp Arowhon. On another temporal scale, some campers have had parents who preceded them as campers; they get to hear stories concerning their parents' years as campers. Finally, a narrative exists on the walls of the Main Lodge. Hanging from the post-and-beam construction of the Main Lodge are hundreds of plaques that have been painted and posted at the conclusion of each summer. Each plaque tells a narrative: who was a junior girl camper in 1978, what team won the Wayne-Peck sailing race in 1983 and which group of campers went on the first ever canoe overnight to Brent. Plaques play such a large role in the life of camp that some of the older campers can recite from heart the painted names of campers from favourite plaques. If narrative is meant to "demonstrate the connection to land of the teller, the listener(s), and of the cultures in which the dialogians are immersed" (Raffan, 1993, p. 43), then these traditions do just that. The fourth people/land connection that Raffan describes is a numinous attachment, the "spiritual bond between people and place"

(Raffan, 1993, p. 44). Raffan writes that numinous experiences are “all that are are-inspiring, all that transcend the rational, all that touches the heart more than the mind, all that goes beyond names, stories, and experience and yet still plays a significant role in the bond that links people and place” (Raffan, 1993, p. 44). On the evening preceding my interview with a fourteen year old male, the rainy day had come to an end just as the sun was setting. Looking across the lake, the eastern shore appears to rise straight out of the lake. Behind the wall of green, on this day, was the still lingering dark grey scud. As the sun dropped lower and lower in the western horizon, shafts of light struck the eastern shore: in a moment it was lit up in a golden hue. This is what he had to say about the experience:

G: OK...In your years at camp, have you discovered anything about nature?

SM1: Uh, yes, well, before camp I didn't know how great and like, beautiful things like Algonquin Park would be. Like when you see, like last night, with the sunlight just glowing off the trees...

G: ...yeah, that was pretty amazing...

SM1: ...that was really special, yeah.

G: Why is that special? Why is something like that special to you?

SM1: You don't get that anywhere else. I mean, at home, all you see is sun glowing off a huge building, if you live in the city.

G: Yeah, and you, that's not as special to you?

SM1: I do- I- Not at all, in my opinion, because you go anywhere and see that, it's very rare when you can come to a place like this and see a night like last night.

In my experience, to have a teenage male who lives in a large urban American city describe his previous nights experience as “really special” strikes me as just one of such possible numinous events.

Numinous experiences are examples of relationship to the land that can exist outside of organized activities and lessons. Taking a moment, as the teenaged male did, to notice, watch and enjoy the experience of the setting sun speaks to the role of self in the development of such relationships. We had other similar experiences during the summer.

Relationship to place and nature: through animal others

Robert Michael Pyle echoes, in a similar way, Peter Kahn's beliefs of “experiences lived and intimacy felt” when he writes of the need for “...special places sought out by the young...” and if “...what is at hand is a scrap of the wild, at least some children will become naturalists before ever receiving instruction” (2002, p. 311). I liked the statement “...will become naturalists before ever receiving instruction” and I had some interesting experiences with this concept this summer. Animals played a very important role in my summer experiences. Campers were often interested in focusing their experiences of the natural world around the wild animals that they found and interacted with. Though I was the nature instructor, I could not be everywhere at every time to facilitate an environmental education of one sort or another. However, I did have campers coming up to me, on a daily basis, sharing with me their day's experiences as a

naturalist: they shared a story of a snake they caught⁸, wanting to know what it was; or where they had seen a bullfrog; or that they had caught a grasshopper and were keeping it in a jar.

These campers were finding places around camp where they could become their own naturalists, without instruction or being lead. Though they were leading themselves, I feel as though I played an important role here. Being a touchstone for their natural experiences, they received encouragement from me as well as having someone to come to, to answer the ever important question, "What is it?"

Interestingly in this study, when animals were discussed by campers they were often discussed in close association with nature, but were often seen as distinct entities in relation to nature. A twelve year old male (IM2) wrote on his worksheets that "nature is very interesting and amazing to me. Nature is both exciting things and animals." A nine year old male (JB2) had these thoughts, "I think nature is pretty fun, going out into the forest and camping and umm, and I like ahh, cool things like animals such as that squirrel [as a squirrel ran by] and umm, plants in the forest." A ten year old female (IF2) said that, "nature is a fun experience to learn about different things like what type of bird it is or any animal and to discover different kinds of objects in nature and animals." In these cases, animals are described as being distinct from nature and yet, still part of it. Animals as distinct entities in relation to nature can be seen in the thoughts of this fifteen year old female.

G: Always? So like, um, like here's an interesting example, would you consider leech to be a part of nature?

SG2: Um...you know what's weird, I kinda detached the animals that live in nature, to nature.

G: I see, so, tell me, tell me a little bit more about that.

SG2: Um, I don't know, I kinda, I like, like to think that the animals kinda have the same attachment to it as I do, except that it's their solid home and they appreciate it just as much as I do and they're very luck to live in there all year.

Animals throughout the data are always, however, seen as existing in close relationship with nature, close enough to *be* nature. Thus, I believe that there exists a relationship between their concept of nature, animals and themselves. It is through their identification with those wild Others, as Evernden has written, that one "...discloses one's own existence. Like the traveler in a foreign land who suddenly becomes aware of his or her own cultural assumptions because they are no longer shared by everyone around, the child becomes aware of itself through the experience of the otherness" (1992, p. 112).

⁸ It is worth noting that all animals that were captured during a nature program were kept overnight in a terrarium and released the following day; the ethic of returning wild animals to their proper place was shared with the campers. I often had a harder time sharing this ethic with campers who captured their own animals: younger campers believed that they should keep their animals as pets. I would often have to have long conversations with campers who shared with me their discoveries about what it would be like to be kept in a jar themselves. Reflecting on their own feelings and then thinking about the animal that they had often was enough for them to agree to let that animal "go."

In this next section, I am using the word kind, rather than species, to describe the qualitatively different categories of animals that were described. I have decided to use this word because the distinct categories that the campers shared with me were not necessarily distinct in a speciation sense. For example, campers considered caterpillars and butterflies to be “distinct,” and thus I considered them as different kinds. However, in a biological sense, the latter is the immature form of the former and would be considered the “same.” In doing so, I have attempted to keep intact the richness of the camper’s describe the categories of animals.

In studying the “things”, concepts and places that campers considered to be part or apart from nature, an interesting trend appears. Examining the kinds of animals that were mentioned, we see that six kinds of herptiles (reptiles and amphibians), five kinds of insects, four kinds of mammals, two kinds of annelids (worms). Birds and fish were mentioned once⁹. Within the herptile category, two kinds of herptiles (crocodiles and lizards) could not be found at camp. In the insect category, all of the kinds of insects could be found at camp, though in the case of the cockroach, the camper was making reference to cockroaches which live in the city. Wood cockroaches (genus *Parcoblatta*) can be found at Camp Arowhon, though are not often found. Of the mammals mentioned, all four of the species could be found at Camp Arowhon. Of the four species, though, one kind was “human” and the other was “horse.” Of the Annelids mentioned, both kinds could be found at camp. Specificity of kinds of animals were part of nature evident in the previous categories were lost as we look at the last categories. Birds and fish appeared in the data as just that. No specific kinds of birds or fish were mentioned, simply that the whole “group” could be considered to be part of nature. In comparison to the kinds of animals that could be found at camp to those which could not, ratio was 4:1.

What I find striking in this information is the location of herptiles and insects, in a quantitative sense, before mammals and all other kinds of animals mentioned. Also interesting is the ratio that existed between the present and absent kinds of animals. Reactions to herptiles and insects are often ones of fear or disgust. I have experienced these reactions first-hand, with some children refusing to touch or even running away from a hand-held snake. While some of these reactions may be for the enjoyment of peers, when in similar “show and tell” situations with mammals or birds, a negative reaction is often more muted or non-existent. Simply put, a moose often gets a better reaction than a spider. However, what appears to be occurring in this study, is a disruption of the typical relationship that exists between humans and animals. Herptiles and insects are some of the most common wild animals to be found at camp. Frogs, snakes, salamanders and various species of flies, beetles and dragonflies can be found readily at camp during the summer. While this data does not describe if there is a preference for these animals over others, the fact that they are mentioned more often than mammals and birds is an exciting finding. Exciting because I believe that through sustained contact campers have the opportunity to get to know the wild Others that exist at camp and become familiar and perhaps, more comfortable with them. Often campers are afraid of snakes because they have never seen one before; they do not know how it is going to react or interact with them. However, if they spend a summer at camp, first

⁹ This data is summarised in Appendix K: Summary of the location of “things,” concepts and places in nature

finding out where the snakes like to live, then catching and letting them go, they develop a relationship that they could simply not have with another, less common animal. Familiarity increases comfort and disrupts the cultural biases of scary and un-liked animals.

