

EXPLORING SUBJECTIFICATION PROCESSES IN ENVIRONMENTAL EDUCATION:  
HOW ENVIRONMENTAL EDUCATION RESEARCHERS COME TO CONSTRUCT THEIR  
ENVIRONMENTAL SUBJECTIVITIES

A Thesis

Submitted to the Faculty of Graduate Studies and Research

In Partial Fulfillment of the Requirements

For the Degree of

Doctor of Philosophy

in

Education

University of Regina

By

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Regina, Saskatchewan

February, 2017

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**FACULTY OF GRADUATE STUDIES AND RESEARCH**  
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## Abstract

In this study I explore ways in which environmental subjectivities are formulated in and through developing discourses, practices and ways of interacting. Using the poststructurally-informed concept of *environmental subjectivity* and narrative approaches I explore how personal and academic positions and positionings are constructed for environmental education researchers through ongoing subjectification processes. My primary research question is *How do post-secondary environmental education researchers come to construct their environmental subjectivities?* Two sub-questions guide this exploration of environmental subjectification processes: *How did the participants come to construct their environmental subjectivities across the time and space of their life?* and *How does their current work – published work and faculty performance (reported and/or observed) provide evidence of their environmental identity as it evolves and is continuously involved in their repositioning work within the academy?* I used guided conversations and participant writings to allow participants to speak for themselves as they describe their understandings of how they came to position themselves as environmental education researchers and how they articulate their environmental subjectivity and worldview. By examining these questions I present for readers the understandings participants have of their environmental subjectivities, enmeshed with their multiple subjectivities, and how the subjectification process works to constantly (re)position one's life and work in environmental education in a process of ongoing becoming.

## **Acknowledgements**

I would like to express my most sincere gratitude to my co-supervisors, Dr. Ken Montgomery and Dr. Warren Wessel for your unwavering support. I would also like to thank the members of my supervisory committee: Dr. Valerie Triggs, Dr. Roger Petry and Dr. Jennifer Tupper for their insightful contributions and feedback throughout this process.

I designed the research described in this dissertation with guidance by my supervisory committee. I was responsible entirely for all stages of the research process, including (but not limited to) participant identification and recruitment, design of data collection guidelines, execution of fieldwork, document research, data analysis and writing of the research representation. No parts of this dissertation have been previously published.

The research required and received approval from the University of Regina Behavioural Research Ethics Board. The certificate number for the ethics approval is 29S1213. (see Appendix D).

**Post Defense Acknowledgement**

I wish to express my most sincere thanks to Dr. Hilary Whitehouse for her thoughtful and constructive examination of my thesis as well as her encouragement to consider how I may extend this research in the future.

## Dedication

*To Mom and Dad - there are no words sufficient, actually.*

*And to Robert - I know.*

*I wouldn't be me without you.*

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## Chapter 1: Introduction

### Contextual Overview – Setting the Stage For Research

Reflecting upon my lived context, societal and cultural norms and dominant social and cultural discourses position environment on the periphery, and often subordinate, of *higher* concerns of human life. The result of these norms and discourses being widely accepted socially and culturally is a systemic devaluing of environment becomes *common-sense* or *taken-for-granted* and perpetuates increasing numbers of ecological and social injustices around the world (Bai, 2009; Greenwood, 2010; Lenz Taguchi, 2008; Orr, 2004). Dominant cultural narratives seem to devalue knowledges, skills or ways of life where connections between humans and the natural world are strong, where such affinities or relationships are seen as undesirable, frowned-upon or *other* than normal (Bowers, 2001, 2003). However, in spite of these dominant social and cultural discourses and the degree of pervasiveness with which they exist, there are people who resist these oppressive norms and discourses of the environment and embrace their connections with their ecological and social worlds.

Decisions and choices that individuals make, which are always influenced by the social and cultural discourses in a particular time context, can be reflective of individual values, ethics and beliefs. These fundamental and core components of who we are can be connected with what is often referred to as our identity or, as discussed later, one of our multiple subjectivities. My interest, and the basis for my doctoral research, is in ideas about one dimension of subjectivity—that of

environmental subjectivity—and the subjectification process through which it is constantly (re)constructed. I argue this process is represented in participants' narratives of their environmentally based morals, principles or ethical ideals, and their actual, day-to-day patterns of thinking, acting, knowing, valuing and relating to the world. Conceiving of a world, or worldview, other than the one that we know and within which we live can be difficult. Environmental educators and researchers have an interest in envisioning and working towards change that will identify social and ecological justice issues taken up with greater importance, and see greater value placed on our ecological and social worlds. Within particular social, political and cultural contexts, to conceive a way forward towards a more ecologically and socially just world can be challenging. Current contexts make thinking about possibilities and worldviews other than our own difficult because we are embedded in ways of knowing and being in the world that resists critique and change (Jackson, 1994). Yet somehow within current situations there are those who conceive of a different and more just world where environments—the ecological, social, political, economic, aesthetic—are valued and conceptualizations for change are proposed and undertaken with environmental justice in mind.

Some educational traditionalists assume that lifestyle and identity are the source for an individual's concern and care for the environment (Dunn, 1998). Following this assumption, the literature in the field of environment education/education for sustainability seems to be preoccupied with how education is structured and how curriculum is delivered. Nel Noddings (1992) suggests that such a focus and organization of education should center around themes of *care*,

illustrating the importance of values in education. Such a focus has led to an interest in *beliefs* in many areas of social science research and, in particular, educational research (Quinlan, 1999). Within environmental education, I see this interest taken up supporting a knowledge-attitudes-behaviour model that is coupled with ecological knowledge in the hope that students develop positive attitudes, and exhibit more positive behaviours, towards the environment (Heimlich & Ardoin, 2008; Hines, Hungerford, & Tomera, 1986/87; Hungerford & Volk, 1990).

More recently, a growing number of environmental education researchers who often have interests in feminist poststructuralist and post-critical perspectives rejected the knowledge-attitudes-behaviour model as simplistic, and have proposed framing research in more complex ways, which attempts to deepen analysis as well as provide language and theory to support asking different research questions (St. Pierre, 2000a). For example, McKenzie (2004) cites several educational theorists who have similar post-foundational conceptions and who believe that curricula should be aimed at promoting certain forms of meaning-making around social and ecological issues. Smith (1992) writes of strategies for developing whole schools for environmental sustainability, and Bowers (2001) suggests pedagogy for eco-justice and community. Kempton, Boster, and Hartley (1995) have argued that environmental values are crucial for engagement with the environment. As a result, concern and focus in environmental education has been directed at disrupting and reorienting education so that coming generations can adopt behavioural patterns and values that are more likely to serve to nurture environment and sustainability. By considering these issues, incorporating post-critical perspectives allows

researchers to consider questions of what are processes and practices through, with and in which, environmental educators constitute themselves. The possibilities presented in new philosophical rethinking, including ontological and epistemological framings, has led to my interest in practices in post-secondary teacher education as a crucial place in young teachers' construction of their thinking about how they want to become teachers of young people.

### **My Interest – Coming to *The What* of My Study**

Environmental education is not a new term or concept; it has been discussed, debated and has evolved over several decades (Palmer, 1998). Initially, environmental education began as a promotion of nature and outdoor study (Stevenson, 1987). This initiative started in primary school and involved teachers using mainly field trip experiences to acquaint students with nature and the natural world which was relatively close at hand (Reid, 1980). From these beginnings, in the 1970s, the field of environmental education moved toward conservation-oriented education, likely because of increased support for the conservation movement from the popular politics of the day (Stevenson, 2007). In Australia the development of school camps, where students were immersed in natural settings and learned in the environment, helped nature study gain prominence (Reid, 1980). In Britain rural studies provided teachers with opportunities for their students to be in nature to gain first-hand experience and understanding of nature and natural settings (Wheeler, 1975). These types of nature study continue to play a significant role in developing an appreciation and understanding of nature and the natural

environment through experiential learning. The goals of environmental education, however, are beyond that of simply being in the natural environment (Fien, 1993; Stevenson, 2007).

In his book Fien (1993) discusses how different perspectives have evolved within the growing field of environmental education. Ideas of education *about*, *in* and *for* the environment support different conceptualizations of what environmental education can look like in a classroom. He argues that those interested in education *about* the environment are primarily concerned with increasing the amount of environment-related content that is presented to children in classrooms to increase students' exposure to environmental issues. Environmental educators interested in education *in* the environment are more likely to increase instances of getting children out of the classroom and being in natural environments to gain a greater appreciation for it. Many environmental educators believe that there must be a balance between both education *about* and *in* the environment but that to really be meaningful, such an education requires a third dimension, education *for* the environment, which is essential for values and ethical connections. Fien (1993) also states that the current dominant societal paradigm is inadequate for long term environmental sustainability. He proposes a new environmental paradigm that provides a more adequate worldview for the large scale societal changes contemplated for a more environmentally sensitive/conscious culture (see Appendix B). These large-scale changes imply dramatic change in school pedagogy and instruction. Thus environmental educators argue against the dominant educational discourse of school systems where the

emphasis is on maintaining the status quo (dominant educational discourse) rather than directing educational change (Fien, 1993, McKenzie, 2004), and suggest approaches that support a more equitable, and socially and ecologically just world.

Despite differences of opinion, most environmental educators agree with a number of fundamental tenets derived at several international conferences hosted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) (such as at Belgrade and Tbilisi) in the 1970s and 1980s (Palmer, 1998) and later modified at the Earth Summit (Rio de Janeiro, Brazil, 1992) and World Summit (Johannesburg, South Africa, 1996). First, environmental education is an approach to education as a whole where knowledge and processes are directed to include personal and social values *and* environmental, including the social and ecological, ethics. Second, environmental education is directed to pedagogical approaches that include active involvement in local community-based social and environmental issues. Third, environmental education requires teaching and learning that includes social, political, technical, moral and aesthetic dimensions of science, which implies educational as well as environmental reforms (Stevenson, 1987, 2007). Being critical and looking toward the future, rather than being content to look at where we are now, pushes environmental educators to promote discussion about environmental issues that are likely to be of great concern to human survival in the future (McKenzie, Hart, Bai, & Jickling, 2009). Since human health and prosperity (related to local contexts, mitigation strategies and abilities to adapt to change) depend on climate stability, the health of natural ecosystems, and biological

diversity, many educators argue for the essentiality of healthy environments and environmental issues as integral components of educational programs (Orr, 2004).

Although there is support, both for the content and the pedagogy it promotes, environmental education remains on the periphery with respect to the dominant educational discourse and continues to present a challenge to education curricula worldwide. Environmental education has been marginalized within dominant educational discourses for as long as the field has existed. Stemming initially from the field of ecology and conservation science meant that environmental education took up interests of those involved in sciences who had a concern for emerging environmental issues. The field of environmental education, and environmental education research, evolved along with movements of those wishing to disrupt dominant discourses. Meetings at Tbilisi and Belgrade *did* establish common principles within the field and contributed to a more concrete common vision with which environmental educators and researchers generally identified. However, the Brundtland Report (*Our Common Future*, UN Document, 1987) changed the language related to education, which then informed the UNESCO summit in Rio de Janeiro, Brazil (1992). The recommendations in the Rio Declaration (*Agenda 21*, and more specifically in Chapter 36 with respect to environmental education) contributed to a shift in discourses which led to a renewed marginalization of environmental education within the field of education in favour of more popular neoliberal agendas of sustainability. Organized meetings counter to the Earth Summit in Rio by non-governmental organizations contributed to further developments of environmental education principles but the educational discourse

had been changed and environmental education was again marginalized in neoliberal education discourse. However, reaffirmation of the Rio Declaration at the World Summit in Johannesburg, South Africa (1996) further solidified the language of sustainability and continued to marginalize environmental education. Similarly, environmental education research was impacted by neoliberal agendas. Critical perspectives, and evolving into the post-critical, informing education research were seen as negative because of the interest in questioning dominant discourses (Robottom & Hart, 1993) and that effect was felt in terms of the ways in which research grant money was being allocated. Naming of topics and supporting particular research methodologies coopted research agendas in subtle ways where peer-review systems were coopted through the agencies interests in money being allocated to certain kinds of research which supported the neoliberal agenda.

The secondary science curriculum in Saskatchewan has recently been reorganized from Biology 20, Chemistry 20 and Physics 20 as the Grade 11 level science courses into Environmental Science 20, Health Science 20 and Physical Science 20 (as the Grade 11 science courses). However, although an Environmental Science 20 course, which incorporates the science-technology-society-environment (STSE) approach to science education, now exists it is still, arguably, not a course that is completely consistent with the principles and goals of environmental education. Aside from the environmental and ecological content, the approach of the individual educator is crucial to having the Environmental Science course align with the goals of environmental education. The Saskatchewan science curricula for kindergarten to grade 9 develop content that, given teacher interest and approach,

could reflect environmental education content, principles and pedagogy. Although part of the STSE approach to science education in Canadian schools, environmental education remains peripheral unless teachers decide to take up an approach to their practices that includes environmental education perspectives (Hart, 2003). This process of exploring how such environmental ethics and worldviews are constructed underpins my interest and my questions in this dissertation.

### **The Question – The What**

Currently there is one secondary level environmental science course in Saskatchewan. While this is a start, aside from the Environmental Science 20 course there is no formal environmental education curriculum for Saskatchewan schools nor are there directives suggesting that environmental education pedagogy inform the way in which we can think about present students' opportunities for learning. Around the world governments provide varying degrees of support for the development of environmental education initiatives. Gough (2011) provides one example of how over time environmental education has been a government-supported educational initiative within Australian contexts. When mentioned, environmental content is included as part of science, social studies or outdoor education. However, many teachers believe that environment is an essential component of what they teach, and have strong convictions regarding environmental and sustainability education being a crucial part of children's school experiences (Hart, 2003). Teachers who have this interest include and integrate

environment and sustainability content within elementary science or secondary science classes.

According to their publications and conference presentations as well as their classroom practice, some environmental educators around the world believe that environmental education is a critical part of what students should be learning in school (McKenzie *et al.*, 2009). How is it that, among a host of competing demands and of crowded and increasingly diverse educational curricula, environmental educators persist with their interest and continue to advocate for and promote environmental and sustainability education? Where does this drive come from? Why do they not simply *conform to dominant educational discourses*?

My main interest comes down to the following question: *How do post-secondary environmental education researchers come to construct their environmental subjectivities?*

This main question can be conceptualized in terms of a number of sub-questions that help to focus and guide my study of how the participant environmental education researchers have come to place such high value on nature and the environment that they take up environmental education research and can be described as having an environmental subjectivity. First, how can I work with university educators to unpack this process of subjectification as it manifests itself in their expression of ideas—that is, *What can these environmental education researchers articulate autobiographically about how they came to have an environmental subjectivity?* To address this dimension of my interest I wanted to create conditions where participants felt comfortable engaging in some personal

historical accounting about how they view themselves and attempted to articulate how they came to position themselves in terms of an environmental subjectivity—including significant childhood experiences, family context, school experience, and their culture. I wanted to deeply understand how they came to the place where they are prepared to advocate for environmental education with such conviction.

Second, *How does this process of subjectification as an environmental education researcher manifest itself in their expressed ideas (such as course designs, pedagogical practices, publications, and conference presentations)?* In this study I have been interested in how environmental education researchers construct their critical socioecological pedagogy in all of its dimensions within their positioning as university educators. I used exemplars (books, research articles and other publications) and presentations at national and international conferences and symposia. I also sought narrative material that participants were willing to share that they felt reflected their interests and which is of importance in being able to contribute assemblages representing their ideas about their environmental subjectivities.

Third, using ideas from my observations and conversations with each of these educators, I explored how participants interacted with others—both in terms of collaborations, as well as engagements with theoretical and methodological framings, and how these engagements may have impacted their environmental perspectives, and subjectivities. I also interacted with participant-contributed materials and informally with participants as part of my efforts to learn how participants interpreted their environmental subjectivities. While the information

from these interactions did not constitute data in the traditional sense, it did inform my own understandings of participants and how I, in as informed a way as possible, attempted to present the assemblages and participant narratives. This focus will address the implications/applications that this research could have by considering *What might this relational knowing/learning mean for the way we think about pre-service teacher and young people's environmental education* (including environmental education programs providing experiences to explore environmental subjectivity construction)? In terms of the significance this work might have or the *point* to this inquiry, I hope that this dissertation might further support environmental educators' and researchers', as well as other educators', understandings of their own environmental subjectivities and how they have come to position themselves as valuing an environmental worldview as a way to support the development of the same ideas in others including those in teacher education programs. I believe this kind of personal understanding is necessary and should be a required component of every teacher education program as well as a base for reforms to the current school curriculum so that environmental education becomes a legitimate educational goal rather than a 'little added frill' (Hart, 2010).

I approach this research using concepts of *subjectivity, subjectification processes* and *discourse*, which draw on aspects of both *poststructuralism* and *critical theory*. My use of these theoretical concepts provides the theoretical grounding and informs my approach to environmental subjectification and discourses of environmental education among environmental education researchers. In terms of methodological approach I draw on *narrative approaches*, since my interest is in

sharing the stories of individuals' subjectification processes and the ways in which they make sense and come to understand their positioning as environmental education researchers. I draw on the concept of *assemblage* to inform the ways in which I contextualize and (re)present the stories of my participants' positionings as environmental education researchers (Marcus & Saka, 2006).

### **Meaning-Making and Significance**

Conversations, conference presentations and published journal articles within the field of environmental education are varied in approach and framing. They range from those reflecting dominant approaches, positivist assumptions and behaviour-focused goals to those reflecting critical, and increasingly post-critical, and poststructurally-informed positionings that counter or oppose more dominant or traditional research approaches. Many studies focus on implementation of programs and curricula to further expand the field of environmental education. Less frequently we have the opportunity to see critical reflections about the research process, or the positionings of the researcher and the researched. Seldom do we have opportunities to look critically at the perspectives of those who are environmental educators and environmental education researchers, their personal reflections about their positionings in the field, and the challenges and struggles faced as a result of the marginalization of environment and environmental education in dominant social, cultural, political, economic and educational discourses.

I believe this dissertation adds a unique perspective and approach to conversations about environmental subjectivity through narratives from postsecondary environmental education researchers. I present excerpts and details from conversations, articles and embodied practices of environmental educators and researchers illustrating the decisions, ideas, relationships and actions with respect to critiques of dominant societal and educational discourses as manifest in their professional and personal lives. Rather than attempting to prescribe a solution or identify problems or generalizable characteristics, I present possibilities by taking a different approach to framing and presenting my research (see, for example, Jackson & Mazzei, 2012; McCoy, 2012, St. Pierre, 2011). The ways in which the narratives are generated have meaning in the co-construction process for participants as well as for readers. Support for narrative methodologies suggests that the stories themselves carry significance (Barone, 2000). Since the interplay between individuals and discourses are continual, I intend to show, through the narratives and writings of participants, the ways in which discourses, both within the field of environmental education and from outside the field, play a role in how environmental educators and researchers come to position themselves in the field as well as within the field. Therefore my interest is in both engaging the process and in presenting participants' narratives for readers to have an opportunity to make sense of their own environmental subjectivities in the ways the narratives echo or help articulate readers' understandings.

My interest and intent is to critically explore and thoughtfully share accounts of subjectification processes, positionings and embodiments of environmental

educators and researchers. The narratives and assemblages of participants are messy and complex but attempt to provide readers with detailed illustrations of the ways in which environmental educators and researchers work both within and against the discourses of environmental education, as well as within the larger field of education and educational research, to negotiate their positionings and come to construct their environmental subjectivities. The purpose of this work is not to provide a recipe or formula for constructing environmental subjectivities or attempting to find, as Sandra Harding (1986) describes it, the “one true story” (p. 193). Rather I present the narratives and assemblages and offer a space for readers to reflect on their lives and practices, and the meanings made during, as Barone (2000) suggests, the time when the reader conspires with participants’ stories. The reader may then come to understand their own subjectification processes, positionings and environmental subjectivities.

### **Dissertation Framing and Outline**

As an organizational tool I provide an overview of my dissertation and a preview of what is to come. Chapter 2 outlines the theoretical framing I have constructed which undergirds and supports my research. I show how poststructural and critical theories contribute to my socioecological theoretical framing and the ways in which I conceptualize my research questions and approach to this dissertation as well as my interaction with participants. I also show how this framing informs the conceptualization of subjectivity and discourse that I have chosen to take up as it applies to individuals’ understandings of how they came to

position themselves as environmental educators and the discourses influencing their subjectification processes.

Chapter 3 provides the methodological framing for my research. In this chapter I illustrate how narrative methodologies provide grounding for my research and methods as well as how the theoretical framing I have constructed influences the ways in which narrative is conceptualized. Additionally I provide some support for the choice of using narrative as a way to approach my research questions about subjectivity and how narrative research provides opportunities to show how participants both conceptualize and embody their environmental subjectivity. I show the approach to the research and methods employed in a practical sense in the co-construction of the narratives of participants, including the concept of co-fielding as a useful method for conceptualizing the interview interaction and reading of the interview texts. I also introduce the concept of assemblages as an approach to representing participants. As well I address my consideration of some critiques to the use of both interview methods and assemblages as representation.

In Chapter 4 I introduce those who participated in my research and present the participants' assemblages. I construct these assemblages using sections of participant narratives from our conversations as well as information from their own writings, presentations and personal statements. Use of participant assemblages is an opportunity for participants involved in my research to have a voice to position themselves and begin to describe the complexity of how environment has come be part of their subjectivity within their specific contexts. Participants' stories and narrative vignettes are presented allowing participants to speak for themselves and

discuss their understandings of their own subjectification processes and environmental subjectivity. Using rich text narrative data from our conversations, I show the participants illustrating their understandings of their environmental subjectivity as well as the complexity of how their multiple subjectivities and positionings interact. In this way it becomes clear that, while environmental subjectivity is something that we can conceptualize, it is inseparable from the multiple subjectivities which, when considered together, constitute who individuals are. Participant narrative sections have been carefully selected and considered, in conjunction with participants' written contributions and through interaction and conversation, to thoughtfully present participants' environmental subjectivities and subjectification processes through valuing the individuality and uniqueness of their journeys to their positionings at the time of our conversations.

Finally, in Chapter 5, I discuss the narratives of participants and my reflections on the discourses of the field of environmental education research, and educational research more broadly. Similar points of conversation that participants discussed, including the need for their conceptualization of environmental education and environmental education research, tensions experienced and discourses providing impediments to their practice as environmental education researchers, are integrated. Rather than a more traditional, reductionist analysis I attempt to present some understandings of the subjectification processes which influence individuals' environmental subjectivities. I also reflect on what that might mean in terms of the kinds of understandings that these narrative may help others to come to about themselves, their own environmental subjectivities and

subjectification processes. The presentation of the narratives, integration of what I find to be discourses that emerged from the conversations and my own reflection provide openings and beginnings for others to critically reflect on the ways in which their own identities are constituted in multiple and complex ways.

### **Note About Language: Subjectivity vs. Identity**

The concept of *subjectivity* is foundational for this dissertation. I have described, at length, the ways in which subjectivity is influenced theoretically and conceptualized. However, I acknowledge that in the literature there are uses of the concept of *identity* in similar ways to the ways in which the term subjectivity is applied and that often the terms are used interchangeably (Probyn, 2003). Thus it is necessary to understand, case by case, the ways in which the term is used. For the most part I have used the term subjectivity because of the theoretical associations. However, if in the literature the term identity has been used I have tried to remain consistent with the author. Likewise, where participants have used the terms identity or subjectivity interchangeably I have also retained that language as, depending on the context, often individuals think of themselves as having an identity and thus for conversation sake this term is also retained (Probyn, 2003).

## Chapter 2: Theoretical Framings

*In taking up our own approaches to poststructuralist theory and developing it in ways Foucault did not envisage, we take the texts of Foucault and other poststructuralist writers as rhizomatic, as open, in a Deleuzian sense, to the work that we want them to do.*

(Davies & Gannon, 2006, p. 5)

*To know who you are is to be oriented in moral space, a space in which questions arise about what is good or bad, what is worth doing and what is not, what has meaning and importance for you and what is trivial and secondary.*

(Taylor, 1989, p. 28)

### **Framing Environmental Subjectivity Research**

In the more traditional approach of the humanist perspective there is a search for stable, coherent meanings and origins of things, and a discoverable essence of the *thing itself* that is out there, objective and waiting to be perceived (Jackson & Mazzei, 2012). In contrast to the humanist perspective, critical environmental educators have argued that environment and sustainability are contested and changing concepts that vary over time and space (see, for example, Scott & Gough, 2003). These concepts are not static and therefore individuals are called upon to reconstruct and (re)build on their initial conceptualizations of these constantly changing constructions. Given their fluid nature, it is important to consider how these concepts may apply within specific contexts and as relatively contingent and inter-subjective constructions (McKenzie, 2004). As a result, educational debates about environment and sustainability can never start from predetermined content or assumed value sets. Additionally, if what is being talked

about in terms of *environment* and *sustainability* are themselves contested and changing concepts, then it stands to reason that when approaching ideas about subjectivity relating to these concepts, researchers must also take an approach and use a theoretical framework which views identity as a fluid, changing concept in constant (re)construction, but with particular interests. Debates about *what* is regarded as being important for future generations should be carried out using approaches which can address their value-driven and socially constructed nature, and must be ongoing to accommodate their ever-changing nature (Stevenson, 2007). How do these constructs, such as environmental sensitivity and sustainable futures, become part of the values of individuals relating to personal and social processes of subjectification? By examining this question, I look at how we come to construct our views of the world as part of our intersubjective formation as people.

### **Assembling a Theoretical Framework**

In constructing a qualitative research study, one needs to determine what a theoretical framework is, how it is used, and the effects it has on the research process (Anfara & Mertz, 2006). In social sciences, theory is associated with the paradigms and perspectives that organize research (Dillow, 2009). The theoretical frame is said to have a deep impact on the process of conducting qualitative research. Qualitative inquiry has always carried on strong theory-, value-, power-, and politically-laden investigations of the lived experiences of people in spite of what are deliberate and often crude attacks (St. Pierre, 2011). A researcher's approach to the world (ontology), with a set of ideas and framework (theoretical

perspective) that supports those ideas, specifies sets of questions to be examined (Denzin & Lincoln, 2003). It is essential to be critical of the theoretical frame(s) being used and whether or not it (they) is (are) most appropriate to address the research question(s). As a result, careful consideration is necessary to choose or select elements or concepts from particular theorists, theories, theoretical and philosophical perspectives that help to frame and support the study of a particular question of interest.

Prior to beginning my doctoral studies, my experiences with theoretical research perspectives and methodological experiences was limited to *the* accepted option open to physical science—empirical, positivist research. In many instances, qualitative research was, and still is, rejected as not rigorous enough to count as high-quality, positivist-informed, natural science (St. Pierre, 2011). I would argue that since many environmental educators and researchers come from science backgrounds, clearly demonstrating the legitimacy of the theoretical and methodological approach is essential for understanding. In using an empirical model, legitimizing research means having a procedure following the criteria that produce objective, replicable methods and verifiable/reproducible (including statistical significance) results. In the United States and Canada there has been an established/mandated research methodology which exemplified the positivist and conservative accountability culture that privileges an instrumental, engineering model of physical and social science research (St. Pierre, 2011). While positivist and empiricist research is based on a theoretical framework and methodology for research that is a tried and tested model in many situations, I have learned about a

large number and wide variety of theoretical frameworks available for qualitative researchers to consider (Anfara & Mertz, 2006). Having not had to consider options for the theoretical frame in my Masters of Science research, I had not considered the paradigms and theories, and thus epistemologies, which informed my research. The approach I took drew on one theoretical perspective and, because of my I approach, I was unaware that there were other possibilities. Qualitative research, because of the variety of theoretical frameworks, provides researchers with opportunities to conduct research and address questions that previously could not be conceived (Quinlan, 1999) and, as St. Pierre (1997) argues, presents opportunities for “producing different knowledge and produce knowledge differently” (p. 175).

Arriving at a more focused point for my doctoral research was a process. I began with a broad topic and interest more than a specific question. Through my course work and readings about various theoretical perspectives, my question of interest began to emerge and evolve as I acquired language to better focus and articulate my real interest for my research. At the same time it became increasingly clear that in order to conduct the kind of research and to ask the particular kinds of questions I was interested in, other theoretical frameworks and concepts could be used and, once assembled, would provide the grounding for my investigation. The challenge was both being able to have the language to accurately articulate my actual interest and to select the theoretical frames upon which to draw that would help me explore my question and frame my research in mutually supportive ways. The *coming to the question* part of my research and theoretical framing process also involved understanding the theories of knowledge, or epistemologies, that inform

and are embedded in theoretical perspectives because that philosophical stance is essential in order to have an appropriate context and grounding for the methodology and methods (Crotty, 1998). Epistemology is essential to establishing a theoretical frame because what counts as knowledge and how knowledge claims are justified as true, valid or legitimate is critical for research design (St. Pierre, 2011).

If consideration is given to positioning poststructural and critical theoretical perspectives in the larger context as Lather (1991), drawing on Habermas (1971) argues, four broad theoretical paradigms for qualitative research emerge: positivist, interpretive, critical and poststructural. Each approach uses different ontologies and epistemologies and therefore differs in the ways in which research questions can be asked. This context also means that each approach differs in the ways in which knowledge and power may be considered, and how imbalances of that power can be conceived and addressed. The positivist theoretical paradigm centers on ideas of the acceptance of universal, objective and reliable truth, and knowledge as the discovery of truth. Positivism also supports views of knowledge as individually constructed, as serving power without distortion, and as administered by authority. Research framed using an interpretivist theoretical perspective situates knowledge and understanding as being socially constructed and acknowledges that the reality of people can be understood by listening to their lived experiences. Language is seen as a medium for understanding (Lather, 1991). Power is viewed in such a way that it is understood as something that can be obtained and held by individuals and that socially constructed cultural norms inform ideas about justice.

Perspectives informed by critical theories and theorists support ideas that realities are socially constructed but that they can be changed while knowledge is (re)produced to serve different vested interests. This view suggests positioning with a particular intentionality. For the purposes of framing my research, I use these aspects of critical theory to inform the ways in which environmental educators take up a particular position, as well as having and taking up particular interests. In doing so, environmental educators and researchers are often faced with opposition because power results from the uneven distribution of privilege so that one view of education is dominant while other views of education and those who hold them, including environmental education perspectives and environmental educators and researchers, are oppressed or marginalized. Researchers framing their work using critically informed frames often work to change the world by exposing and shattering those systems of privilege and power enacted through oppression within politically and historically determined categories such as race, class, gender, age, ability, religion and sexual orientation. I would add environment as it tends to, in North American culture, be marginalized when politically there are choices to be made and environmental health and interests counter conditions for immediate economic growth.

Finally, research informed by poststructural theoretical paradigms is best suited to forms of research that seek to disrupt taken-for-granted assumptions and work towards revealing different views. There is an increased emphasis, when using poststructural perspectives, on discourse and language as ways of providing understanding of how dominant social and cultural norms come to be. One well-

known approach to analysis of discourses, developed by Foucault (see, for example Foucault 1979, 1980, 1988), helps to make visible the discourses, the tropes, the metaphors and binaries that produce subjectivities and power relations. Thus, the focus is on the individual but also on how the individual comes to construct themselves and position themselves in light of the meta-narratives that govern the world, culture and society in which they live. However, it is not simply in language that subjectivities reside but also in the embodiment and the material which must be considered alongside what individuals say.

Combining elements of critical theory and poststructuralism supports a socio-ecological perspective of environmental subjectivity research. Taking this approach and using aspects from these theoretical paradigms bring together foundations for the conceptualization of environmental subjectivity. I utilize an approach to the subjectification process that takes into consideration larger societal and cultural discourses that contribute to the processes by which individuals come to position themselves ontologically and epistemologically, specifically in relation to environment. By taking this socioecological approach my interest is in creating space, making visible, giving voice and seeking justice for the disadvantaged. Structuring a theoretical frame that is informed by critical and poststructural theoretical perspectives with respect to environment (both ecological and social) provides strategies for making sense of the everyday experiences of participant environmental education researchers, their navigation and (re)positioning within their specific contexts, as well as opening possibilities for change and justice for the environment.

A critical socioecological poststructural theoretical frame includes elements and concepts from both poststructuralism and critical theory. A socioecological theoretical perspective to ground research is an emerging framework particularly in the field of environmental education and in social science research (see for example McKenzie, 2004; Payne, 2009). Building critical and poststructural layers into my theoretical groundings for this study can provide postfoundational dimensions to both environmental (ecological) and social perspectives on educational change (Greenwood & McKenzie, 2009). In this section of my dissertation I describe how elements and concepts from both poststructuralism and critical theory underpin a socioecological theoretical perspective and how a critical socioecological poststructural frame is best suited to inform conversations about environmental education researchers' environmental subjectivities.

### ***Poststructuralist Perspectives***

The term *humanism* refers to something “essential and universal, with a defining quality that is shared by everyone, regardless of race, class, gender, history or culture” (Jackson & Mazzei, 2012, p. 69). Thinking from a humanist perspective places human beings at the center of the world so that everything else revolves around us. It is suggested that what is considered *commonsense*, a concept which is often associated with theorists Antonio Gramsci and René Descartes, is a structuring of reality such that things and relationships in the world come to be part of our everyday understanding. In the humanist perspective, people give meaning to the world and create history (Lenz Taguchi, 2008; St. Pierre, 1997). When adopted uncritically a humanist view can contribute to problems. Poststructuralism, as a

contemporary and interdisciplinary philosophical movement of thought extending structuralism (Peters, 1999) was developed in contrast to humanist theories and the positivist quest for objective knowledge. Poststructuralism calls into question the assumptions of what is considered commonsense and troubles the structures that individuals may understand as obvious and natural about the world. St. Pierre (1997a) describes poststructuralism as an attempt to “trouble the grids of regularity produced by the closure of metaphysics, structures of humanism that have become increasingly suspect and insufficient” (p. 279).

Theoretical perspectives termed *posts* break with humanist, modernist, imperialist, representationalist, objectivist, rational, epistemological, ontological and methodological assumptions of Western enlightenment in thought and practice (St. Pierre, 2011). Poststructuralism also goes further than other philosophies that attend to language, such as social constructivism, in that it does more than attack fundamental propositions of humanism. According to St. Pierre and Pillow (2000) poststructuralism does not assume that humanism is an error; rather, they explain that poststructuralism “offers critiques and methods for examining the functions and effects of any structure or grid of regularity that we put into place, including those poststructuralism itself might create” (p. 6). This is an important consideration when discussing ideas about environmental subjectivity as environmental education is intentioned and suggests change in a particular direction but also being critical of the implications. Davies (1997) supports their argument that the point is not to destroy the humanist subject and create its binary other in the “anti-humanist subject” but rather “to show how the humanist self is so

convincingly achieved and goes on being achieved through the inscription of humanist discourses” (p. 272). She further points out that it is important to see “the subject’s fictionality, whilst recognizing how powerful fictions are in constituting what we take to be real” (p. 272). In relation to interest in environmental subjectivity, and how researchers can think about investigating the concept of environmental subjectivity, one of the central tenants of poststructuralism is the subject and subjectivity—that is the belief that conscious and unconscious thoughts and emotions, our sense of ourselves and our understandings of our own relationship with the world, are the product of the society and culture in which we live.

Poststructuralist ideas present an attempt to examine fundamental assumptions of society. Authors such as Baudrillard, Barthes, Derrida, Foucault, Irigaray, Kristeva, Lacan and Lyotard have all been pivotal in developing *post* perspectives (McKenzie, 2004). Concepts that contribute to poststructuralism come from a collection of theoretical positionings influenced by post-Saussurian linguistics, Marxism (particularly Althusser’s theory of ideology), psychoanalysis (especially Lacan’s reworkings), feminism, the new French feminists (Kristeva, Cixous, Irigaray) and the work of Derrida, Barthes and Foucault (Gavey, 1997). Additionally, skeptics of positivism and humanism who have proposed theories that also contribute to poststructuralism include Foucault, Habermas, Rorty, Baudrillard following Nietzsche, Heidegger, Marx and Freud (St. Pierre, 1995). Contributions from these theorists giving form to poststructuralist perspectives, contributions to understandings of individuals subjectivities and helping articulate ideas about

discourses have led to the critique of many other fields of social science research, including education.

St. Pierre (2000a) suggests that the term *poststructuralism* is highly contested because it is strategically refigured, but not secured, within multiple systems of meaning and in response to contextual demands. Although frequently used interchangeably, and in some cases one being used where the other might be more appropriate, Lather (1993) differentiates the terms postmodernism and poststructuralism. She defines *postmodernism* as “raising issues of chronology, economics (e.g. post-Fordism) and aesthetics (appeared first in architecture), whereas *poststructuralism* is used more often in relation to academic theorizing ‘after structuralism’” (Lather, 1993, p. 688). Additionally, Peters (1999) suggests poststructuralism, inspired by Nietzsche, is a “specifically philosophical response to the alleged scientific status of structuralism” (p. 1). Poststructuralist ideas present an attempt to examine fundamental assumptions, discourses and paradigms of society. Paradigms are themselves human constructs that help define the stance taken toward the main principles of ontology, ethics, epistemology and methodology (Dillow, 2009). Poststructuralism attempts to make individuals aware that the way things are, what is *natural* (social and cultural discourses) in society is a result of how humans, over centuries, have constructed it to be and how it continues to be. Davies (2003b) clarifies that, although there are similarities between aspects of poststructuralism and social constructionism, a major difference is that “subjectivity is generally not made problematic in constructionist accounts and the liberal humanist version of the unitary rational actor is kept intact...Poststructuralism, in

contrast, seeks to understand the processes through which the person is subjected to, and constituted by, structure and discourse” (p. 13).

Although much diversity exists within the *post* perspectives, a common characteristic of these theoretical groundings is that they are a response to humanism. Descriptions of knowledge, truth, rationality and subjectivity put forward by those presenting the humanist perspective were intended to make sense of the world centuries ago but are still in place today in a very different world context (St. Pierre, 2000b). Humanism is a set of themes that are always tied to value judgments (Foucault, 1984). Flax (1990) lists values of humanism including the idea that there is a stable and coherent self; that reason and science provide an objective, reliable and universal foundation of knowledge; that by grounding claims to authority in reason conflicts between truth, knowledge and power can be overcome; and that obedience to laws results from the right use of reason. Humanism is everywhere and is overwhelming in its totality but at the same time is so *natural* that it is often difficult to see working. St. Pierre (2000b) suggests that it is important to make intelligible what we cannot see since “humanism is the air we breathe, the language we speak, the shape of the homes we live in, the relations we are able to have with others, the politics we practice, the map that locates us on the Earth, the futures we can imagine, the limits of our pleasures” (p. 478). Poststructural theory presents a way to create opportunities for such intelligibility.

It is only in the last 30 years that poststructuralism has emerged in popular culture and academic disciplines as well-articulated theories and methods that can be used to examine the function and effects of human constructs. Many of these

structures are cultural norms and regularities that a humanist perspective perpetuates, resulting in discrimination and oppression (including sexism, racism, homophobia, ageism, anti-intellectualism and anti-environment views). As a result of the marginalizing effect of humanism, feminists and other post-informed researchers have examined how humanism has a harmful effect on their lives. Parallels can be drawn between poststructurally-informed perspectives, such as feminist poststructuralism, to environmental education and conceptions of environmental subjectivity because of the ways in which modern Western discourses often serve to marginalize environment and environmental education, which impacts environmental education researchers and their positionings. What is promising about poststructuralism, as a response to these negative humanist structures, is that it can “critique a structure that one cannot not wish to inhabit” (Spivak, 1993, p. 284). Weedon (1987) contributes that feminist poststructuralism is “a mode of knowledge production which uses poststructuralist theories of language, subjectivity, social processes and institutions to understand existing power relations and to identify areas and strategies for change” (p. 40-41). Therefore in addressing issues of environmental subjectivity among environmental education researchers, which are marginalized as a result of current political and cultural discourses, it seems reasonable to look to aspects of, and concepts from, poststructuralism to see how it came to be that this marginalization and oppression of subject positions exists.

To understand the ways in which poststructural theoretical framing can be helpful in conceptualizing research on how individuals come to position themselves

in particular ways, there are parallels that can be drawn to the work of feminist poststructuralists such as Bronwyn Davies. Davies, an Australian sociologist, conducted research with the interest of coming to understand how individuals construct their gendered identities through learning discursive practices in which all people are positioned as male or female (Davies, 1989). As Davies did, I chose to adopt aspects of poststructuralism to help frame my research because it provides ways in which to conceptualize and make sense of my research interest, and allows me to formulate questions and support for a theoretical approach to research that will help me explore those questions. Poststructural theory allows one to think beyond the binaries and dualisms, which can seem inevitable, to the “processes through which we position ourselves ... and which we can change if we so choose” (Davies, 1989, p. xi).

#### *How Poststructuralism Critiques Humanist Perspectives*

Poststructuralist critiques of humanism respond to different questions about living for which humanism has specific answers, as well as asking questions which humanism attempts to prevent. The critiques also propose that rather than *discovering* reality, *revealing* truth, or *uncovering* the facts, poststructuralist approaches are concerned with disrupting and displacing dominant (oppressive) knowledges (Gavey, 1997). St. Pierre (2000b) identifies some key philosophical concepts that have been inscribed by humanism and which poststructuralists seek to (re)inscribe: (1) language, (2) rationality, (3) knowledge and truth, (4) power, resistance and freedom, (5) the subject and (6) discourse.

In humanism, language creates a correspondence between a word and something, material or otherwise, in the world (St. Pierre, 2000b). Poststructuralist approaches to knowledge, and therefore epistemologies, are connected to the perspective that meaning and knowledge are discursively produced through language (Belsey, 2002; Weedon, 1987). However, the concern is that the language becomes an organizing factor which constructs and produces order, regularity and binaries in various categories as well as providing opportunities for the hierarchization of particular categories over others (Foucault, 1970). Thus, language becomes a tool for power. Humanist approaches attempt to reveal *essences* of things and establish a single, unique factor that enables identification of something or someone and group/name it with others of its kind (St. Pierre, 2000b). Language is also discussed in terms of signifiers or signs. Weedon (1987) explains de Saussure's theory of signs by saying that "meaning of signs is not intrinsic but relational. Each sign derives its meaning from its difference from all other signs in the language" (p. 23). Thus identification by language is often in contrast to something else and binaries are constructed to illustrate the "other" in comparison to the dominant and to create a position of power. Signs/identifiers have no intrinsic meaning but obtain meaning because of their difference from other signs and that meaning is generated through difference (St. Pierre, 2000b). However, when attempting to name or categorize, it is important to consider that there is always more than one dimension to something. At different times and in different contexts one identifying category might be as important as another, and it is human constructs that indicate which is/are most important (Lather, 1996).

Feminist poststructuralists are concerned with the *essence* of a single identity category, gender, which they argue is an attempt to produce order and regularity. If differences are erased by identity (by generality and essentializing categories), people can be more easily slotted into a hierarchy or grid and then manipulated, dismissed and oppressed (Davies & Whitehouse, 1997; Lather, 2008; St. Pierre & Pillow, 2000). Environmental educators experience this categorization and subsequent marginalization as a result of the dominant political and educational discourses, which are currently predominantly informed by humanistic views. Poststructural critiques of language make visible how language operates to produce very real, material and damaging structures in the world (categories, binaries, hierarchies) that reward conformity and punish difference (Foucault, 1984). Language exists and makes intelligible the boundaries and limits of regularity and normalcy, but it is possible to disrupt and challenge these limits.

Poststructural critiques of humanist language and how structures that cause marginalization and oppression are held in place happen through the process of deconstruction. In this way, some environmental education researchers use the poststructural elements of a socioecological theoretical perspective to dismantle the constructs that work to (re)inscribe current discourses. Norms and constructs are not necessary or absolute but are contingent and therefore open to change (Butler, 1995). Poststructural deconstruction provides a starting point for analyses that examine the (re)building of constructs, seeing what holds them together, and what they produce rather than simply tearing down current constructs (St. Pierre, 2000b). Deconstruction is more than working within and against structure. It is

about overturning and displacing structures so that something different can be thought/done (St. Pierre, 2011). Credited with articulating deconstruction, Derrida describes deconstructive analysis as “overturning and displacing a conceptual order as well as the non-conceptual order with which the conceptual order is articulated” (Derrida, 1982, p. 329). The revelation, through deconstruction, of societal and cultural constructs connects to both power relationships and agency. Derrida’s deconstruction serves as a powerful tool for critiquing any structure and is a practice of freedom that can help us rewrite the world and ourselves (St. Pierre, 2000b).

Those who are subjected to oppression and marginalization often attempt to attack the rationality of humanism. Reason is described as being one of the taken-for-granted and common sense realities of everyday life (Lather, 1990). Reason was meant to eliminate any messiness of variation and became the basis of the scientific method which pitted rationality and science against everything else, thus suggesting that if it was not rational it was inferior and suspect (St. Pierre, 2000b). As a reaction to humanistic reason, poststructuralism attempts to bring to light how reason is a construction within discourses where certain types of knowledge and information are valued and accepted while others are excluded and silenced (St. Pierre, 2011). It is therefore necessary to question and/or attempt to unravel the binaries causing both marginalization and privileging of particular ways of being (Davies, 2003b).

Environmental education researchers attempt to bring to light how political claims to rationality, in terms of spending and economics, serve to marginalize

education, environment and environmental education. Ironically there are copious *rationaly* produced data that suggest that environment should be a primary concern but, as the result of politically and culturally determined dominant structures, even types of rational data are silenced.

*Poststructural Concepts of Knowledge, Truth and Power*

Connected to rationality and how it organizes what we know, is knowledge production and notions of truth. The philosophies of Descartes, Hegel and Comte have provided the foundations for ways in which certain types of knowledge and truth are produced that are virtually impossible to disrupt (St. Pierre, 2000b). Descartes philosophy which set the basis for modernity, Hegel's idealism and absolutism and Comte's doctrine of positivism set the framework for what is arguably the most broadly accepted formula for the generation of knowledge and truth today (Russell, 2004). Gavey (1997) suggests that from a poststructuralist perspective, a plurality of meanings is welcomed and is not considered to be a weakness of poststructurally-informed research. A result of this conceptualization of knowledge and truth generation is that, for qualitative researchers and in particular those taking up poststructurally-informed approaches to research questions, there is more than one way to come to know something and for that knowledge to be valid or legitimate.

Contrary to the goals of the physical sciences and particular types of social science inquiry, Gavey (1997) suggests that poststructuralist theory rejects the possibility of absolute truth and objectivity. Post-informed research is often accused of being relativistic and therefore less valued since it does not advocate a universal,

independent standard of truth (St. Pierre, 2000a). Foucault (1980) describes a “politics of truth” where a regime is determined by society as to what discourses and knowledge, and how they are generated, are accepted as truth in that social and cultural context. Further, in his genealogies, Foucault attempts to trace the ways in which certain discourses and statements came to be accepted as true and thus assign power to relationships. Feminists have observed that dominant conceptions of reality and truth in what are commonly patriarchal Western societies, tend to be primarily male constructions that reflect and perpetuate male power interests (Gavey, 1997). Similarly, a parallel conception of reality and truth in economically-driven cultures which further economic agendas, leads to the marginalization of environmental interests.

Poststructural critiques attempt to reframe the problematic aspects of knowledge and how truth is generated (Richardson & St. Pierre, 2005). The poststructural contributions to a socioecological framework connect to this attempt to examine how certain types of knowledge are accepted and critique that taken-for-grantedness as well as the ways in which subjectivity is conceptualized. As will be discussed later, the critical theory component builds on this examination of the common sense nature of certain knowledge and suggests an alternative which embraces an environmentally conscious basis for what is accepted as truth. Foucault’s work attempts to identify the *regimes of truth* that operate to subordinate marginalized groups and in particular women (Foucault, 1979, 1980). Using Foucault’s approach as well as other feminist poststructuralist critiques (for example, Britzman, 2000; Butler, 1992; Davies, 2003b; Lather, 1991; St. Pierre &

Pillow, 2000; Walkerdine, 1990, 2003) it is possible to see parallels to ways in which environment can be examined as the oppressed and how the regimes of truth function to keep environment in a marginalized position.

Human knowledge is understood to not be neutral and is often closely associated with power (Gavey, 1997). Power, in humanism, is considered to be a product of agency (Butler, 1995) because the ability to act can allow the gaining of power. Often we are born into a power position – either having power or being oppressed by those with it. St. Pierre (2000b) suggests that power is linked closely to resistance and freedom in terms of how power often results in domination to which there is resistance in the interest of being free from that domination. Imbalances in power lead to marginalization and oppression. However possibilities of resistance have led to social resistance by many subordinated groups (including women, LGBTQ2 communities, people of colour, those who are differently abled and others who have formed social movements beginning in the 1960s and 1970s and continue to do so today). Environmental education researchers, as well as environmentalists and those concerned with eco-justice, exhibit resistance to forces which seek to repress and marginalize the environment much as those who are concerned with social justice attempt to empower those who are oppressed (McKenzie, 2005). However, with the binary of the dominant vs. the oppressed, it becomes clear, as Foucault (1984) indicates, that power, resistance and freedom are constructs that exist because each of those things are in relation; power is over something; resistance happens against something and freedom is being free from something. An additional layer of complexity is that power relations are dynamic

and shifting because certain things are more important at different moments in time and in different contexts (Cherryholmes, 1994).

*Poststructural Concepts of Subjectivity and Discourse*

In terms of framing this research one of the most important parts of poststructuralism for my interest in environmental ontologies is how poststructuralism relates to *the subject*. Humanism constructs the subject, or individual as “a conscious, stable, unified, rational, coherent, knowing, autonomous and ahistoric individual who is endowed with a will, a freedom, an intentionality which is then subsequently ‘expressed’ in language, in action, in the public domain” (Butler, 1995, p. 136). The humanist self has an inherent agency since it is able to produce knowledge and the power to effect change (St. Pierre, 2000b). According to humanism, the subject is something that can be mapped and located. In contrast, poststructural theories of the subject consider an individual to be a construction that is constantly in a state of (re)construction in response to the relationships of the individual and in response to social and cultural contexts. It is the agency of individuals and possibility for change that makes the subject an interest in many areas of research and increasingly within the field of environmental education as individual agency provides possibilities for enacting change in education. A more in depth discussion of the subject and subjectivity follows in a later section.

In terms of discourse, poststructural theoretical frameworks provide the opportunity for different types of questions to be asked beyond questions relating to what something means (i.e. a shift from “what is happening” questions to “how did this come to be” questions). Discourse is critical to poststructuralism as it provides

an analysis that can help describe the relationships between power, knowledge, institutions and the systems of thought that dominate modern cultures. Such understandings are important to environmental education researchers who often are marginalized by those very discourses. Discourses work in a very material way through social institutions to construct realities that control (St. Pierre, 2000b). Once a discourse becomes *normal* or *common sense* it essentially becomes invisible and makes it difficult to imagine otherwise. We do not recognize these discourses as structures that exist as a result of the theoretical basis created by humanism (Belsey, 2002; Weedon, 1987).

Poststructural analyses provide a way in which to bring to light the taken-for-granted assumptions and cultural and societal structures that, in many cases, create conditions for marginalization and oppression (St. Pierre, 2011). Poststructural theories of discourse “allow us to understand how knowledge, truth and subjects are produced in language and cultural practice” (St. Pierre, 2000b, p. 486). By understanding how certain discourses are produced, environmental educators are able to see the potential for how new environmental discourses could be produced as well as attempting to subvert the oppressive structures which function to marginalize the environment.

Poststructuralism can be understood as raising three challenges to theory and pedagogy (Britzman, 2000; Luke & Luke, 1995). First, it is skeptical of the capacity of metanarratives—the supposedly universal and absolute truths of a society or culture—to explain the domain of the social. Second, poststructuralism problematizes the attempts to discuss concepts/terms such as public, culture and

social equality without engaging in the politics of representation. Thirdly, and based on the first two, poststructuralist theory questions conceptualizations of subjectivity and agency that include a unified, rational and stable “self” constituted by static characteristics (McKenzie, 2004). Considering these concepts from an environmental education frame suggests how the incorporation of a poststructural theoretical orientation, as part of a socioecological perspective, can enable understandings of societal structures. These constructs should be brought to light in order to realize the ways in which environment is marginalized and oppressed. However, McKenzie (2004) does note that one criticism of poststructuralism to be aware of is that, while poststructuralism provides a response to dominant discourses and the politics they promote, it fails to offer directions for constructing alternatives. As a result, a critical theoretical component to a socioecological frame offers suggestions on how, once discourses are visible, it may be possible to take a stand supporting a particular direction for change.

McKenzie (2004) suggests that poststructuralism is the best attempt to date to critique Western Culture’s own most fundamental assumptions—particularly those of self and subjectivity. Poststructuralist theory has led to a rejection of notions of a coherent subject, arguing that many cultural, social and political processes that continually (re)construct the subject, make self-awareness and self-fashioning impossible (Walkerdine, Lucey & Melody, 2002). Bowles (in Gavey, 1997) suggests that poststructuralists are merely reiterating what feminism has been saying all along. Extending this argument, I suggest that in many cases those conducting environmental education research, because of its very nature, are

inherently using concepts from poststructuralism in their approach to research. However, because both feminist and environmental perspectives take up a particular stance in favour of a particular worldview, it is essential to include concepts from critical theory in conjunction with poststructural perspectives. For my purposes, if subjectivities are at least in part contingent on social interaction, then society, and the societal norms in that time and place, will impact individuals' subjectivity and how it comes to be constructed (Dillabough, 2009; McLeod, 2009). Therefore building a poststructural layer into a socioecological theoretical framework can support critical examination of dominant societal discourses which result in oppression of environmental discourse and the existence of a wide spectrum of environmental subjectivities.

### ***Critical Theory Perspectives***

Like many theories, theoretical perspectives and theorists, critical theory has evolved, and continues to do so, over the last part of the 20<sup>th</sup> century, from more traditional roots to a version that is more *post* influenced (Kincheloe & McLaren, 2000). Therefore, when considering more contemporary critical theory, as is the case in many facets of qualitative research, there is some messiness due to its multiplicity and because laying out fixed characteristics is contrary to the desires of critical theorists. However, Kincheloe and McLaren (2000) attempt to establish a set of beliefs and interests common to most who identify with critical theory, providing a framework and underpinnings on which to base their research (see Appendix A). A crucial component, that I believe a critical perspective provides, is what could be

described as the productive nature of critical theory where a determination and direction for change is clearly indicated.

From its origins approximately 80 years ago, critical theory today retains its ability to challenge the status quo and provide the framework for analyzing the mutating forms of domination stemming initially from the changing nature of capitalism (Kincheloe & McLaren, 2000). Evolving from its beginnings with German philosophers in the Frankfurt school, critical theory, especially the emotionally and sexually liberating work of Marcuse during the 1960s, provided a philosophical voice for those frustrated by forms of domination emerging from a post-Enlightenment culture nurtured by capitalism which was a result of well established humanist traditions (Fendler & Popkewitz, 1993). Over the 20<sup>th</sup> century, and as critical theory evolved, individuals in societies that were believed to be democratic and free became acculturated to feel comfortable in relations of domination and subordination rather than equality and independence (Peters & Lankshear, 1996).

Critical theorists came to understand that in many cases the reason for domination was a result of individuals' views of themselves being more influenced by social and historical circumstances than had previously been thought (Alvesson & Deetz, 2006). Considering aspects of poststructuralism, including discourse, leads to a social critical theory where concern is with issues of power and justice, and the ways that economy, matters of race, class and gender, ideologies, discourses, education, religion and other social institutions, and cultural dynamics interact to construct a social system (Angus & Langsdorf, 1993). Extending from this concern, and relating to poststructuralism, is that in these issues of power and justice there is

a connection to language in terms of who can speak, what can be said, what social constructions (knowledge) are valid and who must listen (Kincheloe & McLaren, 2000). However, individuals are often unaware of the discourses which dictate these rules of language and knowledge, and therefore do not attempt to think about them differently. Giroux takes the stance of affirming that knowledge is socially constructed and contingent on institutional constraints while also acknowledging that humans are not simply passive to the pressures of the discourses because they have agency (Fendler & Popkewitz, 1993). Having agency means that it is possible to attempt to reconstruct naturalized borders to help make clear the arbitrariness of all boundaries and to call attention to culture as a social and historical construction (Giroux, 1992).

Critical theorists argue that privileged groups are interested in supporting and promoting the maintenance of the status quo and hegemonic societal narratives to protect their advantage and positions of power (Peters & Lankshear, 1996). Thus, if those in positions of power value economics over environment, then discourses in that time and place will place economics in a position of dominance but in such a way that it seems to be the accepted or right thing. Critical theorists supporting environment and environmental education would advocate for the shifting of the power imbalance away from the dominant social paradigm of having a lower valuation of nature towards a new social paradigm where there is a higher valuation on nature (Fien, 1993). This aspect of taking a stand for a particular marginalized position is why it is essential for critical theory to be part of my research as it supports adopting a position for action once poststructural deconstructions reveal

the uneven distribution of power. Building a critical layer into theoretical groundings for this study can provide postfoundational dimensions to both environmental (ecological) and social perspectives on educational change (Greenwood & McKenzie, 2009).

### ***Socioecological Framework in Environmental Education Research***

Understanding and drawing from both poststructuralism and critical theory provides a solid theoretical grounding for a socioecologically-framed study. While the intention of poststructuralism is to reveal oppressive forces and examine how they came to be constructed in particular ways while considering the formulation of subjectivities, the critical component is key to actually taking a stand against oppression, marginalization and power. Coming to understand structures that oppress environmental worldviews, by oppression of environment and environmental education, and proposing directions for change that embrace more ecologically conscious paradigms is what environmental education researchers are attempting to do. From its earliest beginning, environmental education researchers advocated for increasing the ecological consciousness of students (Fien, 1993; Palmer, 1998, Stevenson, 1987, 2007). The term “socioecological” seems to be implicitly existent in critical environmental education (Kyburz-Graber, 2013). Therefore given my interest in environmental subjectivity among environmental education researchers, I must consider the socioecological dimension in the framing of my study.

Feminist poststructuralist work can be seen to have similar tensions to critical poststructurally informed socioecologically framed research. Feminists’

interest in taking a stand against the oppression of women is similar to and parallels the ways in which environmental education researchers attempt to advocate for environmental education being a required part of education programs in all schools. Originally premised on freedom from oppression and equality of rights, feminists began to question the ways in which all women were being represented based on the contributions of women from particular positions (Benhabib, 1995). This issue of representation initiated a shift away from grand theories to local, practice-based understandings, as well as a movement from essentialism toward notions of the subject as constructed and yet still capable of agency (Lather, 1991). The efforts of feminist researchers who have incorporated poststructuralism into their work provide a way for environmental education researchers to explore how poststructuralism might inform a field of interest which is inherently critical since it advocates for the environment.

McKenzie (2004) articulates the tension between poststructuralist theory and critical theory as a *willful contradiction*. While poststructuralism provides essential components of research into the language, discourses, knowledge and truth production, power and conceptualizations of the subject, critical theory brings to environmental education research the positionality against oppressive forces. Lather (1991) articulates concerns about the relativistic nature of poststructuralism and that individual agency, in favour of a particular position, is dismissed. Increasingly it seems that critical theory is adopting aspects of poststructuralism in terms of how power relations influence the creation of oppressing and marginalizing cultural and societal structures. Therefore critical theory, in addition

to aspects of poststructuralism, can contribute to an agentic component where individuals, in spite of social and cultural discourses, can still make decisions for themselves with varying degrees of awareness of the commonsense metanarratives (Fendler & Popkewitz, 1993).

At the same time, poststructuralism's articulation of subjectivity and the process of subjectification contributes new conceptualizations of the individual as being in constant (re)construction, rather than a fixed and unchanging entity, working to identify the narratives through which the individual is constituted (Davies, 2000b, 2003b, 2013). Poststructuralism raises serious questions for critical theory regarding the notion of a unified and self-constituting self and about the possibilities of universal truths of oppression and equality (McKenzie, 2004). However, increasingly feminist poststructuralist researchers (see, for example Lather, 2008) and environmental education researchers show that it is necessary to draw on the combination of both poststructuralism and critical theory as the field of qualitative research evolves (see, for example, Fien, 1993; Gough, 1993; Hutchison, 1998; McKenzie, 2005; McKenzie, Hart, Bai & Jickling, 2009; Payne, 2006a, 2009; Stevenson & Dillon, 2010). Therefore my investigating environmental education researchers' environmental subjectivities draws on how poststructural conceptualization of subjectivity and societal discourses helps to shape the subject, as well as critical conceptualizations of the active and agentic subject.

N. Gough (1999) suggests that educators should be engaging students in discussions of discourse and narratives which inform their relationship with social and ecological worlds. Environmental educators are critical of dominant societal

and educational discourses which serve to marginalize environment and environmental education, as can be seen from the documents developed to convey the intentions and interests of environmental education (see Appendix B). Fien (1993) articulates what he describes to be the need for shifts from the current dominant social paradigm to one that in many ways is more socially and environmentally conscious (see Appendix C). The new environmental paradigm proposed by Fien is complex and not by any means universal in how these changes would be manifest in different societies and cultures. This complexity and multifaceted nature of advocacy for the environment suggests poststructural influences are part of environmental education and environmental education research (Stevenson & Dillon, 2010). Much of the environmental education research about subjectivity looks at factors and variables and attempts to create more generalizable themes and metanarratives. Very little research in environmental education looks at individual subjectivity and the contradictions and tensions that arise in research where there is a valuing of differences in individuals and subjectivities. Therefore, in understanding environmental education, using feminist poststructuralist accounts, as examples from which parallels may be drawn, will enable me to theoretically ground my doctoral research in poststructuralism and critical theory to better understand the ways in which individuals come to position and construct themselves in their multiple and ever-evolving subjectivities as environmental education researchers.