In fact, in my experiences, common wild animals have served as an agent for children to engage with the natural world that surrounded them. I believe that these engagements with common wild animals served as a conceptual foothold on which a child can move on to engagement with the more abstract aspects of "Otherness." Leesa Fawcett (2002) however, writes that animals are "increasingly endangered in our minds and in our direct experiences" (p. 126). Camp Arowhon reverses that trend. Campers interact and experience wild Others in their camp experience. Whether it be the excitement of experiencing uncommon macro-fauna like a moose cow and calf as they walk through camp, or through the experiences of more common animals such as the insects, snakes, frogs and toads that live at camp too, campers, such as this eleven year old male, experience and learn powerful lessons about animal Others:

- IM1: I remember seeing my first frog in nature at camp...
- G: What does that mean to see- had you seen frogs before?
- IM1: Yes.
- G: What does- what does it mean to see your first frog in nature?
- IM1: People- I've seen pictures of frogs, I know what frogs look like, but I've never seen a live frog and then I came to camp and I was exploring one day in the wetland and saw a frog.
- G: Yeah? And what was that like?
- IM1: It was just "Wow. This is what a frog is. How it looks like. A frog in real life and it's a frog in *its* life."
- G: Hmm, interesting a frog in its life. So what does that mean, to see a frog in its life?
- IM1: Um...
- G: Why is that important?
- IM1: It's important because, ah, if you look at the frog and you see where it's jumping around, you know where it lives, you know that it knows what it's looking for and where it's going. Um, and frogs, frogs are just funny. They just jump, jump, jump.

The first hand experience of seeing a frog, for the first time, "in its life" is an enormously important one if the relationship between this eleven year old boy and the natural world is going to be established. Based on this experience, this boy now *knows* frogs and denotes agency to their existence. However to better understand this concept of knowing, one needs to investigate what the phenomenological philosopher Martin Heidegger called *Dasein*. Heidegger described humans as "a being for whom Being is an issue and whose way of relating to the planet is through 'care'" (Evernden, 1985, p 63). For Heidegger, Being (capital b) is the description of "existence itself" as opposed to beings (small b) or "things that exist" (Clayton, 1998, p 171). Heidegger develops a word, *Dasein*, to describe humans, "a being for which, in its Being, that Being is an issue" (Macquarrie, as cited in Clayton, 1998, p 173); Being is an issue for us because we are consciously aware of and thinking about it. *Dasein*, as Heidegger says, "is the

servant of Being, not the master of either Being or beings (Clayton, 1998, p 173). This is a distinct difference from the anthropocentric point of view that permeates current Western culture, where humans “hyper-separate [them]selves from nature and reduce it conceptually in order to justify domination” (Plumwood, 2002, p 9). These hyper-separate relationships “speak of a person standing alone, separate from the world and from other beings, defined only by his independent will and without essential reference to other beings” (Clayton, 1998, p 174). It is meaningless, as humans, to stand alone and separate from other beings, and so, we interpret and discover our meaning in the world through care. Heidegger defined caring for others as “‘making them present,’ or revealing them as the “manifestations of Being they are” (Clayton, 1998, p 179). Through care, we are able to “encounter [nature] as a part of our lives, as something with which we live” (Evernden, 1985, p 66).

Rather than being something that only exists on pages of books, or on images on a television screen, this camper’s Being, his *Dasein*, now includes an animal Other. It is no longer an abstract thought or object: this camper has attended to that frog and now knows “where it lives,” “what it’s looking for and where it’s going.” He has entered into a relationship with that frog, and in turn that frog in particular and frogs in general are never thought of the same: frogs now have importance and agency.

The disruption of becoming-camper, becoming-animal, becoming-place

Giving a frog importance and agency requires that frog to become something more than it originally was. This act of becoming does not happen to the frog though. Objectively, the frog is the same prior and subsequent to this act; there is something that occurs to the person who ascribes the agency. That is the act of becoming, the re-territorialisation and de-territorialisation of what it means to be human (Deleuze & Guattari, 1987), where deleuzeoguattarian thought models becoming as the “radically non-subjective view of the alliances that people may form with women, animals, vegetables, molecules, ad infinitum” (Morris, 2002). Becoming is an act that takes place through alliances formed with “minoritarians,” but is also a rejection of the “majoritarian:” man. Deleuze and Guattari explain:

“Why there are so many becomings of man, but no becoming-man? First because man is majoritarian par excellence, whereas becomings are minoritarian; all becoming is a becoming-minoritarian. When we say majority, we are referring not to a greater relative quantity but to the determination of a state or standard in relation to which larger quantities, as well as the smallest, can be said to be minoritarian: white-man, adult-male, etc. Majority implies a state of domination, not the reverse. (1987, p. 291)

I envision the act that campers make when they come to Camp Arowhon is an act of becoming. When a camper gets on a bus or into a car to be driven to camp, they begin a process of becoming-camper. In deleuzeoguattarian thought, becomings occur “according to proximity rather than through processes of identification” and the zone of proximity for becoming “is characterized by defamiliarisation, estrangement, and

monstrosity” (Day, 2003, ¶ 26). While monstrosity may not apply to the Camp Arowhon experience for campers, the act, of leaving parents, city friends and home defines the zone of proximity and what it is to be “camper.” Thus, becoming-camper allows a re-definition of what it is to be human and the location and type of power that can exist between the camper and others.

The Cosmos as an abstract machine, and each world as an assemblage effectuating it. If one reduces oneself to one or several abstract lines that will prolong itself in and conjugate with others, producing immediately, directly a world in which it is the world that becomes, then one becomes-everybody/everything. (Deleuze & Guattari, 1987, p. 280)

The deleuzeoguattarian concept of everybody/everything is similar to the subject/subject concept of relationships that were mentioned earlier in this discussion. We have seen that the potential exists for Camp Arowhon to be a place where the power of “man” [sic] and the hegemonic view of nature are disrupted: a frog is seen as existing in its own life, nature, more generally speaking is seen as having value, agency and worth. These views are possible through the act of becoming. Yet, that act of becoming, for some, expands from becoming-camper to becoming-animal and becoming-place. De-territorialisation and re-territorialisation, is in this case literal. The connection to the sensuous earth, the place and embodied experience of the animals that live with the campers disrupt the taken for granted perspectives that seem to exist concerning nature prior to a child “becoming-camper.”

Camp Arowhon: place as educator

Camp Arowhon, the place and the nature that surrounds, has become an educator. Just as one can become-camper and become-animal, one can become-place and I have seen this happen. As nature instructor, I found out that I could not be everywhere, being an environmental educator at all times. However, what I discovered was that a kind of environmental education was taking place *everywhere* at camp. This fifteen year old female also shares this belief:

SF2: Um, I feel like at camp, well first of all, I feel like camp instils a lot of life lessons with nature’s help, do you know what I mean?

G: I think I do. Do you want to tell me a bit more about it?

SF2: Like, I learn a lot of things here and look at my classroom [gestures around her].

G: It’s the out-of-doors.

SF2: Yeah.

So, it appears as though campers connect to place and nature through formal daily activities such as canoeing and sailing as well as making a connection to nature through their exploration and discovery of wild Others that inhabited the place that Camp Arowhon is. Through that exploration and experiences of self-discovery, relationships, becomings, developed with the place that Camp Arowhon is, as well as the nature that surrounds; it is that relationship with the land that acts as the educator.

Evident in the words spoken this summer is the kind of education that occurs: the discovery of agency that exists within nature, the importance of embodied knowledge, the valuation of wild animal others and the significance of social relationships in and for life.

4. Implications

Summary

Through the examination and discussion of the interviews, many stories have unfolded. These stories contain threads that lead through the experiences of Camp Arowhon. These experiences offer campers opportunities to develop a sense of place, learn how that sense of place can lead to a connection to the natural world. These threads are, in fact, an environmental education.

It is worthwhile to summarise how and why I believe unique connections to place and the more than human world occur at Camp Arowhon. As the campers have shared, camp is seen as being different than home. While there are many differences between camp and home, the sense that a camper has of being independent from home is fundamental to the real meaning of the experience; this independence gives the camper space to develop and grow in a personal sense. A result of that development is a new sense of agency, where camp allows a camper to choose what kind of person they want to be; how they want to be personally defined. Through the process of becoming-camper each summer, a camper has the opportunity to shed their mantle of “city self” and assume, if they wish, a new developing sense of self.

In the experiences of the Camp Arowhon campers interviewed, the basis for all experiences at camp is the relationship that exists between the members of the community. At first glance, this means that important and integral to campers’ experiences are the relationships that they make with those that surround them: counsellors, fellow campers and instructors. I believe that equally as important to the Camp Arowhon experience is the connection that campers make to place: to the corporeal knowledge of the camp itself, and through that a connection to the natural world.