## Theorizing Discourses

Another contributing dimension that poststructural perspectives can bring to my work concerns awareness of our own culturally inscribed position as researchers. This genuine dilemma can be addressed through opportunities provided by working with my participants in the co-construction of their own narratives, parts of which could be assembled to create pieces of collective biography, produced through participant accounts of coming to have similar interests and worldviews. But to consider influences of contexts, there must be consideration of individual subjectivities in terms of influences of discourses. While *discourse* has a variety of meanings, for my interests I focus on Foucauldian notions of discourse as ideological.

One challenge poststructuralism poses is found in the focus on how discourse and “discursive articulation of certain kinds of selves or human subjects [are] intimately involved in the production of certain kinds of society” (Potter & Wetherell, 1987, p. 109). This thinking leads to the notion that, while it is important to consider the individual and how they are constructed, it is also important to consider the context within which the individual had the opportunity to make choices, consciously or unconsciously, about their subjectification process. A crucial element of poststructuralism is the notion of discourse and the belief that it is discourse—the ways of talking and understanding—that contributes to the construction of the social world. While attention to the individual is essential, it is also important to consider not only the self as an entity but also the methods of constructing the self.

The term *discourse* refers to an interrelated “system of statements which cohere around common meanings and values ... [that] are a product of social factors of power and practices, rather than an individual’s set of ideas” (Hollway, 1983, p. 131). Discourses, also described by various authors as meta-narratives or master-narratives, are the nearly invisible, taken-for-granted assumptions that operate on individuals in society. They form the “official and hegemonic narratives of every day life” (Peters & Lankshear, 1996, p. 2). Zipin (1998) further describes discourses as systems of knowledge that are “rule-bound sign systems . . . that infuse everyday activities, and that differentiate people in relation to cultural norms that constitute self-regulatory ways of knowing”. If subjectivities are, at least in part, contingent on social interaction, then society, and the societal norms in the form of discursive structures and practices in that time and place, will impact an individual’s subjectification processes.

Butler (1995) describes an individual’s desire to fit in and follow the norms of society almost like that of an actor trying to follow his/her role in the way it is described in a script. In this example, the script represents signals that societal discourses give individuals about how to behave and interact in societal institutions. However, it must also be acknowledged that these taken-for-granted assumptions/discourses are specific to, among other things, cultures and therefore cannot be presupposed to either exist or not exist in specific contexts (Grimson, 2010). The pressures of dominant discourses or cultural narratives are so strong that, for reasons they cannot articulate, individuals *want* to perform that role because often invisible or vague societal pressures dictate that certain things *should*

happen in certain ways. Hall (1996) suggests that self and subjectivity are constructed within and not outside discourse such that each individual's subjective view of reality (i.e. worldview) is based in discourses encountered within local society. From Butler's work, Atkinson and DePalma (2009) summarize two key points suggesting that since individuals are often unaware of the dominant discourses within a particular culture, there is a normalizing effect such that individuals who are within that norm perpetuate it, consciously or unconsciously, and the other is *othered* as a result of the non-normality. Weedon (1987) supports this perspective suggesting that discourses are structuring principles that are both constituted and reproduced by social institutions, modes of thought and individual subjectivity.

It is important to clarify the ways discourse is used in my study. Foucault (1972) saw *discourse* as "practices that systematically form the objects of which they speak" (p. 49). Court (2005) expands on this describing discourse as "not just language, or ideas and beliefs, or theories about the world" but as "historically, socially and culturally specific bodies of meaning and knowledge, which offer a range of competing and often contradictory ways of giving meaning to the world" (p. 599). Davies (2003b) suggests that, in the formation of individuals subjectivities, discourses constitute historically and culturally specific ways of being (*ontologies*) in the world through constructing different subject positions that individuals can take up. Discourses exist in, produce and are produced by social practices, as well as organize institutions and processes (Fraser, 1997). They are the social texts of a particular community or cultural group and are "the particular signifying practices

of a given group [that] are both constituted by and constitutive of the discursive field in which members of the group live and function” (Elbaz, 1990, p. 15).

Education researchers and environmental educators are two examples of communities within which there are particular discourses informing how those groups function.

### ***Influence of Discourses on Individuals and Society***

Discourses also function to influence individuals and to influence their moral/ethical ideas about what is the *right* (with what is considered to be right being contingent, subjective and contextual) thing to do. It seems likely that individuals are “subjected to particular life experiences framed within governing processes which they cannot escape” (Miller & Rose, 2008) precisely because these processes are often virtually invisible. In other words, it is virtually impossible to get outside the social or cultural discourse and that “analysis of, say, the political forces in a society cannot situate itself outside of the realm of political forces” (Gough, 1993, p. 3). Thus, discourses as self-sustaining, self-replicating, and common sense can be difficult to pinpoint because individuals’ often unconscious actions serve to continually perpetuate and maintain them (Atkinson & DePalma, 2009). However, Dunn (1997) suggests that although the self is structured in and through discourse, critically thinking individuals still have a capacity to act and have agency without being completely reduced simply in terms of what dominant discourses produce. It seems that since environment and environmental education are not the dominant societal discourse in this time and place, this argument for critical thinking and agency of individuals, characteristic of the field of

environmental education, could be important in the positioning of environmental education researchers. In my investigation of critical consciousness of environmental education researchers, awareness of several levels of discursive positioning seems important.

Discourses do not exist in a vacuum but are “in constant conflict with other discourses and other social practices which inform them over questions of truth and authority” (Mills, 1997, p. 19). Often one discourse becomes produced as the dominant discourse. The dominance of the discourse is supported and perpetuated by the support of funding from institutions, promotion by those in positions of power and then by the respect of the population as a whole (Mills, 1997). Discourses not adopted as the dominant are often treated with caution and suspicion and marginalized as being *lesser*. Foucault is not the only theorist to use and define discourse but the ways in which he describes discourses have been extremely influential and are of particular relevance when conducting research that is poststructurally-informed. Poststructural theory provides framing for research which opens up, brings to light, and questions discourses and discursive practices as well as providing strategies for questioning dominant discourses and practices which, once broadly accepted, become taken-for-granted and common sense (Davies, 2000a). Foucault’s work helps to bring to light the presence of discourses and the ways in which they influence, almost invisibly, the workings of societies and cultures and also how those same societies and cultures serve to reproduce those same discourses over time. Poststructuralism attempts to shed light on how we are subjected to and constituted by structure and language and, even more importantly,

how we “continue to write into existence those same structures through those same discourses” (Davies, 2003b, p. xx). However, Mills (1997) suggests that Foucault’s work goes beyond simply *analyzing* the discourses which contribute to the structures of society and that Foucault has an interest in making visible for all to see the arbitrariness of a variety of discourses and how, although they are accepted as common sense and with familiarity, many discourses are strange and contribute to inequality.

Examining discourses which result in the domination of certain individuals or groups and the marginalization and oppression of those who do not operate within dominant groups also involves examining and understanding power relations (see, for example, Britzman, 2003). Understanding power relations implicates understandings of societal discourses that hold those power relations in place and allow power to reside where it does. Foucault (1979, 1988) has had a wide influence on the understandings of both the self and the self in relation to power relationships that exist (Callero, 2003). To change current systems of discourse, many of which result in oppression and marginalization of individuals and groups within society, a shift in the dominant discourse and worldview is desirable and necessary (Fien, 1993; Payne, 2009). My interest, from an environmental education researcher’s point of view, is to articulate that shift away from the current dominant pedagogy towards a critical socioecological pedagogy as preferred practice among a group of critically reflective group of onto-epistemically and theoretically conscious environmental education researchers.

Foucault suggests in his work that discourse is “not an ideal timeless form” and that it is a “fragmented history ... posing its own limits, its divisions, its transformations, the specific modes of its temporality” (1972, p. 117). Further, Foucault’s interest in documenting the changes and development of certain discursive practices helps to bring to light how, over time, discourses are shifting and are not as permanent as their familiarity would suggest. However, discourses can often be traced back to particular events and shifts throughout history. Mills (1997), explaining Foucault’s position, suggests that we “categorize and interpret experiences and events according to the structures available to us and in the process of interpretation we lend these structures solidity and normality, which is often difficult to think outside of” (p. 54). Because it can be difficult to think outside of discourses, particularly when they are well established and reinforced within institutions as guidelines and expectations, it can be difficult to see or conceptualize alternatives to that way of being, thinking or behaving (Farquhar, 2012). It is within these discourses that individuals locate the boundaries within which they are continuously (re)positioning themselves. It is also within these post-secondary institutional discourses that environmental education researchers negotiate, construct and resist subjectivities.

Many strategies for change that look at altering individuals, by trying to give them self-esteem, or make them *want* to be/perform the good citizen, student, or teacher, can be seen as extremely negative. Poststructuralist researchers question laying the burden of change on the individual, as if it were somehow the inadequacy of the citizen or student or teacher that needed to be in some way mended. Rather it

can be argued within this frame that it is the environment/economic order/discourse itself which needs to be called into question. If standards are a product of power relations and indicative of *who* gets to decide rather than the product of local collaborative decision making by the communities, parents and local educational authorities that have a vested interest in what is important for the next generation of students, then how do we approach educating students in schools today and from now on so that they can assume their roles as socially engaged citizens?

### ***Marginalization of Environment and Environmental Subjectivities***

While environmental education researchers may not be part of a specific binary, it is important to consider the concept of binary oppositions because of how environmental education, environment, educators, and researchers are often othered by the dominant discourses. The binary logic of humanism constructs the world in hierarchical ways through the privileging of one positioning within a pair and the depriving the other positioning of meaning independent of the first. The first, privileged or foregrounded term defines the meaning of the subordinate or dependent term as other to itself (Davies, 2000a). Examples of commonly encountered binaries include light/dark, legitimate/illegitimate, normal/abnormal, heterosexual/homosexual, good/evil, presence/absence and public/private. In a binary pairing, the first term is usually set up as the natural or inevitable and is elevated to performing as expected while the 'other' is anything else that is opposite to the 'natural'. However, the positioning of the 'normal' or 'natural' is a

construction of societies and cultures and is dependent on the time and context so it is possible that this opposition may shift and change over time.

To deconstruct the dominant position, attention must be paid to the discursive practices that shape the possibilities individuals see, and positions that they take up. Being positioned and defined by being other than normal, and therefore often regarded as negative, creates a repetition of those same patterns and therefore also marginalization and powerlessness (Collins, 2000; Davies, 2000b). Davies (2000) further argues that it is important to be able to become aware of constitutive forces of social structures and aware that we ourselves, as those who can continue to speak/write into existence those same structures, need to make discourses visible if we hope to elicit some sort of change. Therefore consideration of discourse as part of environmental subjectivity is important because of the ways social and cultural discourses of environment influence the ways in which subjectification processes occur and how individuals choose to position themselves.

## **Identity and Subjectivity**

### ***Introduction***

Kemmis and McTaggart (2005) describe the existence of contradictions between “espoused theory” and “theories in use”. Often, it seems, theoretical framings are assembled, described and espoused to in introductory sections of articles, conference presentations, or dissertations and then the actual “doing” of the research does not reflect those principles the indicated theory supports. Being mindful of this contradiction I discuss the use of the concepts of *identity* and

*subjectivity* as conceptualized through the theoretical framings I have already described in this chapter. While there are many ways to conceptualize these ideas, I show how, by using poststructural and critical conceptions of these terms, I am applying the theories to the ways in which I am approaching the concepts I have used. In Chapter 3, I discuss how I have framed my methodologies and methods, including analysis, in ways appropriate to these theoretical frames.

Traditionally, in developmental psychology and as a political artifact of the European Enlightenment, psychology has tended to portray who we are (what might be called our *identity*) as a relatively stable entity which remains constant from one situation to another and over time (Callero, 2003). However, there is a growing body of research within the social sciences and education that argues for a more flexible approach to identity formation particularly within feminist, poststructuralist accounts of the discursive production of subjects. Increasingly, inquiry into identity has focused on understandings of identity/subjectivity beyond the structural level where identities are formed in specific contexts (Bucholtz & Hall, 2005; Grimson, 2010). My inquiries take advantage of a socio-cultural narrative approach that confronts the tradition of identity development thought to be a matter of personal/individual construction, offering instead a framework through which identity is conceptualized differently.

From poststructuralist perspectives, subjectivity can be understood as being real, imaginary, and symbolic simultaneously (Longhurst, 2003). By understanding that what is considered to be real is essentially a perception and a human construct, interactions and the individual are images of reality in the sense that how one sees

him/herself will vary depending on how others view that self. As St. Pierre (2000a) argues,

... subjectivity is produced socially, through language in relations... [and it] illustrates poststructuralism's double move in the construction of subjectivity: a subject that exhibits agency as it constructs itself by taking up available discourses and cultural practices and a subject that, at the same time, is subjected into subjectivity and by those same discourses and practices. (p. 502)

Individuals have changes to our subjectivity occurring as a result of interactions we have in an ever changing world, as well as identities/subjectivities that are specific to a context, thus providing a link to poststructuralist concepts of discourses. In the past, within more belief-based research, researchers were unable to think of identity construction as part of several contexts in lives, that is, of the possibility that individuals can have multiple identities (Britzman, 2003; Butler, 1995; St. Pierre, 2000b). Bucholtz and Hall (2005) argue that "identities encompass macro-level demographic categories, temporary and interactionally specific stances and participant roles, and local, ethnographically emergent cultural positions" (p. 585). This thinking supports my stance that looking at subjectivity involves consideration of many contexts and discourses. In terms of subjectivity encompassing, in part, participant roles, Grosz (2005) takes up the idea of identity also being understood in terms of bodily practices. Thus both the thoughts and practices people embody are reflective of their positioning, values and subjectivity as well as their decisions to take up those positionings.

Increasingly one could argue that the concepts of self and subjectivity have begun to move to the center of intellectual debate within the social sciences and

humanities (Callero, 2003). Within fields of education and environmental education, where it seems ideas about environmental subjectivity remain peripheral to the main areas of research, it is important to take up these concepts in contexts in which they have not previously been discussed.

### ***Drivers and Barriers***

At the UNESCO conference in Paris (2002), ideas which would help to later structure the concepts of subjectivity and discourse began to be discussed within the educational research circles in relation to education for sustainable development (ESD) (Laessoe & Ohman, 2010; Sterling & Scott, 2008; Wright, 2007). Initially the terms *drivers* and *barriers* were used within the fields of educational research where *driver* was used to describe forces that would motivate, push or inspire people to do things, perhaps even evoking feelings of caring (Wright, 2007). In contrast, the term *barrier* was used to describe the often invisible obstructions that would stop or prevent things from happening or even make thinking about acting a particular way almost impossible (Wright, 2007). Drivers described qualities that relate to an individual and give the internal inspiration or desire for someone to do something, want to do something or care about or show compassion towards something. Since a driver was envisioned to be a *force* from within, researchers describe the source of an individual's driver(s) as being formed as a result of an individual's beliefs, values and ethics and beyond a simple objectivist description of factors (Quinlan, 1999).

With drivers as the internal component, which contributed later to the articulation of concepts of identity or subjectivity, barriers were described as the

external forces, physical or imagined, that from the outside helped keep individuals in line with the dominant, taken-for-granted assumptions of society (Wright, 2007). Discussions about barriers in educational research suggest that although barriers are often not of a physical nature, they can be very strong and greatly influence the behaviour of individuals, the factors that drive an individual, and how that individual acts or functions. Barriers later became understood, in poststructuralist terms, as discourses or metanarratives (St. Pierre, 2000a). The function of barriers within society is that they are meant to keep people following the dominant paths, maintaining the status quo and ultimately self-disciplining to follow cultural and societal norms (Ladson-Billings, 1995). From the perspective of those in positions of power, for society to run smoothly there must be a maintenance of the status quo and the commonsense to maintain those positions of power and to prevent individuals from questioning, exploring what is beyond, asking different questions or thinking differently which may result in loss of power to those who have it. Understandings of the ways in which the concepts of subjectivity and discourse have come to be within the field of educational research is important in the positioning and ways in which I have chosen to theoretically frame and support the use of these concepts with respect to the field of environmental education research.

When exploring ideas that are non-dominant within the social order, the perception that the individual will not get 'approval' is often enough to keep the individual from even asking (Notenboom, 2010). An individual has certain perceptions about expectations that institutions/society has of him/her as a result of the barriers that he/she encounters (Quinlan, 1999). Over time, the cumulative

effect of entire societies of people all acknowledging the same barriers, often unconsciously, provides the framework for societal norms to be established and reinforced by institutions and to become the expectations of individuals within a society. Therefore, even if society does in fact change, the perception that the barriers still exist will hold individuals within the current taken-for-granted channels, inspire them to act in the assumed way and steer them away from attempting to push the boundaries that structure the societal norms (Ladson-Billings, 1995).

Use of the terms *drivers* and *barriers* gave way as conceptualizations of the individual and the individual-in-relation have evolved. Increasingly the terms *structure* (used for barrier) and *agency* (used for driver), particularly in critical contexts, were utilized to describe the individual's subjectivity within discourses. More refined than simply something driving or preventing an individual from doing or not doing something, Thrift (1996) writes about the existence of "versions of human agency" and about combining these versions with social structures (p. 68). This term suggests that agency lies with the subject as opposed to the subject being constituted only by external forces that manipulate the individual. Using examples from Bhaskar, Giddens, Bourdieu and Layder, Thrift (1996) illustrates four interpretations of maps of social theory in terms of structure and agency and the interactions between the structures of society and the agency of individuals within it. All four conceptualizations show varying degrees or descriptions of the determinist (objectivist) and voluntarist (subjectivist) approach to social theory. Thrift indicates that "social structures are constituted by human practices, and yet

at the same time they are the very medium of this constitution” (1996, p. 69). An individual’s agency can reinforce social and cultural norms (which are in place as a result of structures), which inform and influence an individual’s agency.

Subsequently, poststructural descriptions of agency of the subject suggest a constant reconfiguring and renaming of the subject with changes in context that compel us to rethink ourselves (Butler, 1995; St. Pierre, 2000b). The use of agency in more traditional/humanist contexts should not be confused with the poststructural conceptualization of agency which is associated with the poststructural construction of the subject. Therefore in the interest of clarity, subsequent use of the word *agency* will reflect the concept as framed through poststructuralism.

### ***Evolution of Identity***

In discussing why we do the things we do, or why we believe the things we believe, which connects to what we have an emotional attachment to or care about, it is suggested that we must examine how we have come to position ourselves in particular ways and in response to specific contexts. Understanding our *subjectivity* helps us ground our understanding of who we are (Longhurst, 2003). Therefore, to understand how it is that individuals come to position themselves as environmental education researchers it is important to develop understandings of their subjectivity as well as subjectification processes. Using a poststructural conceptualization of subjectivity I illustrate how this understanding of the subject can help structure my approach to conversations where environmental education researchers construct narrative accounts of how they came to construct and position themselves with

respect to the concept of environment and in the context of the larger field of education.

The first models of subjectivity emerged from cognitive psychology. Ideas about an individual's personality were first used to describe who an individual was, and included their beliefs, desires and actions (Thrift, 1996). Conceptions about personality and identity in psychology were primarily based on a humanist model of the subject (St. Pierre, 2000b). According to humanism, individuals are conscious, stable, unified, rational, autonomous and ahistoric and are "endowed with a will, a freedom, an intentionality which is then subsequently 'expressed' in language, in action, in the public domain" (Butler, 1995, p. 136). Humanist geographers, including Hägerstrand, proposed ideas of subjects being self-knowing, bounded and unique individuals suggesting that an individual is constant and not a result of external influences (Longhurst, 2003). The qualities of a humanist subject suggest stability and constancy regardless of situation or context (Callero, 2003; Elliot, 2001). St. Pierre (2000b) suggests that it is important to understand the description of the self that humanism portrays since it remains a dominant fiction of Western philosophy's public domain. However poststructuralist accounts of subjectivity propose different conceptualizations of the subject that counter the dominant humanist tradition and offer more flexible approaches to identity/subjectivity taking into consideration specificity and contextuality (Bucholtz & Hall, 2005; Davies, 1997; Flax, 1993; Grimson, 2010).

Although perhaps not categorizing the description as poststructural in nature, Thrift, in the 1980s, suggested that the subject needed to be thought of in

terms of the norms of institutions within society and the individual as a member of that society (Longhurst, 2003). Althusser's description of the subject also shows an evolution in the conceptualizations of the subject in the direction of those suggested by poststructuralist accounts (Probyn, 2003). Using Althusser's description, subjects are constructed as they are born into a dominant ideology and thus often take up the dominant ideologies as their own in their self-construction (Althusser, 1970). Individuals can then take up or resist certain subject positions that are operating within cultures and they are obliged to work within or rebel against the confines of those positions (St. Pierre, 2000a). Accounts of a poststructurally conceived subject show that there is an inextricable connection between identity/subjectivity and discourse meaning and that discussions of discourse are necessary in consideration of subjectivity and the subjectification process (Davies, 1997). These connections will be important to consider when reading the participant narratives and the ways in which environmental identity is contingent partly on societal and cultural discourses.

### ***Understanding Identity vs. Subjectivity***

Traditional psychology uses the term *identity* to describe the humanist view of who we are, what we do and how we behave and suggest that this position is relatively stable (Lundegård & Wickman, 2009). More recently both the terms *identity* and *subjectivity* have been reconceptualized into what could be described as concepts theorized through poststructuralism. However, although the terms are similar and often used to describe the same thing, there are some who attempt to illustrate the differences between the terms *identity* and *subjectivity* and why it is

that one or the other is more appropriate in particular contexts and specifically when applying a poststructural perspective.

The term *subject* is used to refer to the individual human being/agent, accenting both physical embodiment and the range of emotional-mental processes through which it thinks its place in the world (St. Pierre, 2000b). This description of the subject, as well as acknowledging embodiment aspects which will be discussed later, illustrates a distinction and change in thinking about the subject from that of one that is constructed solely as a result of outside forces to where there are internal processes that should also be considered (O'Loughlin, 1998). Subjectivity is not simply about adding up the total positions in discourse since birth (Henriques *et al.*, 1998), but rather a complex of discourse both influencing and guiding subjectivity construction and the ways in which the relations between the multiple positionings of the subject can be quite contradictory and conflictual (Walkerdine *et al.*, 2002). The subject is the physical (being) of the individual as well as the consciousness of that individual in relation (being in the world) and how they make sense of themselves as an individual and in relation to others and the world (MacLure, 2003). Longhurst (2003) suggests that the use of *subjectivity* relates to the idea of the *subject* and therefore to ideology. Thus looking at the articulation of the self requires considering identity/subjectivity, ideology and history to come to understand the positioning of the subject and how the individual came to that position (McKerrow, 1993; Morris & Wright, 2009).

Weedon (1987, p. 32-33) suggests that “

‘Subjectivity’ is used to refer to the conscious and unconscious thoughts and emotions of the individual, her sense of herself and her

ways of understanding her relations to the world. Humanist discourses presuppose an essence at the heart of the individual which is unique, fixed and coherent and which makes her what she is...poststructuralism proposes a subjectivity which is precarious, contradictory and in process, constantly being reconstituted in discourse each time we think and speak.

Additionally, Potter and Wetherell (1987) explain that just as subjectivity is produced in discourse, the self is subjected to discourse and that in constructing the self or subjectivity in discourse other constructions are excluded creating a particular kind of subjection. Understanding the subject and subjectivity involves the negotiation of a whole series of interconnected terms such as the body, the self, identity and the person (Zipin, 1998). The complexity of the subject and the processes through which the subject is constituted, when conceived through poststructuralism, opens up the possibility of constant (re)construction and (re)configuration and thus provides opportunities for change and the expression of agency (Lovell, 2003; Roth, 2007; St. Pierre, 2011). Since it is often less confused or associated with the more traditional uses of the term *identity*, it seems more appropriate to use the term *subjectivity* to describe the individual and the (re)construction of the individual, as well as the process of coming to that positioning, when using a poststructural frame. As Weedon (1987) explains, “unlike humanism, which implies a conscious, knowing, unified, rational subject, poststructuralism theorizes subjectivity as a site of disunity and conflict, central to the process of political change” (p. 21). She goes on to suggest that “‘subjectivity’ is used to refer to the conscious and unconscious thoughts and emotions of the

individual, her sense of self and her ways of understanding her relationship with the world” (Weedon, 1987, p. 32).

### ***Conceptualizing Subjectivity***

Instead of having criteria or components or even any sort of definition for *subjectivity*, major themes can be used to describe what subjectivity encompasses. One major theme of subjectivity is the *spatial* imperative; subjectivity is emplaced (Longhurst, 2003). Spatiality could, but does not necessarily, regard an individual's physical place (in terms of geography). Place, in this sense, refers to a hierarchy or power relationship in which one finds oneself. An individual's subjectivity involves the individual being mapped and mapping him/herself, into a place within society at a particular time (Burgess, 2010). Since individuals find themselves in multiple power relationships, and therefore different combinations of *being*, on the side of the dominant or oppressed, the place in which individuals find themselves in those power relationships helps construct subjectivities (Butler, 1995). Thus place can, in relation to subjectivity, be thought of in terms of subject positioning and how one takes up a positionality in relation to a contextual place, space and time.

Additionally Callero (2003) suggests the use of three organizing concepts when attempting to come to understand subjectivity: a) power, b) reflexivity, and c) social constructionism. Power is significant as it relates to discourses and the potential influences of symbolic interactionism, and therefore the shaping of the self, and further supports the link to poststructural theory, of which power is an integral component. Reflexivity is important as it provides for an understanding of agency of the individual and thus in research, can provide for opportunities for

change. Dunn (1997) states that in some poststructural research a problem exists with the conceptualization of subjectivity because it leaves out the agentic capacity of the individual. Possibility, with this understanding of the subject, then exists to imagine how individuals can choose not to repeat a practice and do something different (St. Pierre, 2000b). Further emphasizing the impacts of social and cultural relationships on (re)constituting subjectivity is the principle of social constructionism both in more traditional and newer poststructurally influenced approaches.

Although each individual is a separate being, it is impossible for an individual to be constituted completely independent of outside influences. Britzman (2000) counters the humanist's description of stability of identity by stating that all categories are unstable, all experiences are constructed, all reality is imagined, all identities are produced and all knowledge provokes uncertainties, misconceptions, ignorances and silences. Without individuals able to be completely autonomous, researchers developed ideas about multiple subjectivities and the fact that there is no one right answer, description, or one individual (Britzman, 2003; Butler, 1995; St. Pierre, 2000a; Walkerdine, Lucey & Melody, 2002). Rather, individuals respond to social situations in which they find themselves according to how the individual constructs the self in that situation, as a result of continual (re)inscription in social and cultural contexts and contingent upon human interaction (Clegg, 2008; Dillabough, 2009; Grimson, 2010). As a result, an individual who is black and female would have a different subjectivity as compared to a white female or a black male or a white male (based on only the two features of gender and race; of course many

others contribute to the construction of an individual's subjectivity). Since individuals are more than one thing at any moment, the concept of multiple subjectivities describes the multiple positions an individual assumes, all of which are contingent upon each other to varying degrees. Therefore although a researcher may be interested in *one* of an individual's subjectivities, it is inextricably connected to multiple subject positions which should be considered when conducting and analysing research.

It may be asked, why examine subjectivity and subjectification processes which illustrate the construction of an individual's subjectivities? In part it is for the individual narratives that tell of an individual's journey to a particular position. At the same time the story is interlaced with the influences of social and cultural discourses which influence the subjectification process. Davies and Harré (1990) suggest that "the words the speaker chooses inevitably contain images and metaphors which both assume and invoke the ways of being that the participants take themselves to be involved in" (p. 49). As well, in addition to what we say or the stories we tell, what we do or choose not to do reflects our subjectivities (Roth, 2007; Walkerdine *et al*, 2002). Therefore, in considering the subjectification process of environmental education researchers it is important to consider the complexity of how they view themselves, how what they practice embodies their beliefs and how their interactions express their agency as well as resisting or reinforcing environmental educational and societal discourses.

### ***Subjectivity and Power***

Walkerdine (1990) suggests that individuals' subjectivity is constituted within particular frameworks and as a result of relations of power. Much of Foucault's work examines how power relations exist and influence the construction of individuals as well as normalizing the ways in which we enact, or believe is appropriate to enact, our subjectivities (Callero, 2003; McKerrow, 1993).

Considering the influence of power on subjectivity is important in that it moves us closer to linking self-construction to larger institutional forces, political ideologies, economic interests and concerns of social life (Denzin, 1992; Gubrium & Holstein, 2009). Consciousness of the individual, the influence of power and the impact it has on the subjectification process all contribute to deeper understandings of the individual (Witz, Lee & Huang, 2010). Subjectivity is a complex understanding both of discursive constitution and the ways in which the relations between positionings are held together by and for the subject. These can be quite contradictory and conflictual (Walkerdine *et al.* 2002). The discourses, and resulting power relationships, often result in oppression and marginalization of those who are not dominant and lack the power that others possess (Zipin, 1998). Individuals, in spite of the pervasive nature of powers that (re)inscribe discourses, have the agency to resist those normalizing forces by realizing and responding to them.

When power relationships are made visible it is possible to think and speak differently (St. Pierre, 2000b). Power positions are, particularly to those who have the power, difficult to see. However, as Butler (1990) reminds us, power is not inherent in the subject position itself; it is a result of human constructions. By

understanding the power relationships that help to shape an individual, it could be possible to move away from the racist, heteronormative and/or masculine regimes that dominate Western society (Peters & Lankshear, 1996). Instead of simply perpetuating society as it currently exists—a society where individuals and groups are subordinate/marginalized—understanding and acknowledging these multiple relationships allows for openings for change (Petersen, 2008).

Work on significant life experience suggests that event(s) help to shape individuals' conceptualization of whom they should (based on the pressures of society, that is to say social discourses) construct themselves to be or how they should be in society as well as their relationships (Chawla, 2001). In poststructuralist terms, personal transformation, through experiences and relationships, can be understood as developing new possibilities of being in the world (Cameron & Gibson, 2005). Experiences can have powerful impacts on individuals throughout the constitution of their subjectivities. People are both subjected to particular life experiences and social and cultural processes which they cannot escape (Miller & Rose, 2008).

Families are another relationship context in which subjectivities are constituted. Payne (2005a) examines the relationships within families and their influences on children within that family specific to environmental subjectivity they construct. In looking at "Green families", and how they construct and practice different versions of environmental ethics and ecopolitics in the home, Payne (2005a) offers suggestions for improving environmental education in schools. As Fien (1993) suggests, one of the key components of environmental education is

participation. It is this embodiment of subjectivities and the corresponding agency of individuals that reveals our various subject positions (Grosz, 2005; Lovell, 2003; O'Loughlin, 1998). By considering the multiple components which contribute to and shape the subjectification process, it is possible to both construct images of individuals in particular contexts and take into consideration the specificity of those images as a result of the many components which contribute.

As the different power relationships and discourses that shape society are recognized, need for examination of these relationships as well as advocacy for the groups who find themselves as the marginalized is realized. Potential for change exists in the ways deconstruction and reconstruction of the subject position can show how that position has come to be inscribed in culture and societies' grids of regularity and normalcy and provide opportunities to reinscribe that position (Butler, 1992). There is an opportunity to (re)describe what has been taken for granted as a result of the overarching humanist paradigm. Therefore, coming to understand how subjectivities are constructed, and the processes by which this happens, it is possible to reimagine a process where the same inequalities and oppressive conditions are not simply perpetuated.