What the camper then experiences is a kind of developmental synergy, where both personal (relationships to others) and biospheric (relationships to place and nature) development is taking place. This is not surprising, given that relationships to friends and of the place are seen as integral and most important to the experience of camp in the eyes of the fourteen campers interviewed. Camp Arowhon is such a valued experience for the campers because they are able to, more so than in any other comparable experience they have, nourish, with reference to Shepard and Livingston, their developmental needs. Shepard (1982) writes that the “task is to not start by recapturing the theme of a reconciliation with the earth in all its metaphysical subtlety, but with something much more direct and simple that will yield its own healing metaphysics” (p. 130). The experience of camp, interacting with Others, including human and more than human Others, may just be such a “direct and simple” process. Campers’ experiences are so special and cherished because campers grow in ways they do not know from their city experiences.

Out of the camp experience develops the potential for a reciprocal relationship with nature, the concept of nature which sees affiliation to surroundings, rather than domination. However, this awareness requires embodied knowledge of place. Camp

experiences, full of sensual, corporeal experiences of place and nature, lead to a sense of place about Camp Arowhon. In their words, camp feels like a home.

In addition to a different concept of nature emerging from relationship to place, it also appears to emerge through campers' experiences of common wild animals. These common wild animals become a door through which campers can engage, or relate to more abstract aspects of the natural world and in so doing, they learn about themselves, Others and their mutual relationship.

I believe that what appear to be integral to the experience of Camp Arowhon can be summarized in the following qualities that I found to exist in the experiences of the fourteen campers I interviewed this summer:

1. a perceived distance and difference in independence, on the part of the campers, from home life;
2. the permission, based on the act of becoming-camper to redefine relationships to the self, the land, the natural world and the wild others that surround the camp;
3. the milieu of growth that exists due to the synergistic effects of personal and biospheric development;
4. the sensuous, embodied experience of the land, the camp, friends and the place;
5. and the opportunity for continuity over time and space: to stay for up to eight weeks and return year after year to the same place.

Implications of the Camp Arowhon experience

If environmental education is meant to be a process through which an ultimate goal is to provide participants with experiences that let them reconnect cultural separation with the more than human world and to change the legacy of limited perspectives, then the experiences that campers have had at Camp Arowhon offers insight into the kind of education that could encourage similar perspectives.

Often, environmental education is seen as the exclusive domain of the formal education system and consists of practices involving identification, formal study of scientific concepts and field trips away from school. To believe that not all education is environmental education leads to the conclusion that environmental education, rather than being a holistic philosophy informing practice, is, in fact, a subject. The act of narrowing the depth and width of inquiry to a subject limits perspective and has led to the subjectisation and subjugation of environmental education. The danger is that this narrow perspective leads to a dramatically incomplete view of our world.

Often, in environmental education, factual concepts—information—surrounding environmental issues are shared before a connection to the land is fostered. What I believe occurs out of this kind of practice is a short-circuiting of an “ethic of care” (Cheney & Weston, 1999). If behavioural changes based upon awareness of human impacts on the environment are ultimately what are “wanted” from this kind of information, I believe the “information-over-care” approach does more harm than good. More often than not, an understanding is gained, but behaviour is not modified. If behavioural changes do occur, they occur in a kind of vacuum: one where the mind is separate from the body, one where we are shamed into action over the destruction that

we are inflicting on more than human Others. An information-over-care environmental education praxis philosophy does not include the whole person: action comes as an extension of logic, to the loss of embodied experience.

The opportunity that Camp Arowhon offers differs from the common view of environmental education described above. Camp Arowhon allows for a drastically different perspective, a perspective where environmental education is not one single subject, to be studied at pre-defined times and in pre-defined places. It is not informational based. Concepts of nature that campers have do not come from an understanding of the water or carbon cycle. For up to two months in a camper's year, the daily act of living, relating with friends and to the land *is* the environmental education that these campers experience.

This perspective immediately reminds me of the concept that John Livingston shares when he writes that "individual self, group self, and community self in wild (whole) beings should not be constructed as mutually exclusive" (1994, p. 114). Livingston goes on to suggest that we have the power to possess "simultaneous access, if we will it, to all four states of self-conscious: individual, group, community and planetary" (1994, p. 118). I see the notion of a "biospheric self" (Livingston, 1994, p. 116) and reciprocity towards nature to be inclusive: everything has the power to become an Other. It is easy to see how the living things on this planet could be considered nature since they actively seem to give and take. However, even non-living "things" can be included in this concept of nature: rocks can give to us and rocks can take from us. Rock can be seen as part of nature through a human's relationship to it, through a "field of care." This field of care is described as "our region of significance and meaning" where we are "surrounded by the knowable" (Evernden, 1985, p. 65). I would argue that through being aware of the place that we are, we are able to extend our field of care to the non-living aspects of the natural world and enter into relationship with them. If a reciprocal-based concept of nature exists, then through our fields of care, we are able enter into affiliation with that which surrounds us, be it rock, tree or mammal.

Integral in this affiliation is having awareness of and attending to the place you are. This sustained, embodied relationship, over the course of a summer and over the course of years, allows for identification and care of place: Camp Arowhon campers identify and believe in the power of the place, of the land and of nature in their camp experiences. Concepts of nature, in this case, come from a relationship to people and place, where the personal beliefs that develop focus on the inherent personal value that the more than human world has. This is care-based environmental education; close and personal relationships to place are fundamental for a connection and ethic of care to develop.

It is these close and personal connections to place and nature that should be the starting point for environmental education. From caring comes an internal motivation to learn more about the world that surrounds. Action then comes from the collaboration of an ethic of care *and* information, the results of which have the potential to be much more potent than the work of information on its own. There is more than just logical reasoning for a pro-environmental behaviour: there is a relationship and a concern for the care of that Other.

Camp Arowhon offers campers the opportunity to develop this ethic of care towards that which campers identify as nature. The experience of camp holds a door open to a new perspective of human-nature interactions. While all campers do not

necessarily decide to walk through that door and accept and assume a new perspective towards the more than human world, the fourteen campers that I spoke with for this study had all been affected and effected by the place of camp. For some, a reciprocal based view of the natural world emerged from this interaction, for others, care of the place that they call Camp Arowhon emerged. Regardless of their perspectives towards the natural world and their concepts of what nature is, what existed in all fourteen was a perspective that the nature that surrounded them while *in place* at camp was important. Again, this is an important starting point for environmental education. To have a population of children who believe that they have some sort of connection to the natural world and believe in the importance of that connection offers an opportunity for their ethic of care to expand and grow as they do.

Ultimately, for the practice of environmental education, it speaks to the importance of experience of and in the natural world. What seems to emerge from the conversations with these campers is the power that a relationship with a place, that is conceived of as being nature, has on their personal ethic. However, a problem does exist in the concepts that campers have about the natural world which I will address under "Suggestions for further research."

Limitations of the research techniques and suggestions for improvement

Some of the research techniques that were used in this study could be improved. As mentioned earlier, I had an active hand in choosing the children that I interviewed. This could have had an effect on the kind of answers that I heard and the subsequent conclusions that I made. While I did not actively choose campers who I felt would support any hypotheses that I had, that I did choose my participants could mean that there was a bias which may have lead to a weakness in my data. While it may be a goal to reduce this kind of bias in research, given the qualitative nature of the data and the inability for randomisation of participants in this study, I believe that a satisfactory compromise was reached in my process of selecting participants. If one could, as a researcher, be able to choose participants through a randomisation, then there is the potential for improvement in the generalisability of the data.

While a portion of this research was a phenomenographic investigation, I only managed to get two kinds of data from these campers: written and oral. Knowledge and concepts held are not limited to what is shared through speaking and writing. This reliance on oral discourse has been a criticism of the phenomenographic method (Richardson, 1999). In order to increase the robustness of my research, I could have also followed and observed the campers that I interviewed to get a kinaesthetic sense as to their concepts of the natural world. The logistics of such an extension to the research method were beyond the scope of my investigation due to the commitment of time that such a method would require.

Another obstacle in adding this embodied knowledge aspect into the research method would be the increased difficulty of recruiting participants into the study. The interviews that took place for this study were no more than an hour long. It was easy for participants to agree to give up that slot of time. Had they then needed to agree for me to follow them around, they may have decided against participation.

Finally, a change in behaviour could be expected if the campers knew that I was watching them over the course of a day or week. Being cognisant of what it was that I was interested in investigating could have led to a significant enough change in behaviour that I would not have been able to get reliable data from this method. Therefore, for the preceding reasons, I chose to limit the collection of data in the phenomenographic portion of the study to oral and written accounts.

When coding the data, had I the time and resources, I would have liked to have had another coder assisting me to ensure inter-coder reliability. Because I was the only person who coded the data, the possibility exists that I introduced bias in the choice of codes. Had I had the opportunity, throughout the entire coding process, to test the reliability of my own code choices with a colleague, I would have increased my own confidence in the robustness of the data. That noted, I did reflect on my choice of codes and make changes based on that reflection. Additionally, I shared my initial set of codes with a colleague, and made changes to categories based on that interaction.