### **Environmental Subjectivity and Environmental Education Discourses**

One challenge I experienced consulting environmental education literature to support the approach to my research is that what I intended to do was something that had not been done before. Payne (2001) suggests that while little in environmental education has been stated directly about the question of identity, "a

great deal has been implied” (p. 69). In the literature within the field there are empirical studies and rhetorical claims about how knowledge, attitudes, values and behaviours might be formed, maintained or even modified. Reid and Payne (2011) and Wals, Stevenson, Brody and Dillon (2013) go on to suggest that there are numerous studies about views, beliefs, conceptions, hopes, formative/significant influences, competencies, skills and thinking of children, young adults and teachers. Concerns have been raised about the need for wider theoretical underpinnings to environmental education research and the potential for the use of identity theories as theoretical frames that can empower cultural groups (Dillon, Kelsey & Duque-Aristábal, 1999).

Feminist poststructuralist research can provide some parallels to the ways in which subjectivity of environmental educators can be examined. In the women’s movement, women attempted to redefine their own subjectivities within overarching societal frameworks of patriarchy and sexism and as a result of identifying the sources of oppression (Cahill, 2007). Similarly, environmental education researchers advocate for new educational paradigms from within a framework of economic/governmentality and standardization domination (Dowling, 2010). Feminists have also written about a tension between poststructuralist theories of subjectivity and activist work which involves not just realizing the oppressive structures but also taking up a position against that oppression (Gough, 2013). Again, parallels can be drawn in my research as it conceives of environmental education researcher environmental subjectivities through a poststructuralist lens.

The philosophy which underlies environmental education, according to Hart (2003), anticipates the postmodern types of research that show us how to act morally with passion, respect and responsibility, to engage the future in complementary rather than competitive and destructive ways. As Fien (1993) outlines, there are particular components to individuals' subjectivities that suggest a tendency towards also having an environmental subjectivity. By understanding how an individual came to take up an environmental positioning, and thus develop an environmental subjectivity, there is potential for developing education programs where others can have the opportunity to also take up that position. Thus questions shift from what individuals learn about objects in the environment to the individual with agency, and the process (Lundegård & Wickman, 2009). Expanding on Fien (1993), Payne (2005b, 2013) suggests a greater complexity, as a result of the great number of subjectivities that make up an individual. He fundamentally agrees that it is both the individual and the social and cultural contexts, which influence the subjectification process. Although placed on a two-dimensional page, the ideas of subjectivity, and the discourses which inform them, are not merely a matter of option one or option two. Instead, the complexity and combination of components that influence the construction of subjectivities fall along several continua, all of which influence the final composition of the subjectivity.

Despite the dominant discourses, experiences, interactions and relations, individuals *do* develop subjectivities that are beyond that of maintaining the status quo and that strive to do something different (Hart, 2003; Payne, 2005c).

Investigations of subjectivity will likely include exploring a kind of positioning and

subject position (Davies & Harré, 1990) mobilized by academics in processes of delegitimation, exclusion, and “othering” as a result of non-conformity (Petersen, 2008). However, the development of communities of practice (Wenger, 1998) can contribute to agency of the individual as well as provide subjectivity congruences which make individuals feel less isolated and othered (Hughes, 2010). Researchers need to examine how individuals come to construct themselves in terms of environmental subjectivity as well as how they perform it (Dunn, 2000; Reid & Payne, 2011). It is through the narrative accounts of environmental educators coming to their positioning as well as the practices (publications, interaction) which will illustrate both their positioning and likely the discourses, both confirming and resisting, that contribute to that subjectification process.

### **Environmental Education Research and My Contribution**

Critiques of some radical poststructural approaches to research raise concerns about the calls to tear down the very structures that result in the formation of identity categories. However, it is important to consider that, in contexts where we have to work within and against the binaries and categorizations of modern cultures and societies, identifying an aspect of subjectivity and positioning can be useful as a political category (Ferfolja, 2007). Butler (1995) problematizes the classification of lesbian and argues that it cannot exist as a single identity category and is an organizing implement of regulatory regimes (see also, Jackson & Mazzei, 2012). To simply slot someone into a pre-existing category, be it in regards to sexual orientation or environment, based on one characteristic,

ignores the complexity of the many ways that individuals continually (re)position themselves in their own understandings as well as in relation to the world around them. Environmental subjectivity as a single, definable and universal classification does not exist. A single subjectivity does not a person make. Individuals are complex networks and interactions occur between many subjectivities at a variety of stages of (re)forming. Therefore the same could be said that a single identifying characteristic does not define an individual, society or culture. However, the ability for an individual to *self-define* as having an environmental subjectivity or being an environmental educator and researcher, whatever definition that invokes, does, in fact define an individual. Therefore I can borrow from this idea that an environmental subjectivity is an environmental education researcher's subjective experience or intrasubjective account of her own environmental ontology.

It seems to me it is important that, having the power of being a researcher, individuals set out to problematize some of the most fundamental assumptions that exist and beliefs that are taken for granted if they are oppressive and marginalizing structures (Czarniawska, 2004). It is from this position of privilege that researchers can consider their research as a form of activism towards, if conceptualized as such, change, progress to disrupt oppressive structures. The environmental education researchers who are participants in my study likewise have a common interest in environmental education but bring a diverse set of contexts and interests to the field. As such the theoretical framing outline to ground this doctoral research will help me participate in a co-construction of participant narrative as well as inform the ways in which we can make sense of those narratives and see the

understandings and positionings that environmental education researchers have, as they live and continually (re)position themselves with respect to their own environmental ontologies and worldviews.

## Chapter 3: Methodology and Methods

### Introduction

Considering the challenges of looking at environmental education in terms of these new perspectives on subjectification processes, finding a way to work with those who are passionate about environmental education research to understand how they have come to construct their subjectivities in relation to and with environment is important. However, gaps exist between the theoretical and methodological approaches to subjectivity research (Dillabough, 2009). Given my interest I believe that narrative methodologies are most appropriate. Connelly and Clandinin (1990) suggest a concise rationale for narrative inquiry is that

... humans are storytelling organisms who, individually and socially, lead storied lives. The study of narrative, therefore, is the study of the ways humans experience the world. This general notion translates into the view that education [and educational research] is the construction and reconstruction of personal and social stories; teachers and learners are storytellers and characters in their own and other's stories. (p. 2)

Environmental education research should involve using "critical investigations and modes of inquiry which contribute to the development and renewal of the discipline itself" (Gough, 1993, p. 2). Therefore creating the conditions for participant environmental education researchers to share their stories not only allows the articulation of the positioning and values of each individual but also reiterates the beliefs and goals within environmental education. Gough (1993) further suggests that, particularly within the field of education, much of what is learned or that we claim to know comes from the narratives of

experience. I believe that my interest also includes phenomenological elements in that I am interested in each participant's lived experience within the phenomenon of academic life. I am primarily interested in the stories of participants and the focus on their storied lives rather than general themes and patterns. My intent is not to set out to discover universal truths, or to make generalizations, but environmental education discourses may be manifest in the participant narratives, which could provide opportunity for further discussion.

I want to consider the specificity of individual experiences, how they are presented, and how subjectivity can be understood with reference to "global phenomena and frameworks ... and in terms of how [participants] negotiate and are formed in the intersection of local and global contexts" (McLeod, 2009). In discussing environmental subjectivity I am interested in considering how participants have come to conceptualize their ontological position within the academy; that is, their worldview. An individual's worldview, particularly an environment-related worldview, is a manifestation of their subjectivity and can be visible in several ways that they consciously choose to position themselves within a variety of contexts. Subjectivity research looks at the expression of experience in time and place as well as "forms of identification – both conscious and unconscious – which are associated with experience" (Dillabough, 2009).

Additionally, given the interconnected nature of subjectivity and discourse, elements of critical discourse analysis are important to my study (Bucholtz & Hall, 2005). By providing opportunities for forms of narrative as embedded in the discourses of culture and environment, I attempt to create conditions for the

articulation and expression of how these ideas and experiences interplay with participants' academic work of teaching and writing, and discuss how their disciplines and requirements impact each participant's performing in respect of their worldviews and subsequently how they come to position themselves. In the following sections I show how, in terms of methodology and methods, the theoretical framing outlined in Chapter 2 directly relates to the ways I take up narrative inquiry and interview, and is directly related to the ways in which I have engaged in actually doing the research for this dissertation.

### **Understanding Narrative Methodologies**

Only in the past approximately 20-30 years has narrative begun to proliferate within social science research with peer-reviewed journals such as *Narrative Inquiry* gaining real momentum in the 1990s. Beginning with family and relationships, narrative quickly spread to investigate many facets of education including Cortazzi's (1993) research on the experiences of primary school teachers, Smith's (1996) research on women returning to education and their return impacting relationships, and works by Clandinin and Connelly (1999, 2000), Connelly and Clandinin (1990, ), Connelly (1996) and Bruner (1996) discussing examinations of the field of education research. Within narrative accounts of participants, some features of interest include: people's lived experiences and the temporal nature of that experience; desire to empower research participants and allow them to determine important content and themes; processes and changes over time; self and representations of the self; and awareness of the role of the researcher in the process (Elliot, 2006). Similarly as in the construction of a

theoretical framework, which draws on appropriate concepts, theories and theorists on which the research can be theoretical grounded, methodologies must be considered which compliment the theoretical framework but allow for it to be put into practice.

### ***Defining Narrative***

Because of its complex and diverse nature, rather than attempting to construct a definition for narrative, I describe some of its defining features and attributes which help explain its appeal as a research methodology to social science researchers and for my research question. Traditional study of narrative is described as having to do with conventions of literary styles and genres (Elliot, 2006; Lawler, 2002). Increasing numbers of articles have taken up the concept of narrative and its application in the human and social sciences (Somers, 1994). Therefore as applications of narrative expand so too does the set of defining characteristics, analytic approaches and critiques leveled against it (Riessman, 2008). Contributing to characteristic attributes of narrative, Bruner (1990) suggests that narrative is the natural way in which humans make sense of lives in time and that “people do not deal with the world event by event or with text sentence by sentence. They frame events and sentences in larger structures” (p. 64). Elliot (2006) describes narrative as being a way of conveying the meaning of events by organizing a sequence of events into a larger whole where the significance of the individual events can be understood within a context. Narratives have been described as “discourses with clear sequential order that connect events in a meaningful way for a definite audience and thus offer insights about the world

and/or people's experiences of it" (Hinchman & Hinchman, 1997, p. xvi). Thus contextuality, time, and place are key components to consider in narrative research. These aspects of narrative are important within the context of discussing individuals' ideas about their subjectivities and subjectification processes.

Using both Hinchman and Hinchman's (1997) contribution as well as his own, Elliot (2006) further frames a discussion of components of narrative as being contingent upon three key features which help illustrate its importance. First, narratives are often *chronological* representations of events so that temporal dimensions are understood as relating to both individual lives and social contexts. Second, narratives are *meaningful* in terms of what they mean to the individual experiencing them as well as having the potential to create empathy with the reader by communicating and externalizing feelings about the significance of events. Thirdly, narratives are inherently *social*. The social component is perhaps the most complex in that narratives are social both in the sense that they are specific to an audience as well as being social in how they are produced. Increasingly the role of the researcher is being acknowledged not just as a data collector but as a co-creator of the narrative itself (Mills, 2001). Although identified as individual, the facets of narratives— temporal, meaningful and social—are not necessarily easy to separate. The interwoven nature is something to be valued as often the meaning is situated in temporal and social contexts (Elliot, 2006). These three components seem to directly relate to the ways in which narrative methodologies will help me understand the positioning and subjectification process of environmental educators and researchers.

Narrative is a way of recalling past experiences by verbalizing sequences of events, as well as the meaning those events had for the individual in that time and place. The organizing of events into a particular sequence is considered by many to be a key and defining feature of narrative. If the order of events were different then the meaning of those events would likely change. The importance of the sequence suggests that within the story a change in situation over time occurs, which usually is disruptive in some way, and that events must be connected temporally as occurring in the past or present (Lawler, 2002). Sequencing is an important consideration in the conveying and representation of participant narratives to ensure the contextuality of meaningful experiences. Events within a plot are linked to each other by prior events and have connections to subsequent ones (Polkinghorne, 1995). Approaches taken when stories are portrayed in movies or in popular media sometimes use flashbacks to describe how a character came to a particular positioning. The narrator may state that "... but I should start from the beginning" because through the series of significant occurrences, or what the narrator sees as significant occurrences, we arrive at a current subject position. However, that does not necessarily mean that the organization is from oldest to most recent. When talking with participants consideration and presentation of narratives within the context of the sequence of events in which the experiences occur is important. Even without the overt presence of an explicit link between cause and effect it is possible that the reader may read causality into the story (Elliot, 2006). As a result, a researcher must be careful in communicating the

narrative not to interpret causality because the researcher's position results in a particular interpretation of the narrative that may differ from the participant's.

When considering components of temporality and causality, which are complex and beyond a simple cause-effect relationship, likely events that are grouped together into a narrative would, in some way, be related. Even if not made explicit, often the audience will assume causal links (Elliot, 2006). However, individual events taken separately would not have the same meaning or contribute to the larger picture without being situated temporally and in relation. The importance of the context of the narratives is essential to coming to understand participant accounts of their subjectification processes. The speaker positions events within a context because of the meanings they think are associated with the events; alternative interpretations by the reader are possible if events are taken out of context. Causality has been considered to be a central element to narratives as it effectively leads to the progression of events to some sort of point (Bruner, 1986; Polkinghorne, 1988; Somers & Gibson, 1994). I would argue that, in relation to subjectivity, causality is conceptualized in much more complex ways. In considering subjectification processes, events within the chronology, and relationships between events, could be illustrative of contributing to the subjectification process. Environmental educators' narratives could include events in their lives that cumulatively chronicle the subjectification processes which led to their current positionings.

### ***Meanings in Narrative Research***

The meaning of a narrative comes from a combination of components present in most narrative accounts. Labov and Waletzky (1967), and further developed by Labov (1972, 2006), suggest six elements which together comprise the narrative and illustrate its meaning: the abstract (summary of the topic of the narrative); orientation (time, place and context); complicating action (what happened); evaluation (meaning and significance of the action); resolution (outcome); and coda (impact on the present perspective). Not all narratives have all these components but for the narrative to make sense for an audience the aforementioned components fit together to have a narrative be a narrative and not simply a description. While these components may be seen as individual, the intention is not that each piece be dissected but that the narrative should be a celebration of human experience as a whole (Dillow, 2009). The complicating action, which may be described as a significant life experience or component of a life history, and the evaluation are critical in the narrative as it conveys the teller's view of the experience as well as the significance, often linking the self to another (Lawler, 2002).

The ways in which events are collected and portrayed in detailed accounts of lived experience show how lives are lived, the meaning of the experiences, and what is understood as a result (Kiesinger, 1998). Therefore the researcher must take care when narrative accounts are represented so that the contextual meanings are not lost. The fact that the narrative, or events in the narrative, were considered by the participant to be worth telling suggest that the narrator performed an evaluative act

in selecting important components to include as well as how the events are recounted (it was worthy of telling) (Elliot, 2006). The ways in which the components of environmental education researchers' narratives reflect the suggested components of narrative vary; in those rich narratives and the differences between them we find opportunities for connection and reflection by the reader. Environmental education researchers' subjectification processes may have certain components that I, as a researcher, may find to be similar (for example, in the resolution, as participants have similar positionings as environmental education researchers). However the complicating action/process and the meaning/impact that each had is individual. Throughout the narrative the audience witnesses the progression of events and resolution but will also, by engaging the narrative, have a resolution of their own.

The resolution of the narrative is suggested to be the most critical part. The resolution brings the actions and events of the narrative together, and takes the narrative beyond knowing what happened to including the meaning and importance/significance about why the story was worthy of telling. However since I am interested in the subjectification process, the chronology of events is as important as the ending, and considers social and cultural discourses that were part of the experiences and the meanings made. The participants for my study have similar resolutions to their subjectification process—they are passionate environmental educators and researchers. The narratives they contributed are unique because their subjectification processes vary. Given this variability, the narratives of participants show, in view of the various journeys they have

undertaken, how they have arrived at similar positionings in relation to their perspectives on environment and education as well as the ways in which their subjectivity is embodied in their practices, publications and relationships.

Individuals do not live apart from reality. Narratives are social because they are situated contextually and humans are constantly influenced by social and cultural discourses. Human interaction can influence the ways in which meaning is made, or an event is interpreted. Two individuals who observe the same event may interpret and make meaning from that event very differently depending on the worldview and onto-epistemic positioning of the individuals. The social component of narratives also has to do with the role of the listener (or reader) in the construction of the narratives (Gubrium & Holstein, 2009; Mishler, 1986).

Narratives have context in which the story is told and both the teller and listener have roles in how the story is told and is received. Narratives are social products produced by people within the context of specific social, historical and cultural locations (Lawler, 2002). How a story is recounted can depend on the audience because the speaker needs to decide how to best communicate their message, given what the listener can reasonably be expected to know (Elliot, 2006). When we communicate with colleagues or people in the same epistemic group or community of practice, the way we deliver a narrative (language used, assumptions made) may be different than it would be if we were trying to communicate the same events to someone outside of that community (Altheide, 2008). The researcher acts as a co-participant in the telling of the narrative, refrains from making assumptions and is active in the co-construction of the narrative itself. Therefore in the position of

researcher for my doctoral study, I engage in conversations as a co-participant to facilitate the narrative process.

### ***Why Use Narrative Methodologies for My Research?***

The specificity, context and contingent nature of narratives can be sources of critique from those who seek to essentialize and make generalizations about a particular topic. However, the beauty of narrative is in the compelling and unique nature of the narratives. Narrative is a “way of understanding experience” and that “experience is the stories people live” (Clandinin & Connelly, 2000, p. xxvi). Narratives are a way to think about our lives, and complexities and possibilities for how we can live (Dillow, 2009). Richardson (1995) suggests that we should value narrative if we wish to deeply understand emotional human experiences as well as if we “wish to use our privileges [as researchers] to empower the people we study” (p. 29). Narratives can offer a means of exploring the ways in which humans as social actors understand and interpret the world and their positionings within it (Lawler, 2002). They provide opportunities for audiences to be drawn in and vicariously experience events, and confront issues “from vantage points previously unavailable” (Barone, 2001, p. 1). These descriptions of narrative show the potential impact that narratives can have on the audience in leading to understanding and agency. However, Clandinin and Connelly suggest that “stories lived and told educate the self and others” (2000, p. xxvi). The process through which individuals come to convey a narrative requires sense making and understanding to come to construct the narrative that is told (Lodge, 1990). Therefore in addition to a narrative potentially having meaning or providing a way for the audience to identify

with the teller, the telling and construction of the narrative can be transformative and reflexive for the narrator.

Not only do narratives reflect the narrator to the audience and allow the narrator to reflect on the impact of the experience, narratives can illustrate the ways in which individuals interpret the world around them (Holstein & Gubrium, 2000). Narrative is a way in which people can represent themselves to themselves and to others, because individuals exist as social actors. This world in which the actor lives is reflected in the nuanced and complex accounts (Lawler, 2002). Individuals exist as individual and as individuals within particular contexts. Therefore considering social components when making sense of a narrative is important. Some accounts are formed by connecting new events with narratives that an individual has already experienced, or that exist within cultural, social and public narratives (Somers & Gibson, 1994). However, in relaying and representing narratives, exposing those assumptions of context to the reader should be carefully considered for the sake of clarity. In addition, stories that circulate culturally provide a means of making sense of the world and (re)produce materials with which people construct personal narratives to understand themselves and their subjectivities. We can learn how and what to desire through the cultural narratives, or discourses, we encounter, as we constantly (re)position ourselves throughout our lives (Watson, 2008). Care must be taken that, where possible, the social aspects of the narrative are made explicit so that the narrator's accounts are situated and not occurring in isolation.

The context of the narrative is important not only in terms of the temporal relationship between events but also because cultural narratives impact how the

events of that time and place are made sense of and understood. The worldviews and values that are dominant or oppressed can be recognized (St. Pierre, 2000b). Social and cultural beliefs and practices, and individual differences in perception influence the ways in which events are understood. If narratives are fragmented, or situated excerpts, they can provide information about individuals, how they see themselves within society/culture (or their community of practice) and the world itself (Lawler, 2002). The situating of the events and contextuality helps the reader understand the ways in which sense is made in that time and place. Rather than the factual nature or discrepancies between narratives two people constructed from the same experience to determine what happened, the more important consideration is what the significance of the event meant for that individual in that time and place, and as a result of social and cultural discourses (White, 1996). Narrative functions as the glue that enables human life to transcend the natural incoherence and discontinuity of the everyday by imposing a point of origin and an orientation toward closure thereby structuring the otherwise meaningless into a meaningful life (Bamberg, De Fina & Schiffrin, 2007). Both the individual (subjectivity) and the social/cultural (discourse) components must be considerations in understanding the subjectification process.

### ***Critical and Poststructural Influences on Narrative Research***

Influences of critical and poststructural perspectives on narrative inquiry impact the ways in which the subject is viewed, and how the stories of that individual making sense and experiencing the world are approached. What can be said and which stories count depends on the theoretical perspective taken (St.

Pierre, 2000a, 2011; St. Pierre & Jackson, 2014). In contrast to more traditional positivistic or interpretive conceptions of what counts as research, where generalizability is highly valued, narrative inquiry informed by poststructuralism and critical theory offers opportunities to embrace differences. Humans are by nature story telling individuals who can make sense of the world by constructing and reconstructing their understandings of themselves and their positions in it (Connelly & Clandinin, 1990). Much of what we know or come to know comes from telling each other or reading stories of our experiences in both informal (anecdotes) and formal settings (work, research, conferences, presentations) (Gough, 1993). Poststructurally and critically informed narrative inquiry allows different questions to be asked; thus potentially different meanings come through in the narratives constructed. Poststructuralists tend to share the view that everything is socially constructed and therefore narratives are socially constructed within the context of the social and cultural discourses. As a result we should expect differences in understanding. We live in the world and our theories cannot be grounded outside of our understandings of it (Kincheloe & McLaren, 2000). Poststructuralists also tend to be “critical of the view that anyone can get ‘outside’ a cultural discourse or practice to describe its rules and norms” (Gough, 1993, p. 3). Consequently, for readers to have as complete an understanding as possible of the narratives, the situating of narratives is crucial.

When using a poststructurally informed theoretical framework to ground narrative research, researchers should be skeptical of the possibility of metanarratives or grand discourses that exist independent of context

(Cherryholmes, 1988). Rather, metanarratives are larger narratives for which more broad social agreement exists and are constructed by participants in particular conversations (Gough, 1993). Realizing that metanarratives/discourses that exist are constructions made and (re)conceptualized by humans over time can be a staggering proposition when we consider that large portions of what we believe, as well as the support for why we believe it, began as a story. Knowledge is constructed and what knowledge is considered to be valid is dictated by individuals who have certain views and have convinced others to believe the same. Narratives viewed in research grounded in poststructuralism use the context of the narrative in a particular way as well as having a reflexive component to the narrative that acknowledges the situatedness of the narratives. However when using both poststructural and critical theoretical frames, researchers must acknowledge that while discourses influence the subjectification process humans still have the agency to make a decision to either support or *not* support and perpetuate those discourses. As such the narratives of environmental educators are considered as situated within particular discourses that exist within the field of environmental education as well as within the particular academic, social and cultural contexts of the participants.

### **Narrative and Subjectivity**

My primary research question is *How do post-secondary environmental education researchers come to construct their environmental subjectivities?* Given this interest I believe considering the intersectionality of narrative and subjectivity is

important. Articles in research journals have shown increasing interest in the connection between narrative and subjectivity, and studies of “identity formation” have made major contributions to understanding social agency (Somers, 1994). Although the term identity is used, when discussing identity formation and its relation to narrative, the term *subjectivity* seems more appropriate given the meanings associated with the two terms according to Weedon (1987). The tendency for identity to be associated with more essentialist conceptualizations and the problems that categorical approach can cause can be addressed by using the concept of subjectivity as conceptualized through poststructurally informed theoretical approaches. The contingent components of time, space and relationality of the narrative inherently give specificity to the subjectivity. Therefore even though much of the literature that exists discusses relationships between narrative and identity, parallels can be drawn from that research to support the relationship between narrative and subjectivity if the theoretical framing considerations are applied.

From anecdotal excerpts to metadiscourses and worldviews, individuals come to constitute social subjectivities through narratives. Everything we know is a result of a combination of relational experiences and how individuals locate themselves (Davies, 1997). What we know relates to our experiences and relationships. Engaging ontological narratives provides opportunities to bring together studies of the subjectification process with relational and contextual approaches that avoid the rigidity of categorization and the embeddedness of subjectivity in relations over time (Somers, 1994). While narratives can be said to be

just one kind of genre among others (e.g. description and argumentation), narratives have moved into the privileged mode because they can tie together existent analogies between life, biography and story (Bamberg, De Fina & Schiffrin, 2007). The combination of these components can help illustrate the subjectification process leading to a particular positioning at a particular moment in time as well as reflect the contingent and continual ways in which individuals (re)position themselves.

The concept of *difference* has led to a varied array of narrative research where those experiencing marginalization and oppression have been given voice. That voice has given social agency to those who have been othered by humanistic and modernist worldviews. Examples from poststructural and feminist theory suggest that new theories are necessary and that narratives of individuals should not be made to fit within the current spectrum (St. Pierre, 2011). Therefore in terms of an environmental subjectivity, or more specifically environmental subjectivity of environmental education researchers, new theoretical perspectives informing narrative methodologies from the perspective of subjectivities of interest must be developed. Using the same approaches to researching questions about subjectivity that essentialize individual positionings just maintains otherness since researchers are still operating within the scheme that creates that position. Narrative provides the opportunity for stories to be communicated and perspectives made known. The most dominant narratives, master narratives, are perpetuated and legitimized to preserve the status quo and sustain those power relations which maintain discourses and binaries of difference or other (Watson, 2008). However,

such discourse maintenance is indicative of larger problems of the dominant social paradigm which functions to dictate what is *other*. Although new paradigms are necessary, it is difficult to conceive of something that would avoid merely shifting marginalization from one to another.

Somers (1994) describes the stories that social actors use to make sense of our lives and define who we are as *ontological narratives*. Therefore ontology is an important consideration in the subjectification process and decision-making concerning positioning. Our understandings, ways of being in the world and what we know guide and inform how we make decisions about what to do. This process may be much more complex than it seems because we are not necessarily conscious of what makes us do something. Ontological narratives are social and interpersonal. However, in doing we are producing new narratives and new actions. Lindsay, Kell, Ouelette & Westall, (2010) suggest that the narrative process allows participants to critically reflect on their personal construction and positioning thus providing opportunities for the participant, as well as those who will eventually read the narrative, to benefit from the experience. In terms of environmental education the doing and active participation in the construction of narratives provides opportunities for connections to be made back to the ontological narratives to find the roots of that *doing* as part of individual environmental subjectivities.

To have some sense of being requires that lives be more than a series of isolated events in different contexts. Rather than a more static conceptualization of *being in the world*, ontological narratives make subjectivity and the self something that one *becomes*; and the process is never complete (Somers, 1994). Somers (1994)

argues that ontological narrativity is essential to agency because of the encompassing of agency in social life. In addition to ontological narratives, the increasingly broad public narratives/metanarratives are ontological narratives accepted by larger groups of actors. Therefore part of the subjectification process is the adoption of these ontological narratives from social interactions as well as the agency afforded the individual by accepting or rejecting those narratives.

### ***Counter Narrative and Environmental Subjectivity***

Counter narratives have been described as “the stories which people tell and live which offer resistance, either implicitly or explicitly, to dominant cultural narratives” (Andrews, 2004, p. 1). Poststructuralism suggests that we should be skeptical of all dominant cultural narratives while critical theory supports not only critiquing the dominating structures but once carefully critiqued then presenting possibilities for change in particular directions. This skepticism and directionality for change is particularly relevant for environmental educators and researchers as the dominant discourses often oppress the environment while resistance and change in favour of the environment are important. Because environmental education researchers’ stories illustrate the ways in which they must work both within and against the dominant educational, social and cultural discourses, at least part of their narratives could be considered to be counter narratives. Researchers looking at subjectification through narrative/counter narrative argue that people are guided to act by structural and cultural relationships, and therefore power relations, in which they are embedded and it is from such relationships that they constitute their subjectivities and take action (Somers, 1994). If people do not

recognize the discourses in which they are embedded then taking action is difficult. Telling a story from a critical and potentially subversive positioning of the self gives power (Watson, 2008). While an individual's position may not be the dominant one, that does not mean that the conversation will provide a less powerful narrative and may be even more powerful because of the courage and passion that is required to feel as though one is constantly in opposition to the norm.

In Chapter 2 I discussed the theoretical understandings that inform how concepts of discourses, and social and cultural norms, are human constructions that emerge from the agreement of a group of individuals on a particular narrative. This understanding overlaps with narrative and how we think about the ways in which narratives are interpreted and read. Once increasing numbers of people believe the same narrative, often led by those in positions of power who have an interest in maintaining that story, it could become a master narrative. Over time master narratives gain strength through increased acceptance, and transition from consciousness to subconsciousness along with understandings of the constructed nature of the narrative. These master narratives become social and cultural discourses, and come to be the discourses and paradigms within which we live. Particular narratives being chosen preferentially over others results in environment having been marginalized over time. There continues to be (re)production of the oppressive power structures and environmental discourse continues to be marginalized. As narratives can form dominant discourses, counternarratives can form oppositional discourses (N. Gough, 2001). Environmental education can be thought of as an oppositional discourse which counters the dominant educational

discourses. Within this oppositional discourse environmental educators position themselves and that narrative serves to unite them towards a goal.

### **Discourses in Narratives**

My primary interest is in the narratives and individual accounts of experiences from participants in my doctoral research. However, I anticipate that the narratives may provide insights into the discourses of environmental education by linking the narratives of the various participants into a network. Research into school renewal has shown how networks of individuals who together construct a particular vision for education and subsequently a process for schools can be beneficial for collaboration and future change (Burke, 2010). Networks or communities of practice illustrate the common beliefs among researchers and educators with whom individuals choose to associate. Who participants choose to associate with, and who they choose to read and reference in their work can reveal the ways in which individuals view themselves and their positioning, and can help clarify, for the reader of a narrative, the meaning. Thus the social and cultural aspects of the narratives will be important to consider as I interact with participants to co-construct their narratives and make sense of the connections to and diffractions from the emerging discourses.