Suggestions for further research

The changes in perception that occur at Camp Arowhon are by no means a fait-accompli within the camper population and are not necessarily generalisable across more populations. If Camp Arowhon *is* a place where campers can create an ethic of care to the more than human world, this *may* be occurring due in part to an intellectual “enzymatic reaction;” the presence of readily-identifiable “nature” is needed before campers integrate this “nature” into their experiences and make a meaningful connection to it. While connections appear to be easily made in a “nature rich” place, these campers only spend, at most, a sixth of a year in this “nature rich” environment. What I am now interested in is the other ten months of the year. I wonder if we are in the midst of an extinction of experience (Pyle, 2002, p. 312) of the natural world. Virtual worlds on glowing screens are now more easily accessible in urban environments than real worlds felt through sight, sound, touch, feel and taste. Even while the campers shared experiences of nature at camp, their experiences of home life were often filled with stories of iPods, video games, telephones and other objects that seemed to take the place of trees, lakes and wild animals in their camp stories. While campers saw nature as existing in the city, it was not seen as being the same thing as the nature that existed at camp. Nabhan and Trimble (1994) write that “finding spiritual sustenance in the land requires a certain amount of solitude, but the experience clearly does not require a full-blown wilderness setting, nor does solitude need to be absolute solitude” (p. 312). Does this then mean that a children, who will never have the opportunity to spend their summers in Algonquin Park, can still build a meaningful relationship with wild others, place and the natural world that surrounds? Other questions then emerge:

1. What kind of relationship can be developed to nature in a place that people conceive to be lacking in, or void of, nature?
2. Can connections to the land take place in a place that is perceived as lacking or void of nature?
3. If so, what does that connection look like?
4. If so, what are the experiences of those who feel that connection?

In further work, I would be interested in investigating the dualism that appears to exist between the natural world of a city and the natural world of a place like Algonquin Park. I am interested in urban children, wildlife and relationships because of the belief that exists, wrongly in my mind, that the nature that exists in urban centres is not “true” nature. These beliefs, where natural is good (in this case nature outside of the city) and the unnatural is bad (in this case the nature within the city), speak to a facile conception of nature and the natural world. However, this dualism does seem to exist within the same minds of those campers who hold the most sophisticated concepts of humans’ relationship with the natural world. All of these thoughts lead to this question: if environmental education is to build meaningful connections between the human and more than human world, and an increasing majority of children experience the natural world within the context of urban environments, what happens to that connection?

Emerging from my research is another question: how does one counter the strong urban/wilderness dualism that appears when examining these camper’s views of the natural world? If we are dealing with an extinction of experience, at least in an urban setting, then perhaps it is now the responsibility of environmental education to go out seeking and sharing urban experiences of the natural world with others. It is the practice of ignoring adults and only bussing children to outdoor and environmental education experiences that take place outside the city that reinforces the urban/wilderness dualism. Perhaps facilitating experiences of the natural world for adults and children in local neighbourhoods is an example of seeking and sharing urban experiences of the natural world with others. The research question here is the effectiveness of such activities in fostering a meaningful connection to the land.

Concepts of what environmental education *is* need to be modified as well. If a camper at summer camp can experience nature sailing on a lake, then why not view this as a form of environmental education? Blinders as to the type of experience that counts as environmental education seem to exist within current practice: too narrow a focus exist on experiences that “count.” Urban environmental education needs to expand this focus and seek out experiences that foster these connections. They may not come in expected places, as more than one kind of experience in one kind of place, I believe, can lead to a connection to that particular place. Abrams writes:

Let us indeed celebrate the powers of technology, and introduce our children to the digital delights of our era. But not before we have acquainted them with the gifts of the living land, and enable its palpable mysteries to ignite their imaginations and their thoughts. (Abram, 2004, p. 22)

Let it be the responsibility of environmental educators to help show to those who live in urban settings the nature that surrounds and to help others experience an embodied and sensual urban experience. While the experiences of summer camp appear to be those where “imagination” and “thoughts” about the non human world are ignited, we provide a disservice to campers if we tell them it is the *only* place where the living land exists. Nature is a creation of the mind, sculpted through cultural beliefs and lived experience. I wonder if the real problem was not that campers did not see their homes as nature but rather that they *did not see the nature at home*. The need exists for environmental education that counters the hegemonic discourse and mainstream representation of urban environments as a location unsuitable for nature to be found.

References

- Abram, D. (1996). *The spell of the sensuous: perception and language in a more-than-human world*. New York: Vintage Books.
- Abram, D. (2004, January/February). Earth Stories. *Resurgence*, 20-22.
- Ashworth, P., & Lucas, U. (2000). Achieving empathy and engagement: a practical approach to the design, conduct and reporting of phenomenographic research. *Studies in Higher Education*, 25(3), 295-308.
- Atkinson, P. (2001). *Handbook of ethnography*. London: SAGE Publications.
- Bixler, R. D., & Floyd, M. F. (1997). Nature is scary, disgusting and uncomfortable. *Environment and Behavior*, 29(4), 443-467.
- Brewer, J. D. (1994). The ethnographic critique of ethnography: sectarianism in the RUC. *Sociology*, 28(1), 231-244.
- Brown, C. S., & Toadvine, T. (Eds.). (2003). *Eco-Phenomenology: back to the earth itself*. Albany: State University of New York Press.
- Byrne, M. (2001). Ethnography as a qualitative research method. *AORN Journal*, 74(1), 82-84.
- Chambers, B., Legasy, K., Bentley, C. V., LaBelle-Beadman, S., & Thurley, E. (1996). *Forest plants of Central Ontario*. Edmonton: Lone Pine.
- Cheney, J., & Weston, A. (1999). Environmental ethics as environmental etiquette: toward an ethics-based epistemology. *Environmental Ethics*, 21, 115-135.
- Chrismar Mapping Services (Cartographer). (1996). *Canoe lake daytripper*
- Clayton, P. H. (1998). *Connection on the ice: environmental ethics in theory and practice*. Philadelphia: Temple University Press.
- Day, R. (2003, February 15). *Excerpts from: animal songs: translation, community, the question of the 'animal': information*. Retrieved February 16, 2004, from <http://www.lisp.wayne.edu/~ai2398/animal.htm>
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: capitalism and schizophrenia* (B. Massumi, Trans.). Minneapolis: University of Minnesota Press.
- Engel, S. (1991). The world is a white blanket: children write about nature. *Children's Environments Quarterly*, 8(2), 41-45.
- Evernden, N. (1985). *The natural alien* (2nd ed.). Toronto: University of Toronto Press.
- Evernden, N. (1992). *The social creation of nature*. Baltimore: The Johns Hopkins University Press.
- Fawcett, L. (2002). Children's wild animal stories: questioning inter-species bonds. *Canadian Journal of Environmental Education*, 7(2), 125-139.
- Gaskin, R. (2003). HyperRESEARCH (Version 2.6). Randolph: ResearchWare, Inc.
- Hall, B. (2003a, February 21). *Guiding questions in ethnography*. Retrieved January 31, 2004, from <http://www.sas.upenn.edu/anthro/CPIA/METHODS/Guiding.html>
- Hall, B. (2003b, February 21). *What is ethnography?* Retrieved January 30, 2004, from <http://www.sas.upenn.edu/anthro/CPIA/METHODS/Ethnography.html>
- Hay, P. (2002). *Main currents in western environmental thought*. Bloomington: Indiana University Press.
- Hayles, K. (1995). Searching for common ground. In M. E. Soule & G. Lease (Eds.), *Reinventing Nature? Responses to postmodern deconstruction* (pp. 47-64). Washington: Island Press.

- Holloway, I., & Todres, L. (2003). The status of method: flexibility, consistency and coherence. *Qualitative Research*, 3(3), 345-357.
- Hutchison, D. (1998). *Growing up green: education for ecological renewal*. New York: Teachers College Press.
- Kahn, P. H. (1999). *The human relationship with nature: development and culture*. Cambridge: The MIT Press.
- Kates, J. (1998). The story of Camp Arowhon. Algonquin Park: Camp Arowhon. Oral Story.
- Livingston, J. A. (1994). *Rogue primate: an exploration of human domestication*. Toronto: Key Porter Books.
- Loughland, T., Reid, A., & Petocz, P. (2002). Young people's conceptions of environment: a phenomenographic analysis. *Environmental Education Research*, 8(2), 187-197.
- Manias, E., & Street, A. (2001). Rethinking ethnography: reconstructing nursing relationships. *Journal of Advanced Nursing*, 33(2), 234-242.
- Morris, M. (2002, May 31). *How (not) to become plant: a deleuzeoguattarian analysis of human/plant assemblages*. Retrieved February 16, 2004, from <http://www.gwu.edu/~medusa/plant.html>
- Nabhan, G. P., & Trimble, S. (1994). *The geography of childhood: why children need wild places*. Boston: Beacon Press.
- Natural Areas Report: Algonquin Provincial Park*. (2004). Retrieved January 27, 2004, from http://www.mnr.gov.on.ca/MNR/nhic/areas/areas_report.cfm?areaid=3007
- O.M.N.R. (Cartographer). (1997). *Canoe routes of Algonquin Provincial Park* [maps].
- Orgill, M. (2002, March 6). *Phenomenography*. Retrieved February 10, 2003, from <http://chemed.chem.purdue.edu/chemed/bodnergroup/frameworks/phenograpy.htm>
- Plumwood, V. (2002). *Environmental culture: the ecological crisis of reason*. London: Routledge.
- Pyle, R. M. (2002). Eden in a vacant lot: special places, species, and kids in the neighbourhood of life. In P. H. Kahn & S. R. Kellert (Eds.), *Children and nature: psychological, sociocultural and evolutionary investigations* (pp. 305-327). Cambridge: The MIT Press.
- Raffan, J. (1993). The experience of place: exploring land as teacher. *Journal of Experiential Education*, 16(1), 39-46.
- Rejeski, D. (1982). Children look at nature: environmental perception and education. *Journal of Environmental Education*, 14(4), 27-40.
- Richardson, J. T. E. (1999). The concepts and methods of phenomenographic research. *Review of Educational Research*, 69(1), 53-82.
- Saliba, J. (joey@camparowhon.com). (2004, January 23). *Stats on Camp*. E-mail to G. P. L. Watson (gavan@gavan.ca)
- Shepard, P. (1982). *Nature and madness*. San Francisco: Sierra Club Books.
- Shepard, P. (1995). Virtually hunting reality in the forests of simulacra. In M. E. Soule & G. Lease (Eds.), *Reinventing Nature? Responses to postmodern deconstruction* (pp. 17-30). Washington: Island Press.
- Stables, A. (2001). Who drew the sky? Conflicting assumptions in environmental education. *Educational Philosophy and Theory*, 33(2), 245-256.

- Stannard, P. (2001). SmartDraw (Version 6.0). San Diego: SmartDraw.com.
- Trigwell, K. (2000). *Phenomenography: variation and discernment*. Paper presented at the Improving Student Learning, Proceedings of the 1999 7th International Symposium, Oxford.
- Tuan, Y. F. (1998). *Escapism*. Baltimore: Johns Hopkins University Press.
- Watson, G. P. L. (Ed.). (2002). *Camp Arowhon staff resource manual* (2nd ed.). Toronto: Camp Arowhon, Inc.
- Williams, R. (1976). Nature. In *Keywords: a vocabulary of culture and society* (pp. 184-189). New York: Oxford University Press.
- Williams, R. (1980). Ideas of nature. In *Problems in materialism and culture* (pp. 67-85). London: Verso.

Appendixes

Appendix A

2004 camper statistics

73% of campers are returning

72% are Canadian

23% are American

5% are International

26% are 8 week campers

The Female:Male ratio is 1:1.05

(Saliba, 2004)

Appendix B

Camp Arowhon Daily Schedule

Except for Visiting Day and special days, the camp follows the following routine.

7:30 - Wake-up

8:00 - Breakfast

8:30 - Cabin Clean-up

9:00 - Programming

9:30 - 1st Period

10:30 - 2nd Period

11:30 - Morning General

12:30 - Lunch

1:30 - Rest Hour

2:30 - 3rd Period

3:30 - 4th Period

4:30 - Afternoon General

5:00 - Staff Hour

6:00 - Dinner

7:30 or 8:00 - Evening Program

9:00 - Camper Snack & Bed

11:00 - Staff Snack

1:00 - Night Duty Ends

Appendix C

Program Activity Areas

Archery (A)
Arts & Crafts
Canoeing (A)
Climbing (A)
Drama
Kayaking (A)
Landsports
Low Ropes (A)
Nature
Riding (A)
Sailing (A)
Swimming (A)
Tennis (A)
Windsurfing (A)

(A)—Award Available

Appendix D

Semi-structured interview questions

1. What is nature?
2. When have you experienced nature?
3. What does nature include?
4. Where have you experienced nature?

Appendix E

Informed consent document

Purpose

The purpose of this project is to investigate:

- a) youth's conceptions of nature and
- b) youth's conceptions of themselves in nature and
- c) the role of place in their conceptions of nature

Procedures

This is a phenomenographical investigation, designed to learn about the qualitatively different ways in which youth experience, conceptualize, perceive and understand the various phenomena that they define as nature. For the purposes of this study, each participant will:

- Be presented with three sheets of paper. On one will be the words "Nature is..." on the second will be "Me and nature..." and on the third will be "Camp is..."
- Have the opportunity, using any form of expression appealing to them, to fill out the sheets. These sheets will be kept by the researcher.
- Be asked about their work. This dialogue will be recorded and transcribed. Given the open-endedness of the participant's possible products on the two sheets, no formal interview questions will be developed for this portion of the interview. Once the participants have had the maximum opportunity to reflect on their experiences in relation to the three worksheets, they will then be asked questions that make up the semi-structured interview portion of the study. This dialogue will also be recorded and transcribed.

New, Experimental or Procedures Not Normally Used

Phenomenographic research usually consists of semi-structured, verbal interviews. This project differs from typical phenomenographic research by including the addition of participants filling out sheets of paper prior to the semi-structured interviews.

Foreseeable Risks or Discomforts

There are no foreseeable risks or discomforts that you may experience participating in this study

Benefits to you or to others

You:

As a participant, you may benefit on a personal level from this study. New awareness or appreciation of the phenomena under study may lead to a greater personal awareness or appreciation of the phenomena.

Others:

This investigation has many potential positive implications. Examining the results from an environmental thought viewpoint, the outcomes will

add to the body of literature surrounding concepts of nature. From an environmental educational viewpoint, the results will lead, through an understanding of what nature is to these youth, to an opportunity to be aware of and incorporate youths' outcome space in the design and implementation of their programs; adding to the relevancy and impact of these programs.

How you came to be chosen for this project

You came to be chosen for this project based on the following:

- you are a youth
- you are involved in a non-formal educational situation

To what extent records will remain confidential

Records *will* remain confidential. Transcripts of conversations and copies of worksheets may be published or shared.

To what extent records will remain anonymous

Records *will* remain anonymous. All personally identifiable material will be removed or changed from any published material.

Please note that participation is voluntary.

Please note that you may discontinue participation at any time.

You may contact the Graduate Programme in the Faculty of Environmental Studies at telephone number (416) 736-2100 x 22612 for answers to questions about research and about the rights of participants.

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement.

Signature of participant
(or legally authorized representative)

Date

Printed name of participant

Signature of investigator

Appendix F

Letter to camper parents

Dear Camp Arowhon Parents:

My name is Gavan Watson and I have been a Camp Arowhon staff member since 1998. I've had the opportunity to work with your children in the capacity as the head ropes instructor, head canoeing instructor and for the past three years, I've supervised instruction as one of the two program directors at camp. While not at camp, I've completed an undergraduate degree and worked in the field of education. Presently I am a graduate student at the master level at the Faculty of Environmental Studies at York University, located in Toronto.

My research interests while at York University lie in the fields of environmental education and environmental thought. Part of my study while at York University involves field research. My research this summer centers on youths' perceptions of and how they see themselves in nature. For this research, I am planning on conducting informal interviews with a group of fourteen campers.

This proposed research has been scrutinized and approved by the Faculty of Environmental Studies research ethics committee. If your son or daughter is approached to be included in this research, they'll have the opportunity to decline or opt-out at any time, without any repercussions. My research will be supervised by Dr. Leesa Fawcett, faculty member in the Faculty of Environmental Studies. If you would like to speak to me, or my supervisor, about this research feel free to contact me. My email address is mailbox@gavan.ca or conversely, you can call the camp office and I'll return your call.

Sincerely,



Gavan Watson
Candidate, Master in Environmental Studies
Faculty of Environmental Studies, York University

Program Director
Camp Arowhon

Appendix G

Verbal informed consent text

I am asking you to participate in a project that investigates:

- a) your conception of nature
- b) how you think yourself in relation to nature and
- c) your conception of camp.

For this project, you will be presented with three sheets of paper. On one will be the words “Nature is...” on the second will be “Me and nature...” and on the third will be “Camp is...” You will have the opportunity to fill out these sheets however you like. I will be keeping what you make. Finally, I will ask you about your work. The conversation we have will be recorded. I’ll be copying the conversation out later and also keeping a copy of the conversation.

There are no foreseeable risks or discomforts that you may experience participating in this study.

You may benefit on a personal level from this study. You may discover a new awareness or appreciation which may lead to a greater personal awareness or appreciation of nature.