Some research suggests that, in addition to the interactions and collaborations of individuals, the actions of those individuals illustrate and reflect the embodiment of the individuals' subjectivities (Paulus, Woodson & Ziegler, 2010). Higgins, Nairn and Sligo (2009) argue in the practices of individuals,

including research, publications and teaching, there is symbolism in the pieces they construct and how they perform their subjectivity. When having discussions with participants in my research, there may be things in their writing that act as symbols (words, phrases, etc.) that illustrate participant ideas and positioning, embodiment of their subjectivity, and that are reflective of environmental education discourses. Additionally socio-cultural influences, which exist as a result of the societal and institutional discourses, can be brought to light within the fabric of the narrative both explicitly, as described directly, and implicitly, in the language used and assumptions made (Black, 2007). Thus interactions and activities of individuals can be reflective of their interest and important aspects of the ways in which we can understand a complex concept such as environmental subjectivity. How the narrative is taken-in by the reader will vary in the depth and level of engagement (Burke, 2010). Having examples of practices, writings and actions of individuals should contribute, both as part of the narratives and as supplemental to them, to understandings of positioning and worldview that reflect environmental subjectivities.

### **Concluding Thoughts on Narrative Methodologies**

Narratives and discourses seem to be linked in two respects. First, narratives are situated within a context and are formed as a result of influence of social and cultural discourses. Second, discourses themselves were narratives that over time have come to be accepted broadly. In the same way counter narratives and oppositional discourses are related to each other in their construction and

(re)production. During conversations with research participants, I hope to gain insight into their subjectification processes that lead to their positionings as environmental educators. What an individual views as important, or values, can lead them to position themselves in particular ways and environmental and ecological values are no exception (Payne, 2010b).

Discourse and subjectivity are intricately connected as both serve in the construction and (re)production of the other. Personal values and beliefs spring from social and cultural beliefs and each feeds the other (Grushka, 2009). Even within this interaction, there is always the added layer of complexity of the agency of the individual to make decisions about which discourses to reproduce and which to not. In narratives of environmental education researchers, I anticipate that both the subjectification process and environmental education discourse will be present. There is much complexity in examining and articulating the subjectification process (Higgins, Nairn & Sligo, 2009; McLeod & Yates, 2006; Nairn & Higgins, 2007). However, I believe that narrative inquiry methodologies are the best approach and make the most sense in addressing my questions of interest. I think that the narratives of my participants will illustrate not only the specific accounts of their subjectification processes in coming to position themselves as environmental educators but also the discourses of environmental education. Both the subjectification process and environmental education discourses will be important in considering the ways in which environmental education is integrated and addressed in teacher education programs and ultimately manifest in future classrooms for future generations.

What is accomplished in the research process in which participants engage and that is of interest is not merely a means to “generate knowledge about the individual self of each storyteller, but as a means to provide knowledge about the ways in which individuals are made social and are discursively constituted in particular moments” (Davies & Gannon, 2006, p. 4). While interests focus on the differences in participant subjectivities and subjectification processes, the informal and formalized discourses of environmental education may be manifest in participant narratives, which may provide opportunity for further discussion. I wanted to create conditions and a space for an appreciation of the individual journeys of participants in coming to position themselves in particular ways and with consideration of influences along the way. My interest is in the specificity of the individual experiences, how they are presented, and how subjectivity can be understood with reference to “global phenomena and frameworks . . . and in terms of how [participants] negotiate and are formed in the intersection of local and global contexts” (McLeod, 2009). An individual’s worldview, particularly an environment-related worldview, is a manifestation of their identity/subjectivity. It can be visible in several ways that they consciously choose to position themselves within as well as a variety of contexts. These positionings and contexts are expressed in their narrative accounts. Subjectivity research looks at the expression of experience in time and place as well as “forms of identification—both conscious and unconscious— which are associated with experience” (Dillabough, 2009). By providing opportunities for forms of narrative, as embedded in the discourses of culture and environment, I attempted to create conditions for the articulation and

expression of how these ideas and experiences interplay with their academic work of teaching and writing, and discuss how their disciplines and requirements impact each participant's performing in respect of their worldviews and subsequently how they come to position themselves.

## **Methods**

The following sections illustrate the use of the interview methods as well as the ways in which the theoretical framing influences the ways in which those methods are applied. I discuss the selection of participants and the interactions with participants, their narratives and their writings. I also provide an introduction to the "analysis" approach that has governed the ways in which Chapters 4 and 5 are structured as well as how the approach to analysis reflects the theoretical and methodological grounds of this work.

## ***Interviewing***

The participants for my study form what could be considered a unique group. All participants are environmental education researchers. They are familiar with how one approaches research because they engage in research processes themselves. All participants have engaged with different qualitative approaches to research, and have an understanding of the ways in which I have chosen to frame my study. Each participant, however, has varying degrees of familiarity with the specifics of the concepts I have selected and how those concepts are informed by the theoretical and methodological groundings I have selected. Additionally, because I am interested in the differences as well as the similarities in participant

environmental subjectivities and subjectification processes, a more flexible, contingent and dynamic approach to the interview process would be necessary. Mishler (1986) is a well-known advocate for the use of qualitative interview as well as for proposing alternatives to standardized survey interviews.

Given the conversational style of interview I used, I anticipated that approaching ideas of subjectivity through dialogue could produce conversation around relational and socio-cultural aspects. Such aspects can be conceived as another layer within complex discussions that bring subjectivity into context and out of the individual psyche (Bucholtz & Hall, 2005). Use of focused discussions or conversations with participants is therefore considered to be a productive method to allow them to share their thoughts and consider variability in the flow of conversations. Rather than a more traditional interview with pre-determined questions asked in a particular order, a more conversational style of interview is a better way to provide an opportunity and to create the conditions for the participants to share their experiences and ideas about their positionings and about from where they came. Mills (2001) describes a discussion approach to interviewing as more of a social practice, where both researcher and participant engage in the construction of the narrative and its meaning. The conversation becomes a process where, although guided, there is latitude for exploring specific significances.

The interview itself can be described as “the interviewee’s best attempt to describe or explain, in the particular dialogic context of the interview, what he or she remembers, based on a particular history of observation and experience” (Davies & Gannon, 2006, p. 1). The best attempt is confounded by the fact that

tracing the process of identity formation or the constitution of subjectivity is described as being an elusive endeavour (Doucet & Mauthner, 2008; Higgins, Nairn & Sligo, 2009; McLeod & Yates, 2006; Nairn & Higgins, 2007). Subjectivity and the subjectification process are difficult ideas to describe and discuss and conversations can be messy or clumsy as participants attempt to articulate their own understandings in ways that others might understand and relate to. Higgins *et al.* (2009) outline several useful guides for how to examine the subjectification process based on interview talk as attempts to frame approaches to the kinds of conversations out of which ideas about subjectivity might come (including Cameron 2001; Wetherell, 1999; Wetherell & Potter, 1992). Kvale (1996, p. 145) offers suggestions for best practices, often mentioned in the methodological literature, that can be conceptualized into six criteria upon which interview quality can be judged. These criteria informed the ways in which the interviews in my study were conducted so that the conversations would be of the best quality.

Kathryn Roulston (2010a, 2010b) considers quality in qualitative interviewing which can help ground an approach to interviewing originating in concepts from critical and poststructural theories. In her paper, Roulston (2010b, p. 204) suggests six conceptions that help make sense of how theoretical framing relates to method and therefore would influence the approach to interviewing based on the researcher choices of theoretical framing. These proposed conceptions were valuable in conceptualizing my approach to the interviews as well as helping illustrate the ways in which I would be practicing the theory that informed the approach to my research. Drawing on a variety of sources, Roulston (2010a,

2010b)) proposes a typology illustrating six approaches to interviewing informed by different theoretical framings. For each type Roulston highlights conceptions of qualitative interview and possible research question, theoretical assumptions about social research, methodological issues highlighted in the literature, criticisms of this approach to interviewing, and approaches to ensuring quality of research compiled from the consulted literature (Roulston, 2010a, p. 204). After reviewing all of the options, and considering the theoretical framing and concepts upon which I have grounded my work, the postmodern and transformative categories seem to be the best fit for my interest (Roulston, 2010a, p. 210-214). Therefore in creating conditions for conversations with participants I followed the suggestions within these typology categories as well as consulting the authors that were referenced to support those typologies (Denzin, 2001; Eisner, 1997; Freeman, 2006; Kvale, 1999, 2006; Pillow, 2003; Richardson, 1999; Scheurich, 1995; Wolgemuth & Donohue, 2006).

My interest and intent is not to seek totalizing truths but rather value and celebrate the particular, local and situated truths within the context of each participant, their subjectification process and their understandings of their environmental subjectivity. Watson (2007) suggests that if we understand subjectivity and subjectification as ongoing processes accomplished locally in and through everyday interactions, then we must value what she calls small stories or the context specific instances worthy of note in the ways participants articulate and understand their subjectivities. Moreover, the construction of the conversation and

narrative through the interview process can aid in our understandings of ourselves (Watson, 2008).

The participants' interest in discussing their ideas, engaging in critically reflexive discussions and being conscious of their positioning in their publications suggests they could be interested in talking about their environmental subjectivity. By having focused discussions, potential exists for mutual construction of the narrative and less researcher interpretation so that ethical concerns about the process and production of meaning can be carefully considered (Lapping, 2008). From the books and articles in peer-reviewed journals that the participants have written, those I selected to be in my participant group are all coming from similar epistemic communities and have similarities in the frames of reference that support their positioning (Altheide, 2008; Shome, 2009). Additionally, using interviewing and narrative methodologies would be familiar approaches to research among participant environmental education researchers. Examples of qualitative studies using narrative methodologies and interview methods within the field of environmental education are common and utilized enough that critiques of and reflections on quality of these approaches to research have been documented and published (Hart, 2002, 2013). Several references that I consulted to better understand the process of interviewing and the co-construction of the participant narratives should be acknowledged (Cameron, 2001; Wetherell, 1999; Wetherell & Potter, 1992; Wetherell, Taylor & Yates, 2001).

### *Critiques of Interviewing*

Interview methods have been critiqued as a means to elicit data that will inform understandings of the meaning that participants make of their lives, experiences and what is of importance to them (Roulston, 2010a, 2010b). Concerns arise about the fact that interviews are thought to produce insufficient forms of data. However, the argument of insufficiency is only relevant in particular circumstances and depends on the research question. Being completely representative when collecting rich, thoughtful interview data is impossible nor is it the intent. Therefore critiques questioning generalizations made about entire social or cultural groups based on a very small number of interviews are reasonable. The goal, however, is to disrupt existing theory through reading the interview data and to, through their memory work, discover the constitutive means by which participants formed themselves into particular individuals. The goal is also to learn how participants subjectivities form within and into pre-given structures within which they reproduce both themselves and the categories of society (see Davies & Gannon, 2006). Therefore interview is a reasonable method to use.

Another critique against interview methods is found when there are instances of incongruences between the interview methods employed in a study and the epistemological and theoretical assumptions upon which the study is grounded. Concerns arise when a researcher espouses a theoretical grounding for the work but then proceeds to collect data in a manner that is inconsistent and discrepant with the theories stated. However, given the goal of my research, the theoretical and associated epistemological foundations and concepts outlined, and the

consideration of the approach to the interview mentioned in the previous section, I think that I have, to the best of my ability prior to the interview/data collection processes, accounted for as many of the critiques as I could anticipate. Additionally I must engage in critical reflexivity and consideration of my own positioning, values and assumptions that would influence the ways in which I might engage with and represent participants (Hart, 2002, 2013).

Concerns have also been raised about power dynamics that exist between participant and researcher. Researchers often occupy a position of power in relation to participants and thus concerns arise about the responses of participants, or what is or is not said, in the context of conversations because of perceptions about how responses might be interpreted or represented. In this research, participants' experience and positioning as environmental education researchers mean that they are positioned in what could be perceived as positions of power because I am relatively new to the field of environmental education research and a doctoral student. Additionally, the interest in the narratives of participants is not with a specific goal aside from providing opportunities for participants to share what they are willing and to have those narratives displayed rather than analysed, coded and dissected for themes or codes that support an hypothesis or any sort of "answer". As a result of my interests, framings, approach and my own positioning I have considered and addressed potential concerns about power dynamics that could exist and how those might influence the conversations with participants.

### ***Inviting Participation***

Given my interest in environmental subjectivity among those who have come to position themselves as environmental education researchers, I chose to begin my process of developing a potential participant list from those whose work is being published in major environmental education journals, including the *Journal of Environmental Education*, *Environmental Education Research*, *The Canadian Journal of Environmental Education* and *The Australian Journal of Environmental Education*, as well as papers published in the proceedings from both the American Educational Research Association Environmental Education Special Interest Group and North American Association for Environmental Education Research Symposium.

My reading within the field led me to identify individuals as potential participants whom I wanted to invite to be part of my research. There are several post-secondary environmental educator researchers interested in critically reflexive research and publications. I believed that these thoughtful academics would provide me with the opportunity to work with educators who are critically conscious of their position and worldview, with respect to environment and their work in the academy, and have given some thought to how they got there. Potential participants who I identified from my readings of journals and conference proceedings and attendance at conference presentations included:

- Nicole Ardoin (Stanford University, CA, USA)
- Charlotte Clark (Duke University, Durham, NC, USA)
- Amy Cutter-Mackenzie (Southern Cross University, Australia)
- Leesa Fawcett (York University, ON, Canada)
- Peter Fenshan (Professor Emeritus, Monash University, Australia)
- Annette Gough (RMIT University, Australia)
- Joe Heimlich (The Ohio State University, USA)

- Elin Kelsey (Royal Roads University, BC, Canada)
- Regula Kyburz-Graber (University of Zurich, Switzerland)
- Greg Lowan-Trudeau (University of Calgary, AB, Canada)
- Jonas Lysgaard (Aarhus University, Copenhagen, Denmark)
- Marcia McKenzie (University of Saskatchewan, SK, Canada)
- Milt McClaren (Simon Fraser University, BC, Canada)
- Phillip Payne (Monash University, Australia)
- Mark Rickinson (Oxford University, England)
- Connie Russell (Lakehead University, ON, Canada)
- Lucie Sauvé (UQAM, Canada)
- Bill Scott (Professor Emeritus, Bath University, England)
- Arjen Wals (Wageningen University, Amsterdam, Netherlands)

Several researchers selected for initial contact were participants at the recent 11<sup>th</sup> Invitational Seminar on Research Development in Environmental and Health Education in Queenscliff, Victoria, Australia, July, 2011. The conference, entitled *Positioning Environmental Education Research for 2015 and Beyond: Knowledge Value and Integrity, Intergenerational and Globalization Issues* brought together researchers who were interested in discussing and participating in a seminar to probe and push, in a critically reflexive and generative way, about the nature of the field of environmental education and further articulate the quality of knowledge generated through their research and the value ascribed to it (Payne, personal communication, May 3, 2014). The seminar program was comprised of participant biographies so that participants could better know their fellow attendees interests and approaches to research. However, unlike more traditional biographies or CV's, which generally include individual achievements, publications and encapsulate tightly prescribed, human capital focused versions of identity (Higgins *et al.*, 2009), these bio-statements were based on the participants responding to several guiding questions about their current research program or

project and its problems or challenges. Participant biographies also included four key publications that have contributed to their research in environmental education, four key publications of influence from outside of the field of environmental education, as well as ideas for potential contributions for an edited book or special editions of a journal in which they would like to participate. These biographical thoughts/submissions provided an example of ways in which I could engage participants prior to the first interview conversation and gave me some insight into what potential participants felt was important to share in terms of embodiments of their environmental subjectivity.

The participant short list was not in any way comprehensive or representative of all environmental education researchers. The goal of my research is not to establish any sort of total or essential picture of a whole, or definition for what environmental subjectivity looks like. Rather my interest is in the individuals and the understandings they have about their environmental subjectivity and subjectification process. The researchers included on the short list are at varying stages of their careers (from those who have recently completed doctoral studies to those who are close to retirement); include those who identify as male and female; and include individuals from several different countries. The difference and specificity of the narratives of participants is something to be embraced and, in spite of the different contexts, there may be environmental education discourses that are revealed across the accounts.

### ***Participation and Conversations***

Prior to finalizing a participant list, I made informal contact with several of the potential participants listed above. As all of the participants are active researchers and many are faculty members at universities, and are therefore actively teaching, researching and writing, I anticipated some might have been unable to participate. Although some were uncertain whether or not they would be able to meet the approximate timeline for participation I suggested they all expressed interest in my proposed research. From my initial engagements with participant research I thought that each potential participant could bring a thoughtful and critical perspective to the study. Initially I intended to have a smaller number of participants, perhaps five or six, because I thought more participants would be too large a participant group for the type of in-depth, narrative work I intended to conduct.

I applied for and received ethics approval from the University of Regina Research Ethics Board (see Appendix D). I contacted nine potential participants by email to ask them to be part of my research and attached to the email a two-page summary outlining my topic, the theoretical and methodological framings and research questions to provide a description of what they would be asked to do. Within less than a week I had positive responses from all nine of the researchers I had contacted. Following their expressions of interest to participate, I sent participants a formal letter of invitation (see Appendix E), including a consent form (see Appendix F) and outline of the areas for discussion that I thought could guide our interview conversation (see Appendix G). I included the broad areas for

conversation so that participants had an opportunity to see the kinds of topics that could stimulate the conversation and so that they could have the opportunity to consider and reflect in advance. In the email I asked participants to send me a copy of their CV and any articles, that they had written or which they found to be influential to their understandings, and that they felt could contribute to conversations on the ways in which they reflect on, embody or understand their own subjectivities.

Once the consent forms for each participant were signed and received I began conversations with the participants. Conversations were expected to be between 45 and 60 minutes; however, because of the dynamics of the conversation and participant interests, some conversations did go longer than 60 minutes. Conversations with participants took place over Skype, which was a reasonable alternative to having in person interviews. The widespread locations of participants did not allow for in person conversations. Participants indicated that the video did create an environment that was more similar to an in-person conversation. Three interview sessions did take place with audio only because of technological difficulties which prevented video from being used. All conversations were recorded using EndNote software and were then uploaded into iTunes for transcription purposes and for storage. All storage of the conversation digital files was done in compliance with the Research Ethics Board conventions.

The first conversations with all participants occurred before any of the second sessions. The initial conversations were intended to allow for open-directed discussions of autobiographical work related to, for example, conference

biographies and autobiographical papers, as well as the narratives they contributed verbally. The first session was intended to be quite descriptive in nature beginning with participants introducing their approach and giving an account of themselves and how they see themselves in relation to environment and environmental education. Although I used an interview guide to keep conversations directed towards interests in environmental subjectivity and subjectification processes, each interview was unique and evolved as participants contributed what they thought was important and meaningful. In some cases participants discussed topics of interest without any prompting or guiding questions. I directed conversations towards personal and significant events or transitional/branch points of their childhood, adolescence, university life as students, graduate studies and as younger/newer faculty. I also asked each to comment on related interests and concerns about children and the future of environmental education and environmental education research. Within their professional lives conversations were focused more around teaching, research (writing, papers, conferences, presentations, community of practice), and academy (within academy outside of community of practice— e.g. potential stereotyping, discrimination, marginalization, oppression). The interview framework served as a guide rather than a rigid structure for the conversations. Because the interview framework had been sent to participants in advance, participants led the discussions to address what they thought were important components while the framework helped me to ensure all areas of interest were discussed.

Following each initial conversation I transcribed and analyzed the discussions. From these transcriptions I identified and collected specific points that were used to focus subsequent discussions more directly on environmental subjectivity and positioning. During and following each interview I made field/researcher notes about things that emerged during the conversation that I thought should be revisited. I also wrote my own reflections on the conversation and the meanings I made about the interactions. In addition, I identified some key pieces from the writings participants contributed that I used to help focus discussions on what participants think about themselves, and how their environmental positioning/subjectivity is manifest in their research, teaching and conference presentations and participation. Using the first interview transcripts and carefully selected sections of written material I intended the second conversation would provide opportunities for more layered reflections. Layering of interview transcripts with participant written works and presentations follows approaches outlined and described by Frentz and Hocker (2010). Using this layered approach to data collection, the conversations were deepened by engaging key ideas from initial discussions in focusing attention on how participants came to position themselves the way they have within the academy and personal lives. I transcribed the second conversations in the same manner as the first, and made notes during the interviews and throughout the transcription process.

## Participant Assemblages

Rather than analysis I think *representation* is a more appropriate term to use to describe the engagement of the participant narratives and the ways in which participants are portrayed. I had in mind an approach to examining participant text in terms of understanding human subjectivity relating to four dimensions/aspects of subjectification: relationality (identity formation as it relates to social interactions between individuals), embodiment (lived experience of the individual), affectivity (emotional feeling/connection) and discourse (the cultural norms which penetrate and influence all aspects of our life). One of the challenges I encountered while attempting to organize all of the narrative and written material, during conversations and following the interactions with participants, was how to appropriately portray the individuals, their stories, understandings, positionings, worldviews and subjectivities without essentializing, breaking things down, or using anecdotes and narratives without providing sufficient context. At the same time I needed to make decisions about what I could reasonably include so that I was not merely inserting pages of conversation transcript. Just as the interviewee is engaged in interpreting and thus constituting her world, either in telling us about it or engaging in it in observable ways, we as researchers are engaged in interpreting and analyzing (Scheurich, 1997). As has been the case for the theoretical and methodological framing of this study, framing research is something of a process of “derivation and invention of conceptual apparatuses for particular contemporary research” that is necessary to appropriately ground the approach that makes sense for the questions I am trying to ask (Marcus & Saka, 2006).

One of the ways in which participant narratives can be represented is through what are described as *participant portraits*. The concept of portraiture is used to help illustrate and represent participants, their stories, writings and ways of being in the world. Timmerman (2013) uses portraiture to portray three participants in her doctoral research and her understandings, through narrative methods, of their ecological integrity. Ideas about the ways in which portraiture can act as a representation of an individual are likened to the weaving of a tapestry (Lawrence-Lightfoot & Hoffman Davis, 1997) and the end result is a portrait showing the overarching story to create a “vision of the whole” (Timmerman, 2013, p. 86).

While portraiture provides a reasonable approach to representing participants and their narratives of their understandings of their environmental subjectivity and subjectification processes, I think there is a finality associated with the concept of a portrait. The language of portrait suggests a level of simplicity that does not seem to consider the extreme complexity that the concept of subjectivity and subjectification processes demand. Subjectivity and worldview are more than a two-dimensional image taken at a particular time. Interactions between subjectivities and the ways in which individuals live and position themselves are not necessarily visible merely by taking a snapshot of the surface. Additionally, entertaining the idea that one can capture the whole completely seems to be a bit naïve because although participants might be quite willing and open in sharing and conversing around their ideas, practices and embodiments of themselves, there are

still invisibilities and silences that cannot be captured and therefore not assumed and thus not part of a representation of the whole.

*Assemblage*, as a way of representing research, is described as “a sort of anti-structural concept that permits the researcher to speak of emergence, heterogeneity, the decentered and the ephemeral in nonetheless ordered social life” (Marcus & Saka, 2006, p. 101). The concept is most closely associated with theories proposed by Deleuze and Guattari (see, for example, Deleuze & Guattari, 2004). I argue assemblages capture the idea that when trying to look at environmental subjectivity we are looking at a process that is emergent and ongoing, contingent and complex and at the same time these processes are happening in organized social and cultural conditions. Since subjectivity and subjectification processes are, at least in part, socially constituted, considering social aspects that contribute to individuals conceptualizations and worldviews as well as how those ideas are formed over time and in particular contexts is important (Farquhar, 2012). The attributes of the concept of assemblage allow for the consideration of the ways in which social and cultural influences are important aspects, being in agreement or opposition, of the ways in which individuals engage in processes of becoming. Assemblages are also described as having no essence and are the product of difference (Marcus & Saka, 2006). This way of thinking seems consistent with the poststructuralist theories around subjectivity where the different is valued as much, if not more, than the similar.

The use of *assemblage* provides a concept through which participants’ stories, as representations of their environmental subjectivity and subjectification

processes can be expressed and valued for their difference. Mazzei and McCoy (2010) illustrate ways in which Deleuzian concepts can be used to view participant narratives in particular ways as well as how the concepts can be used to make sense of the data. Examples of how assemblage has been used to come to understandings of subjectification processes include uses to understand divergent professional practices among educators (Beighton, 2013) and provide insights into similar approaches to research where this concept was employed. Assemblage is the language used to describe ways in which participants represent themselves through the co-constructed conversations at the time and in the place that those conversations took place and the understandings and ways in which meaning is made about subjectification processes, positioning and subjectivities.

### **Summary**

In this chapter I have illustrated the ways in which I have framed my research in terms of the methodological approach and the methods. I have also, with respect to the epistemological and theoretical concepts, discussed the ways in which I have considered and incorporated poststructural and critical theories in the approach to the methodology and methods. It is quite clear that, given what can be found in the relevant literature, critiques of narrative methodologies and interview methods exist. With that in mind I have, to the best of my ability, considered those critiques and have conceptualized and framed the *doing* of my research to address as many of those as I am able.

## Chapter 4: Participant Positionings and Narratives

### Introduction

Before introducing each participant and their narratives I feel there are points that should be clarified regarding some of what has been shared, my positioning in relation to participants and some references that are made. First, the autobiographical information about participants, their positions, locations and accounts shared are as of the date of the conversations. It should be noted that changes may since have taken place and details have been included where possible to clarify locations and dates. Participants have been given the opportunity to review transcripts of the conversations, as indicated in the REB approval, and have consented to having their names used rather than remaining anonymous or using a pseudonym. I have also, given the framing to my approach to the conversations with participants, left it up to participants to describe intersecting subjectivities as they see fit. Where participants feel their environmental subjectivity has been influenced, for example, by their gender, ethnicity or socio-economic class, that information has been included. However, as participant assemblages are being constructed based on what participants chose to share, additional personal information has not be inferred or included. There is a need, I believe, to address intersections between environmental subjectivities and subjectivities of individuals with respect to race, class, gender, ability, sexual orientation and all spaces that individuals occupy. However, for the purposes of this research I have not taken on a particular intersection with environmental subjectivities nor do I attempt to be comprehensive in any way of the other than environmental subjectivities (re)presented. The

(re)readings of the narrative texts could be a future direction for environmental subjectivity research and would, I am certain, make valuable contributions but at present I cannot do justice to this particular interest.

Secondly, in terms of any ethical concerns around power dynamics between participants and researchers, as readers will see all of the participants in this research are in what I would consider to be positions of power in relation to me. All participants have (a) completed Ph.D., have published (depending on where they are in their academic career but most have published extensively) and presented at peer-reviewed academic conferences and already occupy an academic positioning. Therefore, as indicated in the ethical approval for this research, the participants are at no risk, have had the opportunity to review the transcribed interviews, made changes, additions and deletions where they have seen fit and are not in any kind of compromising position.

Finally, I would ask readers to consider that the pieces of conversation presented in this chapter are presented as they happened in the conversation and therefore the language is that which reflects a discussion between two people and not necessarily using language that would appear had I asked participants to present written contributions. The language used is that of dialogue and co-constructed conversation. It is informal and more casual than would be found in any of the written contributions participants identified as being key pieces that could help articulate their positioning (see Appendix H). The selected works that participants contribute further help present participants research interests, demonstrations of their worldview and reflections of their environmental

subjectivities which support the narratives shared in conversation. The narrative contributions are pieces of larger assemblages that provide an opening and invitation for readers to share an understanding of how the participant environmental education researchers articulate, perform and live their environmental subjectivities.

### **Starting to Describe My Own Environmental Subjectivity**

I do not mean to position myself ahead of my participants by putting a section discussing my own understandings of my environmental subjectivity first. This is in no way a reflection of the relative importance of my story in comparison to theirs. However, I think that acknowledging my understandings of my positioning and my own subjectification process is important in terms of sharing the lens through which I view participant conversations and the context from which I contributed to those conversations. I have tried to provide some context so that readers may see how, in the position of participant in the construction of the following narratives, I came to position myself as I have – or at least I will try to articulate that as my own understandings and realizations are still a work ongoing.

I come to environmental education, as have many others, from a background in biology and environmental science. Prior to taking up environment in a more formal way in university I have always had an interest in the natural world and had a care and respect for living things – probably most specifically in relation to animals. I am still working to understand where that worldview came from but I feel that engaging with participants in the co-construction of their narratives has

contributed to that. Although I am coming to see it now, I did not realize as a child how growing up as the daughter of an environmental education researcher likely contributed to my interest in the natural world, interest in taking a critical perspective and pursuing environmental science and biology before taking up environmental education myself. However, while the subject matter interested me, the natural sciences were an uneasy fit. I could pursue an interest in climate change, health of ecosystems and environmental issues. But in the scientific approach there was a lack of relationship between humans and the more-than-human and an objectivity to the approach to research that left a gap and incompleteness in my understandings. As Orr (2004) describes, the health of the planet is a social issue that needs to be engaged and therefore while we can understand the science of the issue, it is the responsibility of humans to affect change. The influence of John Fien (1993) describing differences in worldview and the need for critical engagement of environmental crises further echoed with my own interests in including understandings of human relationships *with* environment and shifting understandings to value the world we live in in ways that go beyond statistical analyses.

The transition point into my doctoral studies and engaging with environmental education was a time when I made decisions to take up my interest in education in conjunction with my interests in environmental concerns, including social and environmental justice. That transition brought me to a place that I felt a sense of belonging among a group of like-minded environmental education researchers and where I felt subjectivities I had not previously realized were

brought into focus. I developed a language for understandings I had but had previously been unable to articulate. And while I realized that there is diversity in worldviews, I found a community of people whose worldviews about environment, including all living thing, and social and ecological justice issues, aligned with my own at least with respect to those topics. I identified with the ways in which environmental science content is of importance but also the ways in which environmental issues, the meshing of social and ecological justice and the possibilities of taking action through environmental education research were valued among those in the field.

Both my parents contributed to my own subjectification processes. I was raised in a house where the dominant discourse was to critique the taken-for-granted and not simply accept. Only after I began to encounter challenges to my own post-critical perspective did I realize that what I had come to understand as commonsense was not the same for others. I was the fish who could not see the water. My worldview accepted multiple ways of knowing and less rigid gender stereotypes than that of my peers. Recalling events now, I realize that my peers believed their worldview just as strongly as I believed mine to the point of conflict where I was ostracized. I reacted against the neoliberal ideals of individualism and consumerism and questioned gender roles as they appeared among my peers and in the media. But to me that questioning and critical perspective was commonsense. My Dad's influence with respect to environmental education has been ongoing but, I feel, not obvious. There are not specific events that I would describe as influential, but the worldview of both my parents has directly influenced my own such that I am

interested in environmental justice and disrupting normative discourses that oppress humans and more-than-humans. It has always seemed second nature to me to look after the world/nature/environment and it continues to be frustrating to try to understand how that is not more of a priority more broadly among societies and cultures.

I realize that I am only starting to understand and describe my environmental subjectivity as an environmental education researcher and that even over the course of my doctoral studies I have realized the ways in which my own subjectification process has, and continues to, progress. I thank my participants not only for their contributions but in allowing me to engage with them as I develop my own understandings of being aware and critical of the ways in which we take up our multiple subjectivities and the importance of environmental ontologies. My own engagement with participants has helped me better understand my own positioning, worldview and environmental subjectivity as intertwined with my multiple subjectivities. But being part of the conversation and engaging with participants, as Sermijn, Devlieger & Loots (2008) suggest, means becoming part of the rhizome. Instead of the researcher listening and then representing narratives from an outsider perspective, the researcher is enmeshed with the narrative and becomes a part of that process.

### **Annette Gough**

Dr. Annette Gough is a professor of environmental and science education in the School of Education at Royal Melbourne Institute of Technology (RMIT) in

Melbourne, Victoria, Australia. Her doctoral dissertation, following several years of work for the Australian government, entitled *Fathoming the Fathers in Environmental Education: A Feminist Poststructuralist Analysis*, not only brought forth the voices of the founders of the field of environmental education but, using a poststructuralist lens, opened up discussion of the importance of understanding the gendered nature of environmental education as well as troubling the discourses of the field which made/make it so. Her experiences in the field have also contributed to her positioning herself as something of a historian of the field of environmental education but, again taking a critical and poststructurally-informed approach, her historical recountings are constructed while also questioning, contextualizing the discourses and remaining at all times critical. Her CV and faculty information page list her research interests as including environmental education (and education for sustainability), science education, postcolonial studies in education, curriculum development and policy and critical, feminist and poststructuralist research.

Given some historical interest, or at least that contributing to her doctoral research, Annette discussed some of the ways in which the field has remained the same in that there are still principles and tenets that are at the heart of the field, but, as a pioneer in the field in her own right, she described how there has been an evolution in both the field and in her own thinking about the field of environmental education and research.

“The thing I would probably say that has changed the most is the growing recognition of women. My Ph.D. was very much looking at the origins of the field and looking at the Americans and the Europeans and the men, all of whom did have science backgrounds, that helped frame the field. We have moved on from those early conceptions that were around the technological fix sort of notion, I think. Perhaps that’s being a bit cruel to Stapp, because he

changed too. I think Bill was just fantastic in that he did change. He didn't just stick to this idea of having the one true story done in 1969 and just stick with that forever".

Despite some evolution in thinking that has happened she said,  
 "we still have the problems that we had back then – the feminists research is still not particularly high profile within environmental education and we still do have huge social issues and poverty issues that impact on how much people can act but that environmental education should be a focus on action and not just about knowledge and skills but that it is about acting *for* the environment – whatever that means. So that's probably where I would differ from Bob Jickling as well because I do think we need to educate people to act for the environment."

Annette described her work and changes in thinking as she moved from a more positivist into the interpretive paradigm, particularly in her time working at Deakin University and reading outside of the field of environmental education, including the action research work being done at Deakin and researchers such as Patti Lather and

...

"lots of opportunities that coincided with the stage I was at in my doctoral studies, when it came to writing up those founders stories and being able to do multiple readings of the data, just made it so much more meaningful because you got a much better idea of where people were coming from than if I'd just been able to do a survey or something like that."

Annette mentioned interests in both critical and post spaces which, to me, helps me understand, and give context to, her worldview as well as suggesting particular ways in which she views research and the field of environmental education – another way to come to understand the environmental part of subjectivity as interwoven with theoretical perspectives and worldview.

Our discussion shifted towards theoretical framings, or lens, through which inform how Annette positions herself within the field and her environmental subjectivity.

“I really do wish that I had more time to do more of the post-informed research – it’s something that I don’t get to do as much. Most of my environmental education research in recent times has been much more in the interpretive and critical sort of space. It has been doing case studies of school experiences and things like that. Probably it’s my more theoretical work where I can still be a little bit more *postie* ... I’m still struggling to finish a chapter on some marginalized perspectives in environmental education and I think I put my focus where my heart is – and it is around giving voice to people whose voices aren’t being heard and getting away from dominant discourses. Often it seems that subjectification processes, because it is ongoing, is sometimes a (re)forming based on what we learn about our own experiences as well as how others respond to us.”

Annette described, in terms of embodiment of her environmental subjectivity that she

“certainly try to walk the talk – not always easy, as most people find. I see myself, and I think my children think of me, as a ‘greenie’. I’m not a tree hugger or anything like that and that was one reason why I moved away from some of the radical feminists stuff because I’m not a man hater and I’m not a tree hugger or a goddess worshiper or anything like that. ... I think that I go by more of a social justice agenda. I think my strongest philosophy within the environment would be around social justice – looking at environmental racism and things like that. Certainly a depth of belief but not in a deep ecologist sense or a radical feminist.”

Annette went through several transitions and experienced points at which decisions were made that she considered important in describing her subjectification process as an environmental educator and researcher. She recalled from her childhood that she

“spent a lot of time outdoors in the countryside with my Father. He used to go and shoot rabbits and we would have picnics out in the bush and so on. We had close family friends who farmed so I used to spend school holidays on the farms. Certainly an awareness of nature came from things like that.”  
Circumstances entering university led her to courses where biology was something she enjoyed and “one of my lecturers in second year was the editor for the Australian edition of the BSCS ‘Web of Life’ materials. Back in the days Australia took on, in the first edition, a very ecological focus. So we spent a lot of time on field trips out exploring the Australian and Victorian environment. In botany we did similar sorts of things.”

Following university she applied and got a job working on the Australian Science Education Project materials and subsequently for the Curriculum Development Center, after the government pressure to do something about environmental education was addressed. As part of that job she described how

“I did the first national needs for environmental education survey to inform the work of the committee and the work of the CDC. At the age of 24 I travelled around Australia doing interviews about what their understanding of environmental education was, what they were currently doing and what should be done. Really I haven’t moved out of that area, in terms of where my heart is, since the second half of 1974. That was purely the serendipity of applying for the job that then led to working on that committee. That’s where I ended up with my Masters study and then, in terms of work, I built a reputation in that area that led to the formation of the Australian Association for Environmental Education out of one of the Curriculum Development Center projects.”

Once she had already established herself as an environmental educator working with the Curriculum Development Center, Annette mentioned that there were still branch points that were important in her positioning as an environmental education researcher and also how those were related to the politics of the time. She said

“when the Curriculum Development Center was disbanded by the government and I went off and headed up electoral education in the Australian Electoral Office for a little while. When I came back to work after having Kate, in 1983, the environment department had decided that it would take up the environmental education agenda. They created a director of environmental education position for which I was head hunted by the head of the department. I became director of environmental education in the National Government Environment Ministry.”

In addition to her responsibilities with the ministry Annette was also president of the Australian Association for Environmental Education and headed the Australian delegation to the Tbilisi +10 conference in Moscow. She continued,

“it reached the point where I either had to become a serious bureaucrat or do my Ph.D.. I decided I’d rather do my Ph.D. than become a serious bureaucrat. So I came back to Melbourne to do my Ph.D.. And Noel is in that mix somewhere around there – he was certainly influential in getting me back to Melbourne.”

To put all of that in a timeline Annette worked from 1974 to 1981 with the Curriculum Development Center, environmental education was a sub-role from 1974 to 1976. Then from 1976 to 1981 she was national coordinator of environmental education for the CDC. From 1983 to the end of 1987 she was the Director for Environmental Education in the federal environment ministry. Then, she said “I worked on my Ph.D., had Simon and then started at Deakin in 1990 as a lecturer in science and environmental education and I’ve been an academic ever since.”

Annette offered how the interaction between professional and more social subjectivities was quite connected for her at particular times in her life. She acknowledged that she may have gone down a very different career path. Annette mentioned

“if Noel and I hadn’t gotten together I might not have gone down the Ph.D. path – I could well have stayed in Canberra and become the bureaucrat. It was his encouragement to come back to Melbourne. Then once I was here I changed my Ph.D. topic altogether. Originally I was going to look at my own practices in the government and look at community – critical curriculum theorizing in community environmental education because that’s what my focus was in Canberra. Once I got the job at Deakin that really didn’t make sense because my career trajectory was academia.”

She also describes an interaction with colleagues that further contributed to her decision to move towards a doctoral program that was very intimately connected with the reality she had been living. She said

“there was a very telling meeting. John Fien, Ian Robottom and I were at up in Canberra. Ian was my supervisor and John was and still is a close friend. John was just finishing his thesis, he may have just submitted, and it was around critical curriculum theorizing in environmental education. I said to him that he had stolen my topic and what am I supposed to do? I felt like giving up as I was two years in and I don’t know where I’m going. John just said to me ‘it’s obvious’. I said ‘what’s obvious’. He said ‘you’re living it – environmental education as a man-made subject’. It just made so much sense that here I was the only female in this incredibly male space.”

Annette’s decision to take up her dissertation topic presented a new way of thinking about silences within the field of environmental education research. She recalled that she had

“been operating in that incredibly male space for fifteen years and I really was the only female. I had put up with some of the incredibly sexist comments. For example a deputy director general of education in one of the states said to me ‘Annette, if you look at me with those big brown eyes I’ll say yes to anything’ when there I was trying to negotiate a staff member. So it really did quite make sense and so the feminist poststructuralist analysis of environmental education came very readily once John had just sown that seed of an idea.”

Environmental education research, as discussed earlier, is a field that Annette described as being theorized in terms of both poststructural and critical theory influences. Although these theories are not always acknowledged in the research, there are concepts from poststructuralism and critical theory that inform the founding principles of the field and what environmental educators and researchers are trying to do. I asked Annette if she could talk about her interest in poststructuralism as a theoretical frame because I felt that interest reflects her perception and therefore also positioning and subjectivity in regards to environmental education and research. She mentioned that she is

“very much influenced by Sandra Harding in lots of ways – although her work is around feminist methodology. She also talks very much about ideas of multiple subjectivities that we bring to things. I think understanding multiple subjectivities almost comes more easily to women than it does to men because

we spend most of our time juggling our lives. Sometimes you're a Mom and sometimes you're at work and sometimes you're a shopper and the list goes on."

She also mentioned that

"the *one true story* phrase is Sandra Harding's and the idea is there is *no* one true story and that there is no universal science and no universal math. So the science that I taught, and continued to teach science at Deakin, was always global science and contemporary science that had multiple perspectives in it. For example, in relation to Indigenous perspectives on things – and probably the Australian is so strong around bringing, as I'm sure it is for you with the First Nations, those perspectives and that you realize that it's not just the European lens that your heritage brings to the environment and that there are other ways interacting with the Australian environment and reading the environment. Once I started to read into that space it just felt more and more comfortable and that I can no longer do a single reading of things. I feel like I always have to say, 'well it could be this or it could be that' – that we can't have a definitive conclusion anymore. There's never actually a direct causal relationship unless you actually see someone push something over or actually see it happening to be able to say why the cup fell off the desk."

Annette also mentioned the influence she felt, following the founders interviews she conducted in 1991, of attending AERA in 1992 for the first time and seeing Patti Lather and Deborah Britzman. She said she felt the importance of "Patti Lather and her work – that serendipity of *Getting Smart* coming out in 1991 just as I was starting to get writing my thesis." She continued

"for a lot of the story telling – I think one of the early influential papers that influenced me was Patti Lather's multiple readings in her original "Staying Dumb" article from 1986. In that article she did multiple readings of the same bit of data or the same experience and that just showed the power of the lenses through which you view things."

Following up with the influence around multiple readings she mentioned

"I saw Elizabeth Ellsworth and her work was all around the questioning of the conclusions you make from data and I used her set of questions to interrogate an article that Ian [Robottom] and I had published around socially critical schooling and why doesn't that feel empowering. That whole notion of multiple readings of things and not being able to tell one story anymore. I

think in some ways I probably offended Ian a little bit by deconstructing our work but it just showed why, just because we read it one way, it doesn't mean it was the only way of reading that set of data. I think with poststructuralism the 'asking questions differently' is a really important point. A few years on you know a little bit more. We have a lot of medical research that shows a similar kind of thing. At one stage thalidomide was seen as a wonder drug and aspirin was seen as quite demonic. Now we treat both of them very differently."

Even in changes to the way that research can be approached, an evolution and expansion in the ways that research questions can be asked and changes to attitudes towards environmental issues, it still seems that change is happening at a frustratingly slow pace. In many cases it is at a superficial level that engagement of issues occurs unless there is a more sustained effort. Annett said

"we pitch our messages still to the middle class and the converted. You look at the membership of environmental education associations and environment groups and it tends to be the middle classes. When I was still at Deakin I did some research with my own students around using the dominant social paradigm measures, and all those wonderful checklists, and they just weren't interested in that at all because even though several of them had tried they just found them to be so middle class and just not their space. That wonderful Ted Mooney quote of 'here we are growing older and there they are growing different' is very true."

She continued "we need to be adaptive in the way we do things too and try to capture peoples' stories. Just looking for strategies for making your research findings more authentic is probably what we're trying to do."

Although engagement is an issue, as well as having a deeper understanding of the problems that exist, it seems that even when there are initiatives in place there are still instances of resistance or somehow people do not care enough to actually do something about it because, perhaps, the problem is not directly affecting them or not to enough of a degree that there is enough impact to require a change. Annette discussed how

“people, in a lot of cases, know what they should be doing for the environment but it’s easier to hop in the car or it’s easier not to recycle or it’s easier to just buy all that packaging – all of those sorts of things that all add up. Also, so much of what the government does is at that individualistic level rather than at larger scale change. So it’s the consumers that have to actually change their behaviours and not the government actually legislating to ban certain sorts of packaging. It’s just not getting that high level of ownership – it’s still down to the individual to make the change. And if we think about discourses and people not thinking from that critical perspective then they can’t always see that alternative. It is beyond having to tell people what to do but rather have them believe that it is the right thing to do.”

However, changes in discourse are at a large scale making even a small change challenging. Annette points out that currently

“we have pockets of it [environmental education] but so often it’s the one enthusiastic individual who burns out or moves on and suddenly that program that was the flagship of the school is no longer there. We’ve had a lot of examples here with our sustainable schools program where schools work hard to get their five stars and they get a certificate to put in the school foyer and that sort of thing. But you go back two years later and ask about the program and are told that they have moved on to a multi-literacy program or a multicultural or some other program. It’s as though the environmental box has been ticked and the framed certificate is in the foyer but that’s it.”

Annette’s experience in the field gives her a perspective that those newer to the field have not seen in the same ways. The marginalization of the field, and therefore also those within it, as well as the ways in which environmental issues are tokenized or “othered” is an ongoing frustration. Likewise the de-emphasizing of critical thinking and a socially critical perspective contrasts what those in the field of environmental education research have been arguing for. Annette described that

“that’s what we have been arguing at the core of environmental education since the early 1980s. I think Paul’s work and Ian’s work in that space and arguing with Hungerford and others was so powerful. It really is what the core of environmental education is about – the critical engagement, the critical decision-making towards pro-environmental behaviour. The writing we were doing around the late 1980s and early 1990s around socially critical schooling, and really the socially critical curriculum – that good environmental education was good education and the basis of the school curriculum should be a socially

critical one where you engage students in authentic learning that problem solving and they develop their knowledge and skills in relation to that meaningful learning. It's still at the heart of what we are on about and it's still not really happening. It probably happens more at university level but it doesn't happen enough in the school curriculum."

The obviously frustrating conditions, because of political, economic and social aspects, seem to create daunting contexts for those who are invested in this field of environmental education research. Having been involved in the field for a relatively short time I asked Annette if she could describe what has and continues to keep her wanting to position herself as an environmental education researcher and if she could say how that might relate to her own environmental subjectivity. She replied

"I guess because I still believe in changing the world. One more article, one more action, one more project might make a difference and that we might actually get some change in the science curriculum. I think my focus has become more and more towards schooling, just because of my job, and teacher education as well. But changing the teachers and what they do and trying different arguments – almost walking the talk of poststructuralism by approaching it as 'well if this argument doesn't work then let's try another one' to try to change the practices. I think things like my mutualism from IJSE [*International Journal of Science Education*] is an important contribution that I made and I continue to make. I think probably for me, because that's where I come from, changing the practice of science education. And then at a researcher level it's getting people to research differently."

To further try to illustrate ideas about her environmental subjectivity I asked Annette about the kinds of things she does or how she feels she embodies her environmental subjectivity. She described how she

"started out very much in the practice field of writing curriculum for teachers in that lovely way that we used to think that if you gave teachers the materials then it would change their practices whereas we now know that they'll just keep doing the same thing unless it fits with what they are doing or they happen to like it. A lot of my early work was an Environmental Education Teacher's Handbook in 1978 and investigating the national stage and all of the projects we had at the curriculum development center in the late 1970s were all about changing teachers' practices. I suppose my identity was very much as a change agent – out to change the world. As that evolved, then I suppose, for

my Masters research, I was an historian. And then I suppose it was when I moved into the environmental education as a man-made subject it was as a poststructuralist, consciousness raising for those who thought they had the one true story and saying that there are many ways of looking at this story and that you have to look at the ways various groups have been silenced. It has been the white, English speaking males with science backgrounds that have really been dominating the field and that there might be other ways of thinking about it. That is pretty consistent with where the field has gone with the broadening up under ESD – with having the pillars but with drawing attention to more than just the ecological environmental pillar of environmental education or sustainability. In recent times I suppose it has been more documenting stories of change and trying to use those as models to convince others to change. Reconstructing society is what I've always really been on about.”

Relating to discussions about actions and embodiment, Annette added that the actual embodiment of environmental subjectivity is an issue within the field of environmental education and environmental education research. She said “I think the practice is still a problem in that environmental education is still seen as something to be squeezed into a school curriculum and my framework is very much schooling and teacher education”.

Connecting to ideas about how some ideas from environmental education, such as environmental issues, are taken up with a tokenism approach or added in ‘if there is time’, our discussion moved towards the kinds of things that are not happening that might be areas that need to be addressed. Annette mentioned that she

“tends to think in terms of what should be happening in schools and universities. I think environmental education needs to become part of everyone’s worldview really. We are still in that very market-driven economy, the big L “Liberal” agenda, which is the exact opposite of everything that goes with environmental education in terms of valuing other people and caring for the environment and not letting the dollars drive everything that we do. – allowing environmental education principles to underpin all of the curriculum in schools. But’s it’s very hard and it gets even harder with all the other pressures there are on the curriculum and all the market forces that are

driving things – particularly this passion for testing and it’s exactly the opposite of good education.”

I asked Annette if she felt what she was describing could it be seen as a symptom of larger cultural discourses that testing is what is seen as important and environmental education is not being taken up more broadly. She replied “Yes. I mean society is almost going in the opposite direction and, in terms of public perceptions, environment has dropped way down the agenda again – in Australia at least.”

Annette’s positioning as a senior member of the field, as well as a self-described historian within the field of environmental education, made me interested, as a newer member of the field, if she felt that the field of environmental education and environmental education research was still evolving or if there was some stagnation because of the resistance from a variety of social, cultural, political and even educational discourses and perhaps people getting tired of facing that constant resistance. She replied that

“it certainly *has* evolved. I think not necessarily in the caricatured way that Daniella Tilbury will tell you it has evolved. But yes, we have changed. If you look back to the early origins of NAAEE being NAEE and combining with the Consummation Education Association you had a strong domination in North America of the environmental, outdoorsy sort of groups and the cities just didn’t rate at all. Now I think people are willing to take into account everywhere that people live as somewhere we need to consider in environmental education.”

However, the evolution is not necessarily equal across the field. She described how

“in some ways, I feel we have gone slightly backwards around some of the action things and that we have gotten a bit carried away with the back to knowledge again. At the same time there has been a growing acceptance of the importance of the experiential in connecting people with nature. A lot of city kids aren’t connected with nature particularly and so immersing them is important to develop those connections. So yes, I feel that the action

component has probably dropped away a bit. I do think that some of the pillars, what came out of Johannesburg particularly around the importance of poverty and gender equity and those sorts of issues, are there for some people but they aren't there for everybody and I think we've probably gone from a narrow group that was more nature study focus to a huge distribution that's probably on a Bell curve with those at one end who are still totally into nature and at the other end who are willing to consider all issues and then in the middle we sort of have a mix."

Our conversation then turned back towards the ideas of practices and embodiment as a result of some of Annette's thoughts around the previous topic. She said

"some of the work I have been doing for UNESCO in the Asian area has been around putting environmental education and ESD into teacher education. The countries I have been working most closely with are the Philippines, Malaysia, Brunei, Timor-Leste and Indonesia. Timor-Leste would be one of the poorest countries, new countries, around apart from South Sudan and those sorts of places whereas in Brunei you have one of the richest people in the world running the place. So you have this huge rich-poor difference and the people in Timor-Leste are dealing with all the issues around just education for all. I think that brings home to you the sorts of human issues that you've got as part of environmental education and that you really do need to be confronting those human issues before you can really start caring about the environment. If you're starving then you're not going to not shoot an animal of some sort or other – if it's between you and survival well you're going to go with survival. Those sorts of issues are things that I don't think we don't necessarily in the white, middle-classes of Australia and Canada and the USA just don't understand. We can preach until the cows come home but those peoples' lives are at risk."

I commented that "if people aren't able to meet their basic needs then it's going to be difficult to get them to care about other things around them when their day to day existence is a struggle and not predictable". Annette used the examples of the rebuilding of schools in Timor-Leste and the interest in environmental education being a foundation for their rebuilding of the education system because of their consciousness of their surroundings following civil unrest. In response to my question about the stagnation of the field of environmental education she said

“I don’t think it has stagnated because I think each country is at different stages of where it’s at developmentally. In the Australian context it has gone very, very quiet. We’ve got pockets of good things happening but the state government here hasn’t had anything that supports environmental education coming out of the education department for probably a decade.”

Annette mentioned several examples of initiatives that had been started but then abandoned in Australia because of political changes that did not make environment a priority. “It’s really just the committed individuals that are doing some good things. But then there are some great kids things happening, being driven by the youth leadership.”

I asked about stagnation in terms of environmental education research because, although connected, research offers different opportunities. Annette mentioned that she sees

“Monash is certainly getting underway and with Alan [Reid] there and Mark [Rickinson] just starting there – they are building a good concentration. I think Macquarie has gone very quiet ... they lost the federal funding that was keeping them going. I’ve got sustainability as one of the foci in my center and I’m also doing reviewing for the ARCs and there are a few environmental ones coming through there ... So the research is happening but, like the practices, it’s also in isolated pockets rather than mainstream.”

Annette described some influences in terms of her theoretical positioning and the ways in which theory informs her approaches to environmental education research in our first conversation. In terms of influences on the ways in which she came to position herself within the field of environmental education but in the larger context of academia as well, Annette acknowledged several individuals who have had an influence but for different kinds of reasons. From a more philosophical and theoretical side of things she mentioned

“in terms of people and papers that have been important I would say Sandra Harding and Caroline Merchant I think would have been two really important

people to me. Sandra, not coming out of environmental education but out of science philosophy, and her work around troubling science and a multicultural view of science education helped move me to a more multicultural view of environmental education and really informed that analysis. In terms of ecofeminism, Caroline Merchant because she wasn't one of the tree-hugging, man-hating type ecofeminists but was talking about the partnership ethic notion and I thought that was a really good way of approaching the environmental side."

Although Sandra Harding and Caroline Merchant are not specifically environmental education researchers their work has had an influence within the field. Annette went on to mention, more specifically in terms of education research and environmental education research

"Patti Lather very much, just because she sat very comfortably in a critical space but was willing to straddle into the poststructural work and to bring the two together. Within environmental education, certainly Paul [Hart] was/is important – I wrote my thesis for him because I felt like if I could convince him of my argument then I was ok. And I think the fact that I have become that grumpy old woman that reminds people of the history of the field – but I still think that is important because we are seeing a lot of that reinvention of the wheel and it's nice to, well actually it's maybe nasty to do it, to draw peoples' attention what has already been done before."

Since Annette mentioned influences both from within and outside the fields of environmental education research and education research, I commented that people bringing perspectives that have influences from outside the field, I think, makes for a very rich and diverse group of environmental educator and researchers. In response Annette added that

"it is a multi-disciplinary field so you would almost expect that. It is not where we came from – we came, for the most part, from the sciences – but as the field evolved so that you had more of the sociologists and social scientists coming in and I think that was all to the good of the field. Certainly for me a lot of the feminist stuff has been very important."

Influences are a complex thing and can have different effects on individuals and whether those influences are positive and are taken up or are more negative

and reacted against. But influences both impacts and is read in particular ways based on individuals' worldview. I asked Annette if she could describe or talk about any ideas that get at how her worldview aligns with environmental education and also how environmental education is part of her worldview. She responded

“I’ve been working in the field since 1974 so it’s coming up to 40 years next year –it’s a long time to be immersed in it. But I think it is a belief – originally it was a belief in the need to connect with nature and care about our natural surroundings as you see them disappear.”

Annette showed me the view from her office window, which she described as “a lovely little woodland of some gum trees and a little billabong [lake] down on the creek that runs through this campus.” It was a beautiful scene. She added,

“it’s connecting people with that and valuing it. When I first started to be involved in the area we had rampant wood chipping and damming in valleys – all of those kinds of things that were happening in the seventies and being a sort of preservationist, I suppose, at that stage it grew to what I was talking about before about recognizing the importance of people’s situations too. You can’t connect with this and not shoot a kangaroo if the kangaroo is all that you have to eat. So the cultural dimension definitely grew for me. It is a worldview that respects other people and respects the environment I think and is concerned with living as gently or lightly as we can on the Earth within that framework. The clichés from Brundtland of borrowing from our children and all of that – I think that is still very true and so few people have that mindset. They just think that in three years political election agendas.”

I asked Annette if she had further thoughts she felt might help illustrate and describe how she sees herself positioned as an environmental educator, reflect her environmental subjectivity and, as we had discussed, ideas about worldview and ontology. Annette said

“I think that probably ‘change the world’ is one thing that I am very keen on doing – and into one that is more environmentally friendly and culturally engaged. I suppose the other thing I am very passionate about is changing the science education into getting kids engaged with science – it’s part of my roots as a scientist. And as much as I disparage the roots of the field being there I do think kids need to understand how the world works and particularly around

some of the basic ecology. If they are going to really want to protect something they need to know how it works in order to preserve it or protect it. I think the science education that happens in schools is absolutely dreadful in most cases and kids don't connect with it. That's why I've written papers like the mutualism one and saying environmental education is one way of connecting kids with the world of science and science desperately needs this because kids aren't connecting with science. I think that is something that I am very passionate about but I can't really see it happening in my lifetime."

Given her interest and passion for environmental education as an educational discourse, and the impact that might have on science teaching I asked Annette if she thought that changes to the current dominant educational discourses might result in learning and perhaps students having more opportunity to develop an environmental subjectivity throughout their schooling. She responded

"I think it has a huge potential in science because given that science is about the nature of the world around us then the environment should be part of that and you can learn a whole lot of your basic science principles if you really want to teach them, around gravity and pulleys and forces and particularly chemistry, it would make it much more authentic for the students. I think that for the environment, and that's the importance of some of Sandra Harding's work around the voyages of discovery and the history, is that we need to teach people the history and philosophy of science as part of our history and not just the factual history that has been written by the victors. The way that science and the environment, because they were looking for masts and they were looking for timber for ships and they were looking for new products but, they were all natural products that they were looking for – whether it was potatoes and tobacco from North America being brought back to Europe or rice coming from China across to Europe and things like that – it was all nature that they were bringing with them. But students just don't learn that but it does help provide that underpinning."

Annette's mention of the need for students to understand the theoretical underpinnings, or kinds of worldview assumptions, about what they are learning brought our conversation back towards feminist poststructuralist work as a theoretical frame that informs, or provides a lens through which, environmental education research can be constructed and viewed. However, it seems that when

research is theoretically conceptualized there are, perhaps, many assumptions being made about what is informing the approach to research and thus there are articles being written that reflect an ahistoric approach such that work that has already been done is being repeated *and* without consideration of what has already been done. Particularly in regards to some of the need for feminism in environmental education research, Annette discussed how articles are being written that do not give credit or build upon the “feminism in environmental education research” that already exists. She said

“I think there are occasional articles that come across my desk again that are trying to reinvent the wheel around putting feminism into environmental education. A couple of times, if they come through CJEE, Connie will ask if it is ok to send them the chapter that is coming out in the Handbook to try to illustrate how they aren’t considering what has been done on that front already. And I’ll say yes – let them build on what we have documented so far rather than just redocumenting again **and** not necessarily being as comprehensive either.”

Annette continued

“I think there is, if you look at citation indices, some of those papers are being cited which is good. I think the Handbook coming out will probably start to have an influence on future grad students too just because it is available. It’s good to see it finally appear.”

Annette’s thoughtfulness of her positioning throughout her career reveals a feminist perspective within the context of environmental education in Australia from a time when the field was dominated by white males and, for the most part, those coming from primarily science backgrounds. However, it is clear from her descriptions that not only does she see the ways in which the field has evolved but how the thinking within the field of environmental education has evolved and therefore also how her own environmental subjectivity has changed over time and

at the same time remained the same. Interest in feminist perspectives being represented in environmental education research clearly has been important throughout Annette's career and, although there have been some changes, she addressed how she still feels that there needs to be a greater and more broad uptake of feminist issues in environmental education research as well as other previously unheard voices from within the field as well.

### **Phillip Payne**

Dr. Phillip Payne is a professor at Monash University, Frankston, Victoria, Australia. Phillip brings together philosophical and practical approaches to environmental education and has, himself, written about environmental identity. His articles and conference contributions suggest a strong interest in bringing into focus the ways in which philosophies and theories are implied in much of the environmental education research that does not necessarily explicitly state those theories as informing the foundations of that research. Over his career his interests in post-informed and post-critical theoretical perspectives have come to the forefront of his research interests within the field of environmental education as well as the ways in which those theoretical understandings allow us to see the ecopolitics and aesthetic aspects of environment as defined in environmental education research circles.

Phillip began by describing, using both memories and reflections on those memories from his current understandings of his positionings, worldview and in particular in relation to his environmental subjectivity things that he feels were

important and influential to his decision making to take up an environmental subjectivity. He said

“I have memories as a kid – and that’s partially prompted by the significant life experience literature – of involvement and engagement, or fun, in aspects of nature be it a wild sort of nature or a farm nature. So it’s been from memory or memory work, which has been written about in environmental education research and it’s a useful sort of strategy I think. There are lots of memories I have about contact and connection with various environments and natures and for the most part those immersive engagements have been positive affinities whether it be curiosity about it or recreation in it or trying to understand it or being in awe of it. And I could give millions of examples of that but in general terms it has been positive senses of self when in nature. Once you have that appreciation or positive affinity with this thing called nature or its derivatives, when you see damage and challenges to that, it creates a sort of reaction in various ways of like or dislike, or concern or disconcert, and given those positive experiences it would be fair to say that where you see damage, or use and abuse or exploitation, you ask some questions about what’s going on here – what’s leading to this sort of abuse?”

Phillip used examples of interactions with his father and time spent in nature to illustrate the ways in which those experience have, he feels, influenced who he is today as an environmental education researcher. He described memory

“when I was about eight years old – and my father was a smoker and he would leave his cigarettes lying around – and for some reason I started drawing the skull and cross bones signs on his cigarette packs. I’d also break the red end, part you light, of the match off and stick it down in his cigarettes so that when he was smoking it there would be a flare up when it got to the bit where the match head would ignite. I think recalling that memory is a comment about how I saw smoking and how it thought of it threatening and destroying my father’s inner nature and concern for that.”