Others may benefit from this research. The results of this research will add to the body of literature surrounding concepts of nature. The results will also provide an opportunity to be aware of and incorporate your ideas of nature in the design of environmental education programs.

You came to be chosen for this project based on the following:

- you are a youth involved in a non-formal educational situation

Records *will* remain confidential. Written copies of conversations and copies of worksheets may be published or shared.

But, records *will* remain anonymous. All personally identifiable material will be removed or changed from any published material. No one will know who said, wrote or drew anything.

Your participation is voluntary.

You can stop participating at any time without any problems.

Do you have any questions?

Do you understand all of this?

Would you like to participate?

Appendix H

Semi-structured interview questions: final list

1. Tell me about what you wrote / drew.
2. What is nature?
3. Do you care about nature, if at all?
4. What do you think nature includes?
5. Do you think you are a part of nature?
 - a. How are you a part of nature?
 - b. How are you different from nature?
6. Have you experienced nature? Where?
7. Have you experienced nature at camp? Where?
8. Have you experienced nature at home? Where?
 - a. Is nature different at camp then it is at home? How?
9. When comparing camp and home, is there one place that's more natural? Why?
10. In your experience, is nature something that you experience yourself or with other people?
11. Do you have a favourite outdoor place at camp, if any?
12. What do you think community is?
13. Do you think that nature is a community?
 - a. What kind of community?
14. In your years at camp, have you discovered anything about nature?
 - a. What have you discovered?
 - b. Did you discover it yourself?
 - c. Was it important?
15. How are nature and camp connected, if at all?
16. What does it mean to be a part of nature?
17. How is camp important to you, if at all?
18. How is nature important to you, if at all?

Appendix I

Age, gender and camper section of participants	Participant Key
<u>Juniors</u>	
7 years, 8 months, M	JM1
9 years, 4 months, M	JM2
10 years, 5 months, F	JF1
10 years, 7 months, F	JF2
<u>Intermediates</u>	
11 years, 3 months, M	IM1
12 years, M	IM2
12 years, M	IM3
12 years, 2 months, F	IF1
10 years, 10 months, F	IF2
12 years, 5 months, F	IF3
<u>Seniors</u>	
14 years, 6 months, M	SM1
14 years, 1 month, M	SM2
15 years, 1 month, F	SF1
15 years, F	SF2

Key

JM—Junior Male
 JF—Junior Female
 IM—Inter Male
 IF—Inter Female
 SM—Senior Male
 SF—Senior Female

Appendix J

Study Code List

abundance
activity - canoeing favourite activity
aesthetics - comments on
algonquin park
algonquin park is wilderness
animal story - comments on
animals - are cool
animals - are cute
animals - are different
animals - are of a life
animals - are similar to humans in own way
animals - biting insects bother humans
animals - communal
animals - different than humans
animals - dislikes animals being hurt by humans
animals - dislikes animals being hurt by other animals
animals - do funny stuff
animals - doesn't like biting insects
animals - have agency
animals - have protection
animals - humans need them
animals - in nature
animals - in their right place
animals - interesting
animals - likes animals
animals - live in nature
animals - look different but do similar things to humans
animals - make nice noises
animals - nice to see playing
animals - not as abundant
animals - participant loves animals
animals - similar goals to humans
animals - similar to humans
animals - surprise or are surprising
animals - watch humans and learn from them
awe and wonder
being lost in the woods - comments on
big - important
big - size
camp - allows people to grow personally
camp - brings out personal best
camp - built from wood
camp - camp friends more important than city friends
camp - care for nature
camp - changed attachment to nature
camp - could not survive without camp
camp - feels independent
camp - friends and counsellors influence
camp - friendship through good and bad
camp - friendships like second family
camp - has not made discoveries of nature at camp

camp - has role models to look up to
camp - if at camp year round would care more about nature
camp - instils life lessons w natures help
camp - is a community
camp - is a dream come true
camp - is a good time
camp - is a middle landscape
camp - is a paradise
camp - is a place to feel safe
camp - is a place to hang out
camp - is a place to learn
camp - is a place to learn about nature
camp - is a place to relax
camp - is a place to try new things
camp - is a place where everyone is happy
camp - is a social place
camp - is activities
camp - is amazing
camp - is an adventure
camp - is beautiful
camp - is civilized in comparison to trip
camp - is coming back
camp - is connected to nature
camp - is cool
camp - is different from home
camp - is different from the city
camp - is doing things not thought possible
camp - is everyone playing
camp - is experiences
camp - is familiar
camp - is forgetting about mum and dad for a while
camp - is friendships
camp - is fun
camp - is getting away from city
camp - is good counsellors
camp - is hearing rain on the roof
camp - is held in participants heart
camp - is home or second home
camp - is important
camp - is in nature
camp - is in the middle of nowhere
camp - is incredible people
camp - is knowing people
camp - is magical
camp - is meeting people
camp - is more natural in comparison to home
camp - is new things
camp - is opportunities
camp - is opportunity to get away from home and or parents
camp - is original
camp - is people knowing participant
camp - is people participant knows
camp - is real nature
camp - is relationships
camp - is rustic or simple
camp - is some persons job

camp - is special
camp - is starting fresh each year
camp - is the best
camp - is unique experiences
camp - is where you are yourself
camp - is where you can be yourself
camp - learned to love nature
camp - likes camp
camp - look forward to it all year
camp - loves camp
camp - makes participant a better person
camp - more nature at camp than in city
camp - more outdoor life going on
camp - more time is spent outside at camp
camp - more water at camp than at home
camp - nature and camp alike or the same
camp - nature and camp connected
camp - nature at camp explained or talked about
camp - nature at camp hasn't been knocked down
camp - nature at camp interesting bc its different
camp - nature at its best
camp - nature bring camp community together
camp - nature close-by
camp - nature helps you learn how to cooperate
camp - nature makes camp different
camp - nature makes camp more enjoyable
camp - nature more important at camp than in city
camp - nature provides entertainment
camp - nature surrounds
camp - nice to canoe on lake
camp - nice to swim in lake
camp - no one at camp who hates nature
camp - no pollution
camp - offers opportunity to reflect or think
camp - one of most important things to participant
camp - participant does more at camp
camp - participant is happy at camp
camp - people know about nature
camp - people w different backgrounds come together
camp - place is a teacher
camp - plants make camp important
camp - provides a different environment to live in
camp - provides memories
camp - respect nature
camp - seems old-fashioned
camp - shared experiences

camp - technology does not change experience
 camp - things experiences or objects that cant have at home
 camp - wait and think about it all year
 camp - will miss atmosphere
 camp - will miss the people when participant no longer attends
 camp - without nature would be a bunch of buildings
 camp - without nature would be boring
 camp - without nature would not be the same
 camp - work with nature
 camp - would be the same if in the city
 camp - would be unhappy if could not come back
 camp - would prefer if it was isolated
 canoe - canoes are made by nature
 canoe - mentions canoe or canoeing
 canoe - takes characteristics of nature
 care
 cars - destroy nature
 cars - do not have blood
 cars - made from things that have been taken from nature
 cars - sort of nature
 cars - takes away from nature
 cars - takes more away from nature than it is a part of
 circle of life
 city - busy
 city - city equals personal independence
 city - don't see everything going on in nature
 city - everything is provided for you
 city - is a city person
 city - is a part of nature
 city - is not nature
 city - is separate from nature
 city - not as many animals
 city - not enough time for nature
 city - not focused on nature
 city - part of nature depends on development
 city - pollution
 city - space taken up
 city - take nature for granted
 civilization - human products are a part
 civilization - humans change how they live to meet civilization
 civilization - nature has been altered and changed
 civilization - not nature
 clean or cleaning
 clouds - are a friend of nature
 cn tower - can see nature from top
 cn tower - part of human nature
 cn tower - tourist mechanism
 colour - comments on
 commerce
 community - being w other people
 community - buildings
 community - communities have a good time

community - communities in nature
 community - describes the world
 community - good to know about community
 community - human and animal community overlap
 community - is a great place
 community - is not bonding with people
 community - is people liking the same things
 community - is people living in the same area or together
 community - is people who share similar values or morals
 community - is taking responsibility for others
 community - is talking to people
 community - is teamwork
 community - is what is around it
 community - is what is around you
 community - is working together
 community - makes things better
 community - natural communities work on large scale
 community - nature is not a community
 community - organized
 community - people having a great time w each other
 community - people together more than wildlife together
 community - people who grow up together
 community - people who work together to make a difference
 consumption or eating - comments on
 control
 destruction - comments on
 difficult question to answer
 dualism - comments on
 earth - is alive
 empathy
 experience - actual experience
 different than book experience
 experience - actual experience good
 experience - changes values
 experience - if you don't experience nature you will destroy it
 experience - nature differently by oneself
 experience - nature is about what you see as a person
 experience - of nature
 experience - of nature by oneself or with others similar
 experience - of nature with people a social thing
 experience - watching tv and being outside equal
 experience - with others is fun
 experienced nature - alone and with others
 experienced nature - alone at home
 experienced nature - at a park
 experienced nature - at camp
 experienced nature - at camp - in forest
 experienced nature - at camp - on lake