Along with his concerns for inner natures, Phillip also described memories of times spent in natural spaces. He recalled

“going for walks on the farm that used to be my mother’s home – being in a natural space. We would go yabbying (yabbies being small crayfish-like crustaceans). As a young child going yabbying would seem like quite an expedition and we would sit there on the edge of the dam and tie meat on to the pieces of string and lower them into the water and then wait. And then we would watch and start to see the yabbies start to claw at the meat and we

would slowly and carefully pull them in. When I went back to the same place about 20 years later I saw that the dam where we would go yabbying was only about 200m from the home. But when I was young it seemed like such an expedition to get there and then you'd be there for a number of hours immersed in nature."

While Phillip mentioned there were probably many examples of experiences he said that the memories he shared

"shows the sort of vivid memories of both urban life and rural life factors that I was moving in and out of as a young child and having experiences growing up in different areas and being exposed to different forms of environment and different forms of nature. I guess in all of that there has been strong experiences, directed experiences, immersion, in a range of different environments and forms of nature that have been highly positive experiences".

However, Phillip also reflected that, now, he might have viewed those experiences in slightly different ways because of the understandings he now has. He added

"over time there has been a sort of realization that nature is vulnerable and humans are major players in using it, abusing it, exploiting it, damaging it. So to a certain extent that starts to raise questions about a moral consciousness and changes over time-space and place, and circumstance now or, at a different level, some sort of an emerging form of an environmental ethic or ecopolitic on top of the initial aesthetic, but really environmental ethic that was developing in me in an informal way through the locations where I lived and parenting I experienced. It's all of those kinds of things that have led me to do some different research on intergenerational ethics and families. In short, our identities will always be indebted to the parents as significant/primary socializers, noting my family was stable and middle class; many others are not."

Phillip has written and, as he mentioned in our conversation, done considerable reflecting on the concepts of identity and subjectivity (see Payne, 2001). His critical reflection and autobiographical writing (see examples provided in Appendix H) came through in our conversation as he shared ideas about not only how he embodies his environmental education researcher subjectivity but also articulating the sense he makes of his interconnected subjectivities that most closely

relate to his environmental subjectivity. He described how

“mortality/ethics/democracy are a huge part of my identity, probably modeled most by my father – a quiet, humble but highly talented/capable person.” Phillip talked about his interest in discussing identity in terms of identity *transitions* – and also the transitional and relation nature of identity formation. Phillip described his first years of teaching in a primary school about the study he piloted for Deakin University where students took a lot of environmental action based on the Deakin University model. He said

“I think the crucial thing there is, in terms of perspective (and others may agree or disagree with me about this, but) that pilot study was actually the genesis of what became known as the socially-critical perspective of environmental education which Ian Robottom and others picked up in Australia but certainly other people in other parts of the world were developing as well.”

Phillip described that around the time he made that decision that

“Bob Ingpen has been a really influential person in my thinking but in many respects it goes back to that question of imagination, whimsy and that sort of eco-aesthetic recently I’ve been thinking about ecopoeis *is* – environmental becoming as well as being – the bringing forth – poeis that is so crucial to identity transitions and transformations. It’s a very powerful way of invoking that aesthetic and kinesthetic or semi-aesthetic type dimension of affinities and attachment, or possible attachment to various environments and forms of nature. Meaning making as pre condition of environmental ‘learning’ (formal).”

Although he enjoyed primary school teaching he made the decision to go overseas and do a Masters degree in Outdoor and Environmental Education at the University of Oregon in 1980 and 1981. He said

“I think there is another aesthetic dimension there in terms of a memory that is very much part of both my identity and the identity transition in that movement to Oregon to do the sort of Masters degree and further develop my understandings and interest in outdoor, environmental, experiential forms of education with the anticipation that I did want to get into a teacher education/faculty of education position. So 1978 was crucial – both the eco-

esthetics through Ingpen and the eco-politics of curriculum through the Deakin University model. It was a very powerful transition that I chose to pursue, more formally, higher qualification with the aim of getting into a faculty of education or university setting to do that sort of *teaching* but also creative work in terms of research, curriculum development, pedagogical development so that those legacies persist.”

Resisting or finding one’s self in opposition of dominant discourses because of one’s subjectivities and interests can be a tiring and frustrating experience.

Therefore in order to continue to resist and persist takes a certain determination. I asked Phillip if he could describe how it was that at those transition points he felt he wanted to continue towards environmental education research even if it was a more marginalized approach to education. Phillip described

“when I returned from Oregon I was unemployed for three months and then I got a contract with a government department in Youth Sport and Recreation and at the end of that there was a position advertised at what was then known as Bendigo College of Advanced Education, which is now part of LaTrobe University. Based on my previous experience I was successful in my application for the job – and that job was to theorize, frame, develop, write, lead, the first ever undergraduate degree in Outdoor and Environmental Education, or specializing in Outdoor and Environmental Education, not only in Australia but as I understand it in the southern hemisphere. So out of that I had this absolutely remarkable opportunity to now, four years after piloting the Deakin model, in a position to set up this degree course drawing particularly on the educational work of John Dewey but also on the philosophies of Aldo Leopold.”

Phillip described that course design as being another huge learning curve

“in terms of how do you construct a three-year degree where the end point of it is having graduates with a strong sense of not only outdoor competence but also deeper sense of purpose with regard to environmental relations, environmental ethics, environmental politics and a range of things like that. I guess this job formalized a self/professional identity, as a creator/inventor of education/environmental and leader/producer of it in a formal higher education setting – so walking the talk of the previous decade of development where I was student to now professional/leader.”

Connecting to that he continued

“I think an important point here, which goes back to a perspective of education, is that that degree course, the way I formulated it, was very much of a liberal arts type view rather than a necessarily vocational or professional qualification. Of course they were ingredients of it but I have a strong sense of the democracy of education, whether that be Deweyan or more broadly the notion of education itself which, when you get into critical theory, you begin to reject instrumental reason and a whole range of things like that.”

Another key professional transition Phillip described happened in 1987 when he was approached by the State Ministry of Education in Victoria to be the writer of the State’s major curriculum reform, which became known as the Victorian Certificate of Education (VCE). And it was based on that degree course I worked on developing. He described how

“there was a total restructuring and refocusing, it was one of the biggest curriculum reform levels (at the state) that could ever be imagined, but it was working on a combination of social, environmental and economic justice. I became the writer of the outdoor education study design, working with people in Phys Ed, Health Ed and Home Economics. We developed four different studies that were in what was called the Human Development Fosc – which, to sum this up, took a socially critical perspective of Phys Ed, Health Ed, Outdoor and Environmental Ed and Home Economics – but my job was the principle writer of the Outdoor and Environmental Education. So this relates very much to the socially critical type perspective, which at that time was a big part of what Deakin University was doing.”

However, with a change in government, the changes and reforms made to the curriculum were lost because of the political shift away from environmental initiatives and

“all of the original writers of the VCE were basically sacked and that entire VCE curriculum in Phys Ed went back to more skill acquisition, exercise science and exercise physiology. I think that was another incredibly important professional transition point that, again, gave me deeper insights into the state politics and how education really is a tool of government – and this is clearly what the socially critical perspective and critical theory in general are highly critical of.”

Phillip also suggested that experience with funding cuts to programs create conditions where, even for the most enthusiastic individual, the reality of continuing is nearly impossible. As much as one's interests might support an effort to continue

“the theory of that degree course was struggling with not really having the staff to translate that theory into a radically different structure and practice at the individual semester unit level. It wasn't just the theory but even in relation to the curriculum documents for each of the units – a number of the people simply didn't know how to do it. The same is still happening nearly 30 years later and is proving very disappointing if not disillusioning for me – fighting the same ‘arguments’ from 30 years ago but I've realized I no longer have the interest/energy to ‘go back to the future’ – hence a new identity struggle; progressive reform versus regressive ‘holds’.”

The repeated recurrence of concerns contributed to Phillip's decision to leave that government context and pursue a doctoral degree. He described the transition into his doctoral program as being

“based on critically reflective practice of the previous 15 years of education and incorporating a Masters of Environmental Ethics into the course work of the doctoral program in the Philosophy of Education in Curriculum Theory at the University of Georgia. That was an important stage of my life to be thinking far more carefully and critically about education, environmental education, environmental ethics, eco-politics, environmental aesthetics as the underpinning and ingredients of my doctoral work.”

Phillip described his doctoral study as being the beginning of what he might like to be known for in terms of his contribution to environmental education research. He said

“my doctoral was *Giddens Critical Ontology and Environmental Education* and it was more this ontological basis to curriculum theory that is a keen part of the study in how that ontological basis relates to questions about being in, and with, or for nature and the implications of that for educational aesthetics, ethics and politics. So if there's one thing that I came up to in relation to what I'd like to be thought of for environmental education is the notion of a *critical ecological ontology*.”

After completing his doctoral studies and returning to Australia in 1993, several books including Robottom & Hart (1993) and Fien (1993) were being published and distributed and in them there is, as Phillip described

“mention of the ontological, epistemological and methodological basis of environmental education research. So I didn’t know about this when I was doing my doctorate. I contacted John and said, ‘I’ve just read your book – I’ve just finished my doctorate on Giddens’. So John invited me up to the second of the Invitational Seminars which was run by Griffith University. That was a key moment in a sense of the research work that I’ve done that related to the ontology, epistemology and methodology that in a sense was confirmed by Robottom & Hart and Fien as outgrowths of the socially critical which clearly I’ve been involved in way back in 1978 in the genesis of that sort of model. So you’re starting to see a real narrative emerge there in terms of views about environmental education, critical education, socially critical environmental education and critical views of environmental education research and therefore the role of researchers working particularly in faculties of education and teacher education. I think each of the identity transitions/issues from 1978 through to early 1990s have been flagged quite well as important transitional experiences that help formalize my professional and personal identities.”

I mentioned that Fien (1993) and Robottom & Hart (1993) were books that had been influential in my own decision-making and transition into a doctoral program because of the ways that I was better able to articulate my own ideas using language I learned and understandings of my own worldview. Phillip continued

“there are incredibly important things there in the sense of ecopolitics of education but I think that within environmental education there is a whole group of us, your Father included, who have a fairly firm, perhaps even dogmatic, view that environmental education needs to be a critique not only of education but also of society. One of the ongoing issues is how do you maintain a critical perspective – and that deals with both the critique of education, curriculum and pedagogy but also society and culture – critical of basically of all the efforts that exist to homogenize or colonize the possibility that environmental education can be different, alternative and critical. I think that is an ongoing sort of commitment that a number of us have in terms of our ongoing sense of identity in both environmental education, as both curriculum and pedagogical apparatus, but also the role of research in continuing to inform, critique and provide evidence and provide new theory, that keeps that critical impulse alive. However, I feel my tenaciousness to keep fighting the

good fight is waning within the very regressive education and political contexts I now work in.”

Phillip articulated a very keen interest in, to the point of being what he describes as part of his identity, critical perspectives within the field of environmental education research. He said “any work that I do now is still trying to keep that line going in terms of the ontological basis coupled with the epistemological and therefore also methodological that continue to foreground my work.”

While what we would ideally like to be doing is a pleasant thing to think about, the materiality of our contexts often leads to a compromise being made between what we feel we are required to do and what we would like to be doing. Phillip described feelings of restrictions as a result of changes to the university and how they have become limited in terms of how people see the purposes of both universities and teacher education programs He described how in his opinion “universities seem to be becoming far more pragmatic, less principled, more vocational.” I asked if he thought in addition to the ‘corporatization’ of many universities if he thought that there was less criticality in universities. He said

*“far less critical. Far more opportunistic and pragmatic and basically just jumping to the university or corporate expectations and I think part of the tension is a much deeper concern. You’re seeing how staff members are so easily co-opted or coerced, or voluntarily take on board, into the corporate and neo-liberal line. I think poststructuralism has created some wonderful gains but that it has also created some real problems in terms of viewing the world as text and language primarily. And that’s the point of my article in 2005 in EER on life-world and textualism. It was sort of a conversation with Marcia (McKenzie) and a few others about some tensions that were never really fleshed out about modern critical theory and postmodern critical theory.”*

In addition to being a concern of the ways in which Phillip is able to live and work, he also described how these considerations are connected to his own identity.

He described how

“poststructuralism has helped us with our conceptual apparatus, sharpening that, but needs to be seen in the service and supporting of the socially critical and more modernist critical theory and not as a separate sort of ideology in its own right that has no anchors, or moorings, or bearings. More as the praxis to which the socially critical and materialist perspectives, critical realism, are committed at an ontological level rather than just an epistemological change, either diluted or jeopardized. Part of my research and theory and scholarly identity is to continue to play with positive responses to ... there’s some interesting stuff going around now about ‘new materialisms’.”

Phillip pointed out the book *New Materialisms: Ontology, Agency and Politics*. He continued

“what is in a number of other books that I’ve read from feminist scholarship including Elizabeth Grosz, Margaret Archer and a few others – I think there is, increasingly, a reflexive critique of feminist poststructuralism in terms of some assumptions that haven’t been as political as they had hoped. So a return to a more materialist, as well as textualist, linguistic and cultural view is important. That’s actually the reason I’ve written that chapter on the Deakin one without sort of talking about those material, or what your Dad and I have talked about the post-critical, while trying to find a way to sort of marry the best of material and textual or ontological and epistemological considerations in a more synthetic view of curriculum, pedagogy or research. Rather than a disaggregated breakdown of ... well, on the one hand there’s critical theory and over here we have phenomenology, over there is poststructuralism, over there is feminism. More about how we create some useful syntheses. It goes back to the idea of critical, which is critical ecological ontology, which is ontological. That term, clumsy for many people, idea that has never gotten much traction because those words are difficult and just hasn’t been taken up except within the discourse of environmental education or environmental education research.”

I asked Phillip, particularly in given his context and having been involved in the field of environmental education research for several years, if he had concerns and also how he sees the potential for advancing the research that can be done. He replied

“I think we have seen that with ESD. Many of the debates that have gone on there in the early 2000s were debates that were had in the 1980s and 1990s in environmental education. So it’s a bit of recycling and ‘reinventing of the wheel’ under a slightly different language in many respects. What does that mean for one’s identity? Clearly latter stages of my career, and for others who have been in this for 30 odd years, how you pass the baton as in a sort of relay, and how you encourage other people to maybe consider or adopt or play with a more critical – considering it poststructurally, phenomenologically and in terms of critical theory – view of the thing called environmental education and its research. But I think we should note also that one of the exciting things that have happened in the field is the rise of, say, environmental humanities and the environmental arts. That sort of interdisciplinary possibility is clearly more real and much more real and more available than it was 20 years ago. So how we can capitalize on that in terms of the critical perspective is part of the incredibly constructive challenge for those who want to not only protect and defend the critical perspective but want to push it into new understandings of environmental humanities including things like eco-phenomenology, environmental art and drama and a range of different mediums through which a critical perspective, or a socially critical perspective, can continue at that practical level. That’s a bit of a wish list perhaps.”

Phillip expressed concerns about the ways in which he felt both freedoms to explore interests but also institutional discourses that influence choices that he makes. I asked Phillip if there were no externally imposed restrictions or expectations what he might like to consider. He describe how

“there are actually a lot of things and this is a bit of a dilemma. For example, on that intergenerational family study, I collected the data in 2004 when the kids were between 8 to 16. For two years now I’ve been wanting to follow up on those kids all of whom are now voting age and have finished their secondary schooling and are maybe now at university. I’d love to do a more longitudinal take on where they are now. That’s a project that I’d like to do. There is quite a range of things that I *would* like to do but one of the difficulties is that I don’t really get much time to do my thing. I’m always helping or supporting or advising or encouraging or leading other people.”

I suggested that those interests reflect Phillip’s environmental subjectivity as it intersects with a professional subjectivity in that he is interested and take the time to help other people and contributing to their identity and position themselves.

Phillip replied that

“that’s part of the process we’ve started with part of this new research group that I’ve developed with Alan Reid, since he’s here now, called Education, Environment and Sustainability, and formulating that so it’s a strong group locally, nationally and internationally. That kind of work takes a lot of time and effort. Bringing your father and Nicole Ardoin and Justin Dillon out to participate is part of that building process and getting it up and going but that takes a lot my of time – setting that up. Part of the identity there, because of the time it takes, means you do become a lot more clinical or cut throat in terms of who you do help and support but other times you don’t have an option.”

He continued

“I guess that could be described as part of the identity tribulations that relate to work and institutional demands that in a sense you get torn apart or pulled in many directions that make it hard to focus just on what I want to do. So how to balance that? I have to say I’ve never really worked that out because I have always conceived of myself and trying to as much as possible give, share and help other people more than perhaps looking after my own interests or career. I think your father is the same.”

I mentioned that I felt collaboration, as Phillip had described, was important to consider and that who we collaborate or work with can be reflective of our own worldview and subjectivities as we see our own worldviews embodied by others. I asked Phillip if there are particular researchers, both within the field of environmental education but also more broadly in fields of research, that he enjoyed collaborating with or hoped to collaborate with more. Phillip agreed that in addition to significant transitions and experiences, significant people in one’s life and career are also reflective of your own subjectivities. He mentioned

“clearly your Dad – I think we first met in 1995 when he came to the 4<sup>th</sup> or 5<sup>th</sup> Invitational Seminar that was in Christchurch. So I’ve known him for nearly 20 years and we talk a lot, Skype a lot, share, interact – we’re colleagues and friends. And in terms of collaborating – your father and I speak often and talk about writing things and we help each other out and are in contact frequently about writing things but we probably haven’t formally written something together in a while but we are putting something together for the next Invitational Seminar on the post-critical. Also your Dad coming here with Justin [Dillon] and Nicole [Ardoin] is another collaboration. There are lots of

good people in the field but in terms of identity it's about who is best and most appropriate, most strategic and tactical as well as enjoyable to work with. Your father has been a constant/consistent colleague. This is important. There are very few people who still help 'affirm' the identity (professional/academic) one has developed over a long period of time."

Phillip's scholarship shows a keen interest in the theoretical supporting the practical, which is a binary that often is confounding as theory does not always get translated into practice. I asked Phillip if there were ways that his theoretical interests, in aligning with his worldview, were reflected in his practices and embodiment of his environmental subjectivity. He began by describing how

"in the broader scheme of things, I've always had some concerns about poststructural theory in the sense that by in large it has tended to emphasize language, discourse, the mind, deconstruction of names and things like that which are all very important. At the same time I suspect that that has come at the expense of more bodied and embodied material and real/everyday life-world bases of human action, interaction and participation."

He continued

"given that my own interest in all of this has been on a more ecological ontology, I'm suspecting that what is happening is that a new dualism of theory and practice, and mind over body, and thinking over being and becoming has been somewhat innocently reproduced. The new materialism stuff that I've been reading a fair bit of, it actually comes out of a number of feminist poststructuralists work, who by in large have been gently revisiting some of their own assumptions about politics, agency and ontology – and the importance of bringing back the body. And I've sort of, in a sense, declared that while the linguistic, the discursive, the textual turn have been incredibly important that there has been a bit of a loss of sight of the material and the real basis of what it is to be human, being an agent or an actor. The majority of these new materialists are saying yes, we've had historical materialism from Marx on but there needs to be a return to new notions of materialism that look more at the human body and it's relationality as more primitive rather than second order or third order abstractions into language, text and discourse. So the argument there is a greater sense of politics across feminism, environmentalism, colonialism and so on."

Phillip described his engagement with undergraduate students in a vagabonding experience which provides students with an opportunity to (re)consider their own

positioning and which has been described by students as a transformative experience. Phillips described how faculty leading the course and students

“go to a place along the coast called Bear Gully. They go there bodily without tents, they don’t go there with Gortex jackets, they don’t go there with sleeping bags or sleeping mats or any of those high-consumer things that have an incredibly high ecological footprint. We pick up food boxes of locally grown food on the way and the students cook that socially in collectives of 10, as they also sleep under large tarps– so everything that we do, the learning is through the body. It’s a clear deconstruction of the typical outdoor message of adventure, risk, covering long distances, carrying big packs – a different form of embodiment but the (patriarchal) outcomes there are more to do with masculinist inspired character building, personal growth, dealing with challenges and technical skills in the outdoors. In the vagabonding, the slow eco-pedagogy of that is that over the three days we actually really don’t go any further than about 200m from the camp. So in that way distance is bodily deconstructed. Time is bodily deconstructed through the reorganization of each of the three vagabonding days whether it be through the things we do, the food we eat or the clothes that we actually wear and that’s where I think the power of the experience comes from. We are deconstructing a conventional, and I will use labels, but most of this stuff is masculine, hegemonic, colonial.”

I asked Phillip if there were gaps in the approaches to research within the field of environmental education or things that he would like to see being taken up both theoretically and in terms of practice. He replied that

“this is why your father and I are doing this seminar session on post-critical. The special issue of EER around the post-critical that Paul edited was done 7 years ago and in different ways you can see some indicators of that in the published work of environmental education and its research but by in large it seems to me that, for a range of reasons, the political is in ebb.”

Phillip continued

“ethics, I think, continues to be in many peoples’ minds. And then the other part of the triad, which I have been arguing for some time, is esthetics. So a gap for me is what is the incorporation or relationality of esthetics, ethics and politics. I think we deal very unevenly with that and again an ecology of this would suggest that if esthetics, ethics and politics are three branches of the human condition, or knowledge about it, that we have treated them in a sense as disaggregated components rather than as more ecological or more holistic. In terms of theory I think it’s interesting how the humanities and the arts,

environmental criticism, eco-criticism, environmental drama – more and more are picking up on the esthetics but wherein that is the ethics or politics. Similarly critical theory has often dealt with issues of politics and ethics but where was the esthetics? And then of course you have environmental ethics that to a large extent only deals with ethics and bracket off questions of esthetics and politics. That interdisciplinarity or ecology of ways to think about research, curriculum or pedagogy – that seems to me to still be a fairly formidable challenge.”

More specifically relating to methodology Phillip described

“a number of challenges that, whilst there has been a bit of an explosion of genres of inquiry beyond the quantitative, there is still a lot of work to be done particularly on the sensory and perceptual role of methodology. Sarah Pink’s work is about sensuous ethnography and how the researcher really needs to use all of his/her senses as well as dig into the participants’ sensory sort of stuff. If you read, for example, David Abrams *Spell of the Sensuous* as an example of someone who has written more at that “nature writing” genre in that typical North American sort of Theroux or Leopold style – it seems to me as if how methodology can deal more ethnographically and phenomenologically is an important sort of challenge. So Sarah Pink’s work is indicative of some good things to come but then again to get that out there within the environmental education research community is a fairly tall order. That said I think we are seeing examples of some articles that are more and more looking at different forms of representation that in some instances are bringing in art and other media and not just literal, formal, propositional types of statements, truths, claims or numerical sorts of evidence under statistical treatments. I think that’s a task that your father has played a huge role in in terms of opening up forms of representation and legitimation – and that will be an ongoing challenge. So I don’t think that is necessarily a gap and rather I think it is on the way but still requires the flexibility of Ph.D. supervisors and journal publishers and editors and research methods class instructors to actually put this on the agenda more formally than what I suspect currently happens.”

I asked Phillip if, based on his years of experience in the field of research and also because of his interest in supporting the next generation of environmental education researcher, if there were particular directions in which he would like to see the field of environmental education research evolve or if there are particular areas in which he sees some stagnation happening. Phillip described a variability

and unevenness to the ways in which the field has evolved, particularly based on the country or part of the world. He mentioned

“I think there remains a hold, to a certain extent, on the evolution of the field according to the nation state or the region and some of that is probably compounded by the ways in which the journals perpetuate a particular line. The *Journal of Environmental Education*, which has been around for a long time and, despite opening that up, it remains a journal that privileges the more positivist, behaviour change, pre-test/post-test kinds of research even though, under Paul’s influence as well as others, there have some spaces opened up for different kinds of research. The *Canadian Journal of Environmental Education* does some different work. So that gets back to the tension, in an evolutionary way, between environmental education and education for sustainability – that continues to be an ongoing evolution and transition that becomes very complex and messy. At a broader level I think one of my major concerns is the ways in which universities have changed.”

An intersection Phillip mentioned more than once was that between his environmental subjectivity and his subjectivity as an academic at a university. He described

“more and more it seems to be faster research by academics whose commitment to a field may be less than their commitment to a scholarly career and that therefore issues of quality, in terms of what gets published and certainly in Ph.D.s, is always going to be at risk. In simple terms, relating to evolution and an inter-generational type esthetic, ethic and politic, the number of articles you read from young academics that don’t cite anything prior to the year 2000 sort of gives the impression that they believe they are the ones who invented environmental education and its research. I think that is a really serious challenge. At a more specific level there has always been that North American knowledge-attitude-behaviour linear, positivist type view. I certainly grew up in the late 1970s and 1980s under the socially critical. I think the socially critical has suffered since the mid 1990s. All education is for something; it cannot pretend to be neutral. I think we all want new young scholars to be bringing in new ideas that extend either the methodological discussions or the conceptual discussions. So there are lots of issues there that I think could be looked at.”

Phillip’s scholarship, and articles he contributed (see Appendix H) reveal an interest in critical reflection and consideration of the concept of identity/subjectivity. Given his familiarity and interest in identity research, I asked Phillip about whether or not

he saw the concept of environmental identity as being important for advancing research within the field of environmental education. He replied

“I think it is crucially important to consider the way we have tried to understand how people consider things and identify with things – there has been a fair bit of emphasis on teacher thinking and then more and more there have been reflections on the researcher. I think the great gains of the poststructural discourse is that it has brought in to the debate and discussion things that under the socially critical perspective, in a sense, created a fair separation between researchers and research or the researched. Going back to the socially critical stuff you’ll find virtually nothing about the people doing the research. Yes, there was some discussion about feminism and all that but basically it was all about fixing up the problems of the world out *there* and in a sense the researcher and the peoples’ identities were always masked or hidden and so were overly objectified in terms of what environmental education and its research might be. The identity stuff, I think, is incredibly important as is the thinking and as is the reflective practices.”

However, given the different ways in which the concept of identity (and subjectivity) are defined, Phillip returned to his earlier stated point about the material and embodiment of identity being a crucial component as well. He said

“but make sure the body is reinstated as a marker, locus and focus of inquiry, representation and legitimation of the field, and its identity and trajectories. I think understanding that there are different ways in which people bring assumptions and interests to research and I think identity is an important one. I have invested an awful lot of my professional career, as an identity, in environmental education innovation, environmental education research and I hope that it would be understood that in my own life I try and walk the talk in terms of the way I live, as best as possible with some contradictions, in a very low consumer, low cost, low footprint way. But again one of the things I’m talking about with Paul is the politics of ontology, the politics of normativity. At the end of the day, is our identity one that we just feel within ourselves or is our identity something that we actually do something with and take action? Naming and de- or renaming are a partial strategy, caught up in the authority/sovereignty of language/text as ‘priority’ or privileged understanding. What of ‘direct’ actions undertaken through bodies, agency and an embodied politic to support the textual/linguistic ‘action’ which might only be in action?”

Phillip has not only considered the concept of identity but also identity in conjunction with environmental education and environmental education research. I

asked Phillip if he could describe what it is about environmental education research that contributes to his own worldview and environmental subjectivity or what about it aligns with his own thinking. He replied

“I think narcissism is perhaps not the right word for it, but more like having to do with a purpose in life. Maybe it’s a bit self-grandiosing but I see lots of issues in the world that I don’t like and I don’t see things that I would like to see such as equity and justice. That sort of worldview of commitment and justice, fairness and equity across the social and the ecological I think has been a big part of that motivation going way back to some of the earlier formative transitions. There are a whole lot of things there that I found really inspiring and motivating to go on and do a masters and then a doctoral and then get involved in the field of environmental education and environmental education research. So to the extent that there is sort of this delusional ‘I want to help fix up the world’ as part of my worldview or cosmological view that’s part of the underlying identity work that I’ve taken.”

Phillip continued

“I think the 1960s and 1970s when I was younger, in my formative years, there was a whole lot of things going on there that I think made the dreamer quite enthused about the idea that we can do things better. I guess juxtaposing that to now – I don’t know whether I’d want to be growing up now. I look at most of the undergraduate students that I teach – I just sort of think ‘what sorts of dreams do you have?’ I think, again, it is context, transitions, cultures that you live in that determine the worldview. So as I said before I think a number of people, myself and others, who grew up in the 1960s, 1970s and 1980s when the socially critical became an outlet not only in environmental education but in physical education and health education as well. But through the 1990s I think that changed somewhat. Whether it be narcissism, whether it be self delusion or self-grandiosing I think there is a broader purpose beyond one’s own identity but relates back on the identity that one characterizes in their personal and professional life.”

### **Regula Kyburz-Graber**

Dr. Regula Kyburz-Graber, like many others, came to complete her doctoral degree in the field of environmental education following experiences in undergraduate and Masters degrees in Biology. She is a faculty member in the Institut für Erziehungswissenschaft at the University of Zurich, Switzerland. Her

research interests include systemic thinking, socioecologically-framed research, teacher education program development and environmental education in teacher education programs, reflective practice in teacher education, intersections of science, health and environment and environmental education. Regula publishes regularly in a variety of environmental and science educational research journals as well as numerous book chapters and research collaborations. Much of Regula's scholarship is written in German and also a many pieces written in English.

Our conversation began with a Regula describing some of the history behind her developing her perspective on environmental education. Following her undergraduate and Master's degrees in biology, Regula had a place in a microbiology research group and believed that she wanted to go continue doing research in molecular or microbiology. However, she noted a sense of disappointment with that field. She described

"I was disappointed with the people there – the fact that at that time there were only men back in 1972 – and that those people had no interest in human beings, or learning or questions or anything like that. They just went to their office or laboratory and did research and that was it. So that disappointed me very much."

Although she maintained an interest in research, once her position was completed she knew she did not want to continue in that field of research. She said

"I was already teaching biology in a high school at that time and I decided to go into ecology. The whole background, the political, personal and social scene and all the friends we had – there was a movement towards change – everyone wanted to change things, change the world and improve things and make a difference. It was in this field of ecology that I started into environmental education because I was sure that there I could make a difference. So I started my dissertation and I published a book from that afterwards – about student's, children's, thinking in networks. This systemic thinking and thinking in relationships was my main interest – and this idea is still a main focus for me – thinking about what happens if you see the whole thing/whole picture, and

not just isolated facts, as well as the relationships, processes and later on the questions about how natural sciences come to establish knowledge. Just now we are working more on the 'nature of science', which is a big subject and one I like very much, because I think it is the foundation for how sciences work and how they understand the world. The scientists' view on the world is a limited perspective, of course, but the scientists themselves seldom accept that they have a limited perspective."

I mentioned that, given what she had said, it seemed Regula had already had an interest in biological sciences by the time she entered university. I asked if there were ideas or interests she could describe prior to entering university that she felt contributed to that interest. She said

"my father was a biologist and he was a biology teacher and also involved in teacher education. He enjoyed being outside and he organized many excursions with students and with student teachers. And very often I would, or my whole family would, go out with him and almost every Sunday he wanted to go out and see how things were going in nature, like the stages in vegetation growth and to watch birds and so on. Interestingly enough my sisters and my brother, who would go on the same trips that I would, were not as influenced as I was."