experienced nature - at camp - on trail
 experienced nature - at camp - through stream
 experienced nature - at camp with others and by themselves
 experienced nature - at cottage
 experienced nature - at country home
 experienced nature - at grandparents house
 experienced nature - at home
 experienced nature - at the barn
 experienced nature - biking
 experienced nature - by themselves
 experienced nature - camping
 experienced nature - canoeing
 experienced nature - eating
 experienced nature - everywhere
 experienced nature - everywhere at camp
 experienced nature - exploring
 experienced nature - fishing
 experienced nature - hiking
 experienced nature - in a ravine
 experienced nature - in backyard
 experienced nature - in front yard
 experienced nature - in gardens
 experienced nature - in museum - based on nature
 experienced nature - in other country
 experienced nature - in print
 experienced nature - in school
 experienced nature - in the city
 experienced nature - in the point
 experienced nature - in woods
 experienced nature - kayaking
 experienced nature - not at home
 experienced nature - on a beach
 experienced nature - on canoe trip
 experienced nature - on hikes
 experienced nature - on lake
 experienced nature - on rivers
 experienced nature - outdoors in the bush
 experienced nature - outside
 experienced nature - outside the city
 experienced nature - regular places around camp
 experienced nature - riding
 experienced nature - sailing
 experienced nature - swimming
 experienced nature - through activity
 experienced nature - through drawing
 experienced nature - through games
 experienced nature - through nature program
 experienced nature - through viewing
 experienced nature - walking
 experienced nature - when using the land
 experienced nature - with others
 experienced nature - with others a competition
 experienced nature - with others at camp
 explore
 favourite place - can see most of camp

favourite place - feels in touch
 favourite place - forest
 favourite place - stars beautiful
 favourite place at camp - behind the med lodge
 favourite place at camp - by lake in front of ml
 favourite place at camp - canoe dock
 favourite place at camp - canoeing
 favourite place at camp - curve dock
 favourite place at camp - everywhere outside
 favourite place at camp - lake
 favourite place at camp - point
 favourite place at camp - special connection
 favourite place at camp - woods behind girls camp
 fire - fire natural
 fire - lightning that starts a fire is natural
 fire - match that lights a fire is not natural
 fish in aquarium - sort of nature
 flowers - smell nice
 forests fires - bad
 friend or friends
 future
 garbage or littering
 growth
 hard question to answer - comments on
 home - has made discoveries of nature at home
 home - modernised
 home - nature at home can be found at camp
 home - not as many animals
 horses are adaptable
 humans - allowed to be in nature but it doesn't usually surround
 humans - are a part of the world
 humans - are living
 humans - are mammals or animals
 humans - can make decisions
 humans - careless towards nature
 humans - cautious about natural world
 humans - corrupted by money
 humans - depend on nature
 humans - do not live in nature
 humans - good and bad
 humans - have to give back to nature
 humans - human analogy used to describe nature
 humans - human interaction changes nature
 humans - human interaction does not change nature
 humans - human nature
 humans - human nature and nature nature may not be different
 humans - human nature is a persons default behaviour
 humans - human nature is nature
 humans - human nature is our basic instincts
 humans - human nature is the way people act normally
 humans - human nature to discover and be curious

humans - human products are not nature
 humans - humans different
 humans - humans different and the same to nature
 humans - individuals
 humans - like based on technology
 wo nature experience
 humans - like to control or be in control
 humans - need to change in order to survive in nature
 humans - not a part of civilization
 humans - not as interested in human-built objects
 humans - pollute
 humans - similar to nature
 humans - sort of different from nature
 humans - the more people the less nature
 humans - through robotics no longer a part of nature
 humans - waste nature
 incorrect information
 interesting
 lake - is a medium for nature
 learn at school
 littering - comments on
 log - is a medium for nature
 log cabins - sort of nature
 metal - from ground
 middle of nowhere - comments on morality
 mystery
 nature - allows people to grow personally
 nature - always a part
 nature - an environmental place
 nature - appreciates more when upset
 nature - at camp is an expanse
 nature - beauty in everything
 nature - being a part of nature is an individual decision
 nature - being a part of nature is helping
 nature - being part of nature is taking care
 nature - belongs to everyone
 nature - can be dead
 nature - can be found in the city
 nature - cant be disturbed
 nature - cares about nature
 nature - cares about participant
 nature - changes or is changing
 nature - comforts
 nature - connected to place
 nature - connection w nature can happen at any age
 nature - conserve resources
 nature - costa rica is more natural than camp
 nature - could be considered to be everything but its not
 nature - creates itself
 nature - curious about nature
 nature - death does not change essence
 nature - defining nature an individual decision

nature - depends on nature
 nature - deserves respect
 nature - differences in individuals shapes perception
 nature - different from nature b c
 participant can move
 nature - different natures
 nature - discoveries of nature important
 nature - discoveries of nature made at camp
 nature - diversity important
 nature - does not get along with nature
 nature - does not judge
 nature - does not know how they could be a part of nature
 nature - does not waste
 nature - emotional attachment comes from relationship w place
 nature - everything has a purpose
 nature - everything is interesting in nature
 nature - exists on earth
 nature - exists without human influence or creation
 nature - fear of loss or change
 nature - feels a part of it by sharing w others
 nature - from nature
 nature - good to know about environment
 nature - has a past
 nature - has a relationship with nature
 nature - has feelings for nature
 nature - has its own timeline
 nature - has its own way of happening
 nature - helps humans
 nature - here before participant
 nature - identification important
 nature - if didn't exist world would be orange
 nature - important that others are aware and appreciate
 nature - important to have positive role model
 nature - in museum not real
 nature - is a community
 nature - is a resource in the city
 nature - is always with you - inside nature - is helped by humans
 nature - is not a resource at camp
 nature - knowledge about nature may help you
 nature - knows everything
 nature - learning about nature than learning about other things
 nature - likes nature
 nature - live in nature
 nature - loves nature
 nature - machines make nature artificial
 nature - made personal discoveries on their own
 nature - more makes nature
 nature - more nature at camp
 nature - natural processes do not change status
 nature - nature adds to sense of place

nature - nature and music are connected
nature - nature at camp not normal
nature - nature at home is missing objects
nature - nature being important is an unspoken rule
nature - nature nature and human nature are the same thing
nature - nature not that different at camp versus home
nature - nature on tv different then experienced nature
nature - no words to describe it
nature - not always beautiful
nature - not created by humans
nature - offers or provides
nature - offers the opportunity to reflect
nature - part of nature if not created with technology
nature - part of nature is being part of everything
nature - part of nature through giving and taking
nature - part of nature through similarity to nature
nature - partially cares for nature
nature - participant does not live eat or breath nature
nature - participant survives with natures use
nature - participant thinks about nature when its present
nature - projects or bleeds into other objects
nature - provides mutual understanding between people
nature - provides place to think
nature - real nature differs from life in city
nature - relationship w nature contextual
nature - relies on nature
nature - shared experiences
nature - should not change it
nature - size is important
nature - social creation of nature
nature - something is a part of nature if it interacts w nature
nature - survives without help
nature - telos in nature
nature - things or objects have a right place
nature - to be a part of nature is to contribute
nature - to be nature has to be found in nature
nature - two kinds - nature nature and human nature
nature - two kinds of nature camp and city
nature - unorganized is ok
nature - without it world would be dull
nature - without nature would feel bored
nature - would notice if nature was missing from own life
nature - you are not alone in nature

nature - your personal home and environment
nature does not include a parking lot
nature does not include animals
nature does not include buildings or structures
nature does not include cars
nature does not include cities
nature does not include clean objects or things
nature does not include dead animals
nature does not include dead things
nature does not include docks
nature does not include domesticated animals
nature does not include fires started by humans
nature does not include fish tanks
nature does not include humans
nature does not include logs
nature does not include paper
nature does not include people
nature does not include plastic
nature does not include pollution or garbage
nature does not include roads
nature does not include rocks
nature does not include stars
nature does not include tap water
nature does not include the sun
nature does not include toxic waste
nature does not include trees cut down by humans
nature does not include water from a lake
nature gives
nature gives life
nature grows
nature has wonders
nature includes animals
nature includes ants
nature includes anything on earth
nature includes being calm
nature includes beside the lake
nature includes between the forest and meadow
nature includes birds
nature includes buildings
nature includes bushes
nature includes butterflies
nature includes canoeing
nature includes cars
nature includes caterpillars
nature includes chipmunks
nature includes cockroaches
nature includes crocodiles
nature includes domesticated animals
nature includes everyone and everything
nature includes everything
nature includes exciting things
nature includes fire
nature includes fires started by lightning
nature includes fish
nature includes flowers
nature includes forests
nature includes free space
nature includes fresh air

nature includes frogs
nature includes fur coats
nature includes garbage
nature includes gardens
nature includes gasoline
nature includes grass
nature includes horses
nature includes humans
nature includes insects
nature includes interdependence with others
nature includes lakes
nature includes lakewater
nature includes leaves
nature includes leeches
nature includes life on other planets if it exists
nature includes like-minded people with a connection to it
nature includes lily pads
nature includes living things
nature includes lizards
nature includes log cabins
nature includes logs
nature includes mammals
nature includes moss
nature includes mushrooms
nature includes old buildings
nature includes paper
nature includes parks
nature includes patience
nature includes plants
nature includes preying mantis
nature includes rivers
nature includes roads
nature includes rocks
nature includes salamanders
nature includes seaweed
nature includes seeds
nature includes shells
nature includes snakes
nature includes soil
nature includes squirrels
nature includes stars
nature includes surprises
nature includes tap water
nature includes the beach
nature includes the country
nature includes the ground
nature includes the sun
nature includes time
nature includes toads
nature includes toxic waste
nature includes tree stumps
nature includes tree that falls in forest
nature includes trees
nature includes water
nature includes water from a lake
nature includes wild animals
nature includes wildlife
nature includes wind
nature includes wood
nature includes woods
nature includes worms
nature is a community
nature is a container
nature is a family
nature is a feeling
nature is a friend
nature is a group of communities

nature is a loss of control
nature is a part of camp
nature is a place
nature is a responsibility
nature is a risk
nature is a warmth
nature is abundance
nature is activities
nature is adventure
nature is algonquin park
nature is alive
nature is all living things
nature is always changing
nature is always there for you
nature is amazing
nature is an activity
nature is an agent or has agency
nature is animals and humans acting naturally
nature is another world away from a human world
nature is anywhere
nature is around
nature is astonishing
nature is beautiful
nature is being yourself
nature is big
nature is breathtaking
nature is calm
nature is camp
nature is close together
nature is colourful or a colour
nature is comfort or comfortable
nature is complex
nature is cool or cool things
nature is dense
nature is different at camp in comparison to home
nature is different in different places
nature is dirty
nature is discovery
nature is diverse or diversity
nature is everything
nature is everywhere
nature is exciting
nature is external
nature is familiar
nature is fascinating
nature is for retreat
nature is for travelling
nature is forests and jungles
nature is free
nature is fun
nature is greater than you
nature is healthy
nature is home away from home
nature is how things should be or how they are meant to be
nature is how you act
nature is important
nature is in the middle of nowhere
nature is inclusive
nature is incredible
nature is independent of humans
nature is interesting
nature is intimate knowledge
nature is learning
nature is looking out and seeing how things go on
nature is loud
nature is made

nature is made up of physical and emotional elements
nature is magical
nature is most common outdoors
nature is natural
nature is nice to watch
nature is not boring
nature is not built
nature is not busy
nature is not closed off
nature is not faded
nature is not made
nature is not ordered
nature is not owned
nature is not perfect
nature is observation
nature is old
nature is patient
nature is peaceful
nature is personal surroundings or surrounds
nature is precious
nature is pretty
nature is quiet
nature is relationships
nature is relaxing
nature is right
nature is rustic
nature is scenic
nature is science
nature is secluded
nature is silent
nature is simple
nature is special
nature is stubborn
nature is surprises or surprising
nature is synergy
nature is the circle of life
nature is the house that animals live in
nature is there to enjoy
nature is understanding
nature is unique
nature is unorganized
nature is what goes on around us
nature is what humans need to survive
nature is whatever you want it to be
nature is where I live
nature is where I love to be
nature is wilderness
nature just is
nature offers no clear path
nature provides for humans
nature stays the same
need defines nature - comments on observing other organisms - comments on
only seniors - comments on
park - is sort of nature
participant - can not live w o family
participant - can share nature knowledge with others
participant - cares for family
participant - connects with or is a part of nature
participant - enjoys environmental and modern
participant - half part of nature half not
participant - has to in a house

participant - identifies w nature
participant - member in nature not a part of nature
participant - misses dog while at camp
participant - not a part of nature in city
participant - not a vegetarian
participant - not an environmentalist
participant - not in nature all the time
participant - part of nature at camp
participant - personally not a part of nature
participant - plants trees
participant - studies nature
participant - w o nature participant could not live
people will learn to like nature - comments on
perspective shift
place - more you know about one place the more you like it
plants - have fruit to be eaten
pollution - takes away from nature
private
reasoning
reasoning - anthropocentric
reasoning - biocentric
reasoning - relativism
reasoning - telos
relationship
respect the environment - comments on
rivers - are not alive
rivers - feel alive but are not
rock - is a medium for nature
rock - is not alive
rock - is sort-of nature
rock - with moss growing on it is a part of nature
school - don't learn that much about nature at school
scientific
sense of place
sensory
simplicity or simple
sky - is sort-of nature
soil - is a medium for nature
special place - comments on
sun - creates nature
sun - makes things peaceful
sun - provides natural light
sun - sitting in sunshine is relaxing
tap water - is sort-of nature
tap water - nothing living in it
technology - comments on
toxic waste - not in its right place
tree plantation - is sort-of nature
trees - a lot of trees at camp
trees - decomposing trees in forest part of nature
trees - have sap which gives them life
trees - home for wildlife
trees - logs - home for animals
trees - medium for nature
trees - remain part nature after use
trees - roots and branches
trees - sap and blood are the same
trip - is a break from camp

trip - is a relaxed environment in
comparison to camp
trip - is living differently in
comparison to camp
trip - less separates participant from
natural world
tv - is entertainment

use defines nature - comments on
value judgement
values - impacted by role models or
parents
water - builds nature
water - is a medium for nature
water - part of nature bc it moves

water - tapwater and lakewater look
different
wilderness
wilderness is hard to get through
wilderness is overgrown
world without nature

Appendix K

Summary of the location of “things”, concepts and places in nature

Nature includes	Count	Nature “sort-of” includes	Count	Nature does not include	Count
anything on earth	1				
everyone and everything	1				
Everything	4				
<i>Living</i>					
living things	1				
				dead things	1
life on other planets	1				
animals	13			animals	1
				dead animals	1
domesticated animals	1			domesticated animals	1
wild animals	2				
wildlife	2				
<i>Insects</i>					
ants	1				
butterflies	2				
caterpillars	1				
cockroaches	1				
insects	1				
preying mantis	1				
<i>Mammals</i>					
chipmunks	1				
horses	1				
humans	5			humans or people	2
mammals	2				
squirrels	2				
<i>Birds</i>					
birds	3				
<i>Herptiles</i>					
crocodiles	1				
frogs	3				
lizards	1				
salamanders	1				
snakes	1				
toads	1				
<i>Fish</i>					
fish	2				
<i>Annelids</i>					
leeches	1				
worms	1				
<i>Plants</i>					
plants	7				
bushes	1				
flowers	4				
forests	5				
grass	4				
leaves	1				
lily pads	1				

Nature includes	Count	Nature “sort-of” includes	Count	Nature does not include	Count
moss	2				
seaweed	1				
seeds	1				
trees	13	trees	2		
<i>Fungi</i>					
mushrooms	1				
<i>Non-living</i>					
buildings	1				
cars	4			cars	9
				cities	1
				docks	1
				fish tanks	1
fire	1				
				fires started by humans	1
fires started by lightning	1				
fresh air	1				
fur coats	1				
garbage	1				
gasoline	1				
lakes	8				
lakewater	2				
log cabins	4				
logs	3			logs	1
old buildings	1			buildings or structures	8
paper	3			paper	1
				plastic	2
				parking lot	1
				pollution or garbage	6
rivers	3			rivers	1
roads	1			roads	2
rocks	5	rocks	2	rocks	2
shells	1				
		sky	1		
soil	1	soil	1		
stars	3			stars	2
tap water	1	tap water	3	tap water	2
the ground	1				
the sun	5			the sun	1
toxic waste	1			toxic waste	1
tree stumps	1				
				trees cut down by humans	2
tree that falls in forest	2				
		tree plantation	2		
water	7	water	3		
water from a lake	1			water from a lake	1
wind	3				
wood	1				
<i>Feeling or concept</i>					
being calm	1				
				clean objects or things	1
exciting things	1				
interdependence with others	2				

Nature includes	Count	Nature “sort-of” includes	Count	Nature does not include	Count
patience	1				
surprises	1				
time	1				
<i>Places</i>					
beside the lake	1				
free space	1				
gardens	1				
park	1	park	2		
the beach	1				
the country	1				
the woods	3				
<i>Activities</i>					
canoeing	3				