However, Regula said she did not necessarily want to take the same path her Father had even though she began to take an interest in biology. She said

"I always tried to take a different path – in a way the same but in my way, not in his. And I struggled with that. So when I started my dissertation it was something very new. My father thought I should do a dissertation in biology – in *real* biology. He was very surprised by the fact that I chose this particular subject. Then later on when I went into teacher education I took a different path in terms of taking a direction that was much more research based than he was used to. My father was very accustomed to going out with his students and *showing* them what he was doing – he was always very enthusiastic about nature and I shared that enthusiasm. But for me, it was a new time – it was a time when teacher education was more in the direction of research-based teacher education. I took that chance 35 years ago. Now, in our country, they are starting to go in that direction again in their teacher education – for me a bit of *déjà vu*. They are talking now about specific didactics, like biology didactics or environmental education and so on – all more research-based and I was doing that 35 years ago."

I mentioned that it must be interesting to see to progression from where things were when she went through the program, and it was quite new, and see it go away from that and then see it now come back to what she was working on 35 years ago. However, changes in social and cultural contexts, and politics, occurred over that time as well. Regula described

“shortly after 1968, which was the year especially in Europe, that was a special year in terms of the all the protesting students against the establishment, against finances. At that time it was a special situation. Everyone in my surroundings, my colleagues, they all fought for a better future. It’s hard to explain because it was a unique time and a time when everyone thought that things *will* change and we *can* make a difference and the political system *must* be better. We were fighting against nuclear power. We demonstrated against the construction of a new nuclear power station – it was a big demonstration in 1975 or so – and we were there on the very spot and were convinced that we had to fight against it. You could really feel the driving force for change in our society – very different from now. It was in that time that environmental education grew up and I can say I was one of the first in our country to do that.”

She continued “I was sure things had to be changed and I was engaged. I did not belong to groups that were at the forefront in a political way. I wasn’t walking with students in their demonstrations during that time – I wouldn’t have done that. But I was very critical in my thinking – critical especially against established scientists.”

Being critical is something that Regula described as being fundamental and a line that runs through her whole professional life and is still extremely important today. I asked Regula if there were key points or transitions where she felt that critical interest were particularly identifiable as being fundamental to her subjectivities. She mentioned her Father being a particular influence in this respect. She said

“as a biologist he was always fighting – he has been a member of the regional nature protection organization. My father and I, we have done things together

for this organization. For example, we have cleaned ponds, that had plants overgrown and where the water was sometimes polluted causing the water plants to grow very quickly. I remember several Saturdays when we brought a plastic boat and we went out on this big pond and worked at cleaning the pond just because my father thought it was necessary. He didn't wait for anyone else to organize that, he just did it. Very often he would talk things happening in nature which he thought should be changed. He has written quite a famous small book, about water protection and water pollution, which has sold many copies and I have seen this book everywhere. So as far as this critical position, my father was not really political – yes in a way he was but not in the traditional way and not as a member of a political party, not like that – but in his discussions and talks and so on he was.”

Another contributing component to Regula's critical perspective was engagement with colleagues, during her doctoral studies, who were also taking up a politically critical position and had interests in ecological questions. She said

“at that time there was a development towards changes – and a big exposition at our university in 1970. There was also a book called *Protection of Our Living Space* published in 1971. The atmosphere at this exposition was unique. It was organized by my doctoral supervisor – we met there at this exposition almost every day and talked about the bad developments in our living spaces and in nature and so on. It was a huge common, cooperative thinking about how we ought to do something and we have to work for change. And every discussion was critical. In such thinking we referred to Habermas, for example. We talked about what interests drive scientific research – that was a main question. We were so convinced that things were going the wrong direction – that scientists just didn't think about what happened with their research.”

Awareness of issues and engagement is something Regula described as being related to the political and governmental situation in Switzerland. She said

“I think it's important to know that in our country we have this system of direct democracy where participate in decision making by votes. If there is to construct a street, a bridge, a railway station or to agree on a new law then we have to vote. So we are politically aware of what is going on. In our whole system the political thinking is much more apparent than it is in other countries. It is not the parliament alone that decides it is the population, the people who get to vote. This political system is also important, I think, in terms of understanding why environmental issues were so intensely discussed and questioned in our country.”

Regula described how the opportunity to vote on controversial issues sometimes provoke huge discussion, articles in the newspaper and on TV and citizens are very involved in big decisions that are made. I asked Regula if she could describe what she felt supported, or perhaps even countered, her decision to shift from the “hard” science of microbiology to the social sciences. She said

“thinking back to my situation at that time when I was having to make those decisions. I started very early with teaching. I was still a student, at the age of 20, when I started teaching in a high school. I was working with young girls and I saw how important it is to look at how you treat the environment and develop understanding of the environment and systemic thinking. Teaching classes and having contact with the students was another influence on doing research in environmental education. I think that if I hadn’t had the experience of teaching at that time that perhaps things might have been different and I probably wouldn’t have thought of doing research on teaching and learning. So when I was disappointed with microbiology and I was looking around at what I could do I was sure I wanted to do research that was meaningful, useful and could be used somewhere to have changes happen. When I was teaching I saw that education was a field where I could do research because it would be immediately useful to teaching practices as long as it isn’t too far removed from practice as many research projects can be. My research was very close to the teaching practice and I even did some research with my own classes that I used in my doctoral dissertation.”

I asked Regula if she had experienced tension or opposition, given the contexts of the time and place, to her decision to follow her interest in environmental education and education research. She said

“one biology professor, who was also a friend of my father, offered me an opportunity to start whenever I wanted when I decided I wanted to do ‘real’ research in biology. The professor who was the supervisor for my master thesis couldn’t understand at all that I had changed my mind because at first I had told him that I really did want to go on in his research field. I had already started feeling like I didn’t like the ways that the questions were being taken up and being treated by those scientists. The scientists in that institute couldn’t understand at all why I changed my mind. I was left trying to figure out where could I find a good supervisor for my research on teaching and learning. I asked someone who was responsible for teacher education at the university and he said that I could work with him but he couldn’t pay me or support me and that I would have to find my own way. So I was completely on

my own and I had no one in my surroundings or even in my peer group because everyone was in a different field and not in education. I was really completely alone.”

Although she did not have certain kinds of supports, Regula did have opportunities to gain contacts at seminars and conferences. She said her supervisor

“came to me with an invitation he had received with a call for papers for a seminar on ecology teaching. It wasn’t called environmental education for that seminar. He said that if I wanted this time he could pay for my travel if I wanted to go to this seminar – so it was a chance and I took it. It was a good experience and they recognized what I was doing and appreciated my participation. After the seminar they gave me a proposal to develop and write a book about teaching and learning on forests. The book for teachers and for students that came out of that project work is called *Protection of the Forests*. I think that was a starting point because I got good contacts in environmental education and I was involved afterwards in the developments after 1977 and the Tbilisi Conference. I was involved quite prominently with the work going on and I continued to go to seminars and conferences, to discuss the incorporation of the Tbilisi recommendations, as a representative from my country.”

Regula mentioned that it took some time for the Tbilisi recommendations to be incorporated into programs in her country. I asked if she had felt resistance to her support of, and interest in, seeing those initiatives being taken up. She said

“I think I was politically clever. When I was submitting later on research proposals I didn’t use words like ‘environmental education’. I talked more about, for example, teaching and learning about science in a social context – of course what it was really about was environmental education but I didn’t call it that. I had noticed, and I think it is still the case, that environmental education is seen as something for very young children. As a professor I have dealt with teacher education for mostly high school teachers so I am usually doing research on or with high school students. If I would come with proposals for environmental education some reviewers would understand it as not fitting with research on high school teaching. They would think environmental education is something about touching trees and loving nature and being outside. I can see that the public understanding of environmental education is still in many cases not appropriate and too narrow. Many people do not know enough about this broad field of environmental education and what it can include.”

I mentioned that it seems environmental education is happening even if it isn't being called that and at the same time there is some research being called environmental education which is really more environmental science than aligning with the principles of environmental education. Regula responded that

“there are two aspects in the word of education. One is what the French language expresses with *formation*, or the German language with *Erziehung*, which describes the idea of bringing children to a special behaviour. The other aspect of education is the word which means in French education and in German *Bildung*. It is a much broader term and is about what is important in everybody's lives, what is necessary to learn that will be important throughout your lifetime, to be ready for lifelong learning and to become a citizen who is able to understand and make decisions. When environmental education in our region they were talking about environmental education relating to that first word representing ideas about education as changing behavior. And then I brought in this broader aspect of environmental education in the sense of empowering.”

Regula mentioned that she is looking towards retiring from her position at the University of Zurich but she also mentioned an interest in continuing to pursue her research interests in retirement. I asked her if there were particular research projects that she was interested in working on or something that she has been interested in but has not had the time to take up yet. She said

“yes, of course. I have worked on how to work with students and pupils in the forest, on projects to do with food and nourishment and on interdisciplinary teaching. We made a very interesting book about all fields of environmental issues like food issues, living issues, clothing, working, health, travelling and politics and so on. What I would like to work on is more research on learning as well as teaching and learning. I want to do interviews with high school students about their learning and including their learning about the environment but also in a broader sense because I am more and more convinced that the ways students are being taught in school needs to change – and I'm sure it will change. I think there must be a break between what we have done up to now with the systematic teaching and learning and so on and I think this must change in a substantial way in the future. I think that the learners, the young people, have very good ideas because of the experiences they have. In my opinion it has directly to do with environmental education. As long as we have ideas about environmental education we should be organizing

things for the students. I think that in a lot of cases we see that it is the ideas of the teachers but that really it should be offering to the learners much more in terms of options for learning possibilities and learning in their own way – being more open to what kind of inquiry that they want to do and that applies to the social and political realms too.”

Given her interest in critical perspectives being part of her own research as well as being part of programs for students I asked Regula about the openness of the education systems, with which she most closely works, to supporting teachers creating conditions for students to develop a critical perspective. She noted that in many high schools there is very much a traditional model of direct instruction, particularly in science and that contributes to a particular view of what science is for and the intentions of scientists. She described a time when she

“was giving courses for teachers, parents and children *in nature*. I organized these experiences for adults where I showed things like forest die back, or excursions for parents and their children, where I went to the small rivers and creeks and we turned over stones by the waters and saw the life that was there and what you could tell from the findings in terms of the water quality. Many times I went out with teachers and student teachers for these kinds of programs.”

She continued

“I also offered, here in our community, a course for parents about how they can go with their children into nature and show them all kinds of different things. We also did excursions with parents and children and also courses for children in their free time or holidays from school. So I had lots of different programs. There was a time when I was thinking very strongly about establishing a center for environmental education, somehow, right here in our region. At one point my husband and I were both interested in working in a center in the mountains for environmental education – a very famous region – and we would have taken the job but it didn’t pay enough. That was over 10 or 15 years that I was thinking of doing environmental education in a very practical way and I really liked that. Maybe that will help understand a little bit better why now I am so strongly focused on political questions and critical questions and so on – because I have done the practical side of environmental education and seen all the possibilities. Of course I like to go into nature but now I think I prefer where I am now and working on political, critical

questions that also link environmental education and science. It's not that I understand environmental education only on the theoretical level."

Given some of the work that she had already described, I asked Regula if there were other examples of how she feels she embodies her environmental subjectivity both as an environmental education researcher and outside of her research interests. She said

"actually there are two parts to how I would respond to that. First about 20 years ago I did more practical work. I did courses for student teachers and high school students going outside into natural places like the forest – the forest was my most important subject and specifically forest ecology and the links between that and the economy. Also, parallel to those activities and programs, I was doing research together with schools."

However, with a change in her professional position, Regula was to be a professor for educational didactics and pedagogy for upper secondary schools, for high schools, and for training teachers for upper secondary schools. She continued

"I kept environmental as a focus but now my teaching is less about environmental education as whole but it is about teaching and learning more generally. Environment is still my focus and interest so I always bring it in as examples and I use it a lot as examples in terms of environmental questions. I teach a course called 'Environment, Health and Sustainable Development as Key Issues in Upper Secondary Schools'. So my actual practical work in environmental education is teaching this course."

While environmental education is still a main focus of her research, Regula also described an interest in research methodologies as they apply to environmental education research. She said

"my current research addressing questions in environmental education is the nature of science topic in high schools and the learning biographies of young students – because I think learning and how school is organized and how learning happens there is a main aspect of environmental education. As long as the teaching remains very traditional environmental education won't be able to take off. More and more, as I did more teaching and research, I came to more general questions in terms of environmental education and not so much how to work in nature for example in the forests or how to make small

inquiries on forest ecology – those were the kinds of questions that I explored before but now it is more general questions about the roles of science in our society, the nature of science and how schools deal with that and then about learning. By learning I especially mean learning in terms of self-directed learning, project-based learning and so on. So that is more of my main focus now.”

I asked Regula if, from her perspective, there were research topics or theoretical framings that should be considered that might help address concerns that are not currently being taken up in the field of environmental education research. She mentioned that she saw needs both in terms of research as well as in terms of teaching and that research should not lose sight of supporting teachers in their practical work. She said

“teachers worry about if they are good enough to do environmental education or if they are allowed to do environmental education and if they are able to do what they want to do or if they have the appropriate framework for it. Only if teachers are really supported and if they really want to, or if they can have collaborations with researchers that can support them – that’s when teachers can really do environmental education and they feel strong enough to do it is if they have support. Environmental education, for teachers, is demanding in order to be able to do it and the research should find ways, say through action research or other research approaches, so that teachers can be much more supported otherwise they just go on with their usual work and work more on mathematics and language and more traditional teaching. In that model environmental education just falls through the cracks.”

She continued

“if they [teachers] have not got that fire, they think that they just have to do their job, then they will just drop environmental education. Environment is a subject – for sure. If environmental education has stuck – I would say it is hard to tell but I certainly think it has not evolved as much as environmental educators would have liked it to. But I think that has to do with the system. I think we shouldn’t blame the teachers. I think it is the education system which makes it very difficult for teachers.”

Regula referred to Stevenson (2007) suggesting that what he said first in 1987 and then again in 2007 is still very relevant today. She said

“it is so difficult in our educational system to have environmental education which is really oriented towards the interests and needs and questions of the pupils and students. So if we are blaming the present praxis then we should be thinking about blaming the educational system. There is such a strong need for environmental education and a different way of thinking and teaching and learning and so on. But the entire education system makes it very difficult for environmental education.”

The larger educational system not necessarily supporting environmental education is problematic both in terms of teacher practice but also, as Regula previously described, in terms of the ways that language is used in the framing of research proposals, perhaps less so now than in the past. Dominant educational discourses are an area that Regula suggested need to be more closely studied. She described how she

“recently read about the critical analysis of dominant discourses about what schools should be like in terms of questions about standards and assessment and diversity in the classroom. I think this analysis of the dominant discourses should be a research strand or field within environmental education much more than it is just now. Maybe it is a question about the changing generations in environmental education. Here in our country we can see that a number of those environmental educators around my age who started with environmental education in the 1980s or so I see more and more of them already or soon being retired. I also see a new generation not being as active as there was before. I am still hoping that there will be more environmental educators and I can see that there are activities and so on but I also see a real change of the generations happening now.”

I asked if it seemed that individuals were taking less action than at previous times, which might reflect a change in social and cultural discourses and which connect to individual subjectivities. Regula replied

“I think because we are in a different situation today. In the eighties it was a bit of a breaking away of the ideas and changing things in the world. In the situation we have now it is more about how to handle, in a good way, what is reached and how to go on. Now it is not so much a question about how we can change things or how we can make a difference and it is more a discourse about how we can handle what are the challenges in rapidly changing world. It seems to be more reactive ways than active ways. It is more reaction and how

we handle and react to all of those influences and situations and demands. Before, I think it seemed to be more active. But it depends on the situation.”

She continued

“there is always somewhere something going on. You are in this river of happenings and information and communication and it is very difficult to find your own way and to be able to withstand all of that – also to have time to reflect and time to think things over. I would even say that I can see teacher educators who are all complaining about how much they have to do – they have the courses they have to teach and evaluate and pieces that they have to write. There is really no time to reflect on what is important and that may be different than it was in the starting times of environmental education.”

Regula’s scholarship reflects her interest in critical perspectives and how that intersects with the principles of environmental education. I asked if there were particular things that she could describe that contribute to her worldview and environmental subjectivity from within the field of environmental education research but also as that intersects with her other subjectivities. She said

“I think it is linked to our approach of socioecological environmental education which means that we tend to look at and discuss problems as a whole and in a systemic way or relationships and not as a single problem. For example that in addition to discussing isolated problems we have to discuss about the relationships and what that means when we look at one problem and try to change things that influence other things or when we find a solution for one problem we need to think about what impact the solution will have on other problems. This systemic view of the various levels from the individual level, the middle (institutional) level and the societal level – this is another key issue for me. If you look at an environmental problem like energy resources or anything, you have to look at the problems in a systemic way – and this is a very important kind of thinking that students have to learn.”

She continued

“things that influence or contribute to my worldview or values or identity – well, the theory of systemic thinking or the theory of relationships in ecological questions are both important parts and important theoretical backgrounds. I think also learning theories and the current development of learning theories are things that I find very interesting and that it has, or that it should have, a big impact on environmental education as well as social

learning and cooperative learning and self-directed learning – all of those theories of learning I think are important.”

Connecting to the last point of conversation, I asked Regula if there were particular things about the field of environmental education and environmental education research that she connected with and that she felt aligned with her own worldview to the point that she wanted to be a part of that community throughout her career.

She said

“I was always interested in teaching and especially in learning. When I looked at what was really important in terms of what we learn I came to the environment and questions about our **living** in the environment and **being** in the environment, our past, present and future in the environment. Also looking at what is going on in our environment and the impact of human activities in the environment and so on. I am convinced that the environment is such an overarching concept that covers everything that is important to learn about. I can imagine a school working exclusively on environmental issues. I am convinced it would cover all relevant things that young children should be learning about the world and their being and how they can learn to have a good life. Because every human being wants to have a good life and be successful and be happy – and this is mainly a question of how we are in our environment and what we do to our environment and how it develops.”

Regula continued

“I could imagine a school having environment as the main issue over many years and I am sure that the children and young people would learn in such a school all the things that they would need for their lives that would make them responsible citizens and have an active role in life. I think environmental questions, including of course the economic aspects of things – because when I am talking about environment I include economic issues as well as natural and social environment of course – but a school that focused on the environment in a wider sense I think it would cover all of the relevant issues of learning. That’s why I think environmental education is really the **most** important thing we can do in our schools and for the future.”

I mentioned that the interconnectedness of humans with the natural world and understanding those relationships was something I felt was of key importance to

what students learn in school and therefore an important part of teacher education programs. Regula replied that

“that’s where I think we should be going. And then you have the relevant things in learning. Nowadays young people can learn so many things – there are so many things that you should know or should learn about but we have to decide more and more what is really relevant for children and they have to decide, of course, for themselves also. You will come to the way of being in life and the environment and being together with others in the larger context of our society. I can’t think of anything more meaningful for children and young people to learn.”

I asked Regula if she felt that the concept of subjectivity/identity was of importance both in the practice of teachers, in order to address those ideas with students, but also for research within the field of environmental education. She replied

“I see that it will and must play an important role because being in the world and talking about having a good life for human beings in their society – this always needs to have a critical view on who you are, who you are going to be, what should be changed, what should be discussed, what should be raised as an issue. The existing world is usually taken for granted. All of those kinds of questions about how the world is are very important because there are so many things going on that are just taken for granted or they are taken as a “normal” social development. It must be questioned and critically analysed – we need to ask about what is going on here and who we are in this environment. And I think that critical thinking is an important part of environmental education in schools. We have, once or twice, had projects about critical thinking in environmental education and in science.”

Environmental subjectivity is a complex concept and made even more complex by the fact that subjectivities overlap and intersect continuously. I asked Regula if she felt that her environmental subjectivity, as and environmental education research, was particularly interconnected with her other subjectivities. She remarked

“I think I didn’t talk very much about our children. I think I have to mention them because I feel that they have played an important role in those developments. Listening to children, whether they are your own or they are children in a class you can learn so much. I have learned so much from my

children. For example, when they had a question or they asked about why we do something in a particular way I had to explain and then we talked about it. And sometimes, they suggested we should do it in different way. So the effect of their impulses and questions makes you think about why we do things in some way and makes you think critically yourself. That is something I found very interesting and very important.”

She continued

“I always tell my teacher students that they need to listen to their students and talk to their students – try to understand how they think about things and then have a discussion with them about that. Those are the most important things you can do with children because you can learn so many things and they can learn so many things at the same time. But in this kind of communication and discussion between young people and teachers or parents – this happens so many times and about such important things which can teach them the ways of critical thinking and of systemic thinking and those kinds of important questions in environmental education. This is also an important part in constructing my identity as an environmental educator and it prevented me from being too strict in the way I acted as an environmentally responsible person. I saw how critical our children reacted to those teachers who represented a kind of mission in environmental terms trying to impose ideas on others, and that sort of colonial kind of thinking. My children have helped me a lot to think about not taking over that role of a missionary. I think my children have a good feeling that what they think is fair-minded. So I think our children played quite a crucial role in the whole process of me thinking about myself as an environmental educator.”

### **Connie Russell**

Dr. Connie Russell’s academic appoint is in Graduate Studies and Research in Education at Lakehead University in Thunder Bay, Ontario, Canada. Her interests throughout her life and formal schooling are present in her research interests and the degrees she has received. Connie’s interests in feminist and gender issues (for her BA) intersect with her interests in environmental sciences (for her MES), animal studies and animal sciences creating a unique and rich interwoven fabric of topics approached in her research. Her interest in ecofeminism and philosophy inform her approaches to research topics resulting in thoughtful engagements of many social

and ecological issues. Drawing on information from her CV and faculty page Connie's research interests include environmental education and social justice education, including the intersection of environmental education with critical pedagogy, (eco)feminism, environmental justice, queer theory, fat theory, anti-racist, decolonizing and Indigenous pedagogies, disability studies, posthumanism, human/animal relations, critical animal studies and humane education.

Our conversation began by me asking Connie about how she felt she came to understand that environment, as defined in an environmental education context, was something that was important to her and to such a deep level that she felt she wanted to take up a career in this field. She described

“I think for me my entry point, at the time, was really about animals. I grew up on a farm and I saw the ways in which both domesticated and wild animals with whom we lived were mistreated. Animals and their treatment has always been an interest of mine but I didn't know what to do with it. I started working in animal behaviour and getting into primatology but I knew I didn't really want to do that forever because I wasn't interested in doing the lab work. I sort of fell into environmental education. It was my love of animals that brought me there but then all of a sudden things opened up.”

In relation to that connection to animals, I asked if there were influences when she was younger, that she now can look back on as important, that contributed to her choices to take up a position that reflected that environmental subjectivity. Connie suggested that there are probably a number of them. She described

“some of them are probably more general in terms of contact and spending time with the cows and the pigs. I was quite attached to the pigs and realized they are much smarter than many people give them credit for. I also was quite concerned about the way that wild animals were being treated – often they were seen as pests. My Dad and my uncle were always shooting groundhogs and not being even remotely humane and often quite disrespectful and it always bothered me. But I didn't know what to do with that because I seemed to be the only person I knew who felt that way. I remember my family saying ‘oh well you're just afraid of blood’ ... it's not that simple. But I didn't have the

language for that at all. I just knew that I seemed to *see* something that other folks didn't – I seemed to care in a way that other folks didn't."

In addition to the concerns she had around animal issues, Connie also described how she felt she came to position herself in relation to social justice issues as part of her environmental subjectivity. She said

"I also felt like a bit of a weirdo when it came to social justice issues as well. I just always had that anti-bullying, identifying with whoever is being oppressed interest. I think that my parents wondered where the heck I came from – I just didn't fit with either my family or the wider little sub-culture that I was part of. In the second or third year of my undergraduate degree I took an animal behaviour course and thought, 'these people are studying animals without killing them or chopping them up'. Then going into environmental studies later and I had this big 'ah-ha' because I was taking courses about environmental philosophy and all of a sudden there was this language to describe some of the things that I was feeling. And they really were mostly either feelings of connection to other animals but then also feelings of empathy and loss whenever I saw how they were being killed or mistreated in some way or another."

Connie mentioned another experience during her first year of university living in residence at York that created some awareness of her understandings and interests. She described

"people were asking me where I was from and I would tell them I was from a farm and they'd ask me about what we did on the farm. And I'd say, well we have cows and pigs and chickens. They'd say well what do you do with them – and I'd say well we kill them – and so my nickname there became 'cow killer'. So I'm coming into school and living in a residence and trying to be cool and my nickname becomes cow killer?! And these weren't people who were vegetarian and had a thoughtful connection to their food – they were urban folks who had no idea where their food came from. So it was this big *ah-ha* moment for me to realize that other people didn't have that relationship to their food. I didn't really do anything with that until my Masters but in hindsight maybe my experience was influencing this and it actually gave me a bit more in terms of reflecting on the lives that my parents were leading. On one hand I was quite critical of what was going on but then also seeing that sort of total ignorance that was going on in terms of some peoples understanding of their food I sort of went 'wow, some of the knowledge that my parents have *is* really important'. So just increasing the complexity of understanding that situation was valuable."

Connie also described what she felt were some transition points that were key to her coming to position herself as an environmental education researcher and thus also influence her subjectification process. She described coming to an understanding that being a classroom teacher was not right for her and that

“when I started my Masters what I proposed to do was actually look at what kinds of things were going on in zoos and conservation biology because my undergrad in animal behaviour I had focused on orangutans behaviour at the zoo. I already had some connections with the zoo so I thought maybe I can do some conservation work – and so to start with I was very vague. Then in the first term of my Masters in Environmental Studies at York I took an environmental philosophy course with John Livingston and Neil Evernden and in hindsight it was more amazing than I knew at the time – then I didn’t even know who they were and now realize that I was pretty lucky to have gotten to do that – and all of a sudden this world opened up. At that point I was much more interested in Environmental Philosophy Then I took this course with Leesa and Diane on Environmental Education and Critical Pedagogy and realized that Environmental Ed could be a ‘so what?’ to my philosophical explorations. It really was that transition from my Masters to my Ph.D. where I finally made a commitment after starting to see how there was a lot of potential for me in education in terms of theoretical explorations and philosophical explorations but also having it linked to the tangible ‘so what’ that comes out of it.”

The idea of having a community of practice and identifying with individuals in the field, as well as finding the language to articulate what she had been feeling all along about social and environmental justice issues was a liberating thing for Connie and it helped her overcome some of the tensions she had felt. She mentioned

“I just like that notion of ‘kindred spirits’. It was the same sort of thing to also know that there were the same sort of socially critical environmental educators out there that were uncomfortable with the same sorts of things that I was. I think that if I hadn’t had kindred spirits or a community that it would have been *much* harder. But because of those kindred spirits I felt instead like I was having all of these exciting conversations and Anne Bell and I were students together and so Environmental Studies at York was really helpful because there were so many people interested in these types of things that it was *fun* and I felt supported.”

Connie's interest in philosophy, particularly articles about ecofeminism, led me to ask her about her interest in ecofeminism and how that way of thinking informed her own environmental subjectivity. She said

“you know I'm not really hearing that much about ecofeminism any more and I think it might be one of those things that popped up and was popular for a while and is now maybe fading a bit. But for me it was my first go a bit of a intersectional analysis because I think that ecofeminists did such a good job at is looking at the ways in which the treatment of nature, the treatment of other animals, the treatment of women, the treatment of racialized or marginalized folks – they did such a nice job of making those intersections clear. It provided us a theoretical frame to be able to sort of say 'here's what the ecofeminists are saying now how might we apply it to education?'. It's not the only way to do intersectional analysis but...even things like analyzing animal insults and how they are often sexist – little, easy things like that I still use in my teaching and thinking about the ways that I can demonstrate those ideas to students.”

Connie described how sometimes individuals are better able to recognize interests, or what one believe becomes clearer, when opposition to that belief is encountered. When her worldview clashed with others she mentioned feeling quite marginalized. She remembers

“people said 'no, we have human issues that we need to deal with', 'human oppression matters more' and folks couldn't see the connections. Now it is so interesting to see some of the folks who previously poo-pooed it, like Peter McLaren and Henry Giroux, are talking about it. We're also now starting to see animal studies as a new hot thing and we are finding that there are more people involved in the field not because they are committed to the treatment and welfare of animals but just because it's the new, sexy thing to study within the field of oppression studies.”

I suggested that sometimes it seems, to me at least, that when new language is used or a concept is introduced that sometimes the meaning is not fully understood or assumptions are made and the true meaning is lost and, using climate change as an example, the concept sometimes gets dismissed because of the lack of

understanding or assumptions that people know what that is about. Connie replied that

“twenty years ago most folks in critical pedagogy were very hostile. That paper that Anne and I wrote about critical pedagogy and feminist poststructuralism was rejected a few times by mainstream education journals. And it was eventually published as is and it is a good paper but at the time it was just too radical. I remember we presented it at a conference and there were some key critical pedagogy folks there and their response was as if to say “what are you guys talking about” – they just didn’t seem to get it. But now it’s pretty mainstream and nobody would say that to us now. So, things change which is exciting.”

Connie mentioned that she felt the social context of the field of environmental education was important in her positioning and so I asked her if there were people she felt influenced her own understandings of her environmental subjectivity and upon whose work she likes to engage. She said that there were influences both from outside and from within the field of environmental education research. From outside of the field she said

“the work of John Livingston and Neil Evernden was really, really important in terms of environmental philosophy and starting to understand the relationship to the natural world in more complex ways. And then David Abram talked more about the human world and that sort of thing. The environmental philosophers were very important to me. Then I became quite interested in what the ecofeminists were doing and I was particularly interested, even though she wouldn’t label herself that way, in Donna Haraway and that was important to me because it was an intersectional analysis and she drew on poststructuralism which was brand new to me. Having a background in primatology her critical analysis of primatology was a big “ah-ha” because methodologically I could see what she was doing but also liked the content of what she was doing.”

From within the field of environmental education research Connie mentioned that for the most part

“I draw on, mostly the critical folks like your Dad, Ian Robotom’s earlier work, Annette Gough, Noel Gough – those are the folks who I often find myself in

conversation with. But it's also interesting to see some of the new people as well and their writing."

Understanding that positioning shifts and changes with experiences and context but that there are also interests, beliefs or aspects of worldview that are similar throughout the processes, I asked Connie if there were aspects of her worldview that she felt contributed to her positioning and decisions to take up that position that reflected her environmental subjectivity. Although a complex question Connie replied that there were two ways that she felt she could respond. First she said "as an environmental educator – that remains pretty consistent as having a socially critical and intersectional approach. That really hasn't changed over time and if anything has just gotten deeper." That continuing and deepening interest is evident throughout Connie's thoughtful and critically reflexive approach to much of her work. Connie continued

"the other thing though that I would talk about is my professional identity in terms of my role as an academic or as a professor. I entered the academy wanting to be an activist. I started my Masters thinking I would only do my Masters and would go back to environmental or animal focused activism of some sort or another. But then I got totally turned on to ideas and research and had a bit of angst at that point because I was thinking about a Ph.D. because I was surrounded by activists and some of them saw academia as a form of 'selling out' and of not being an activist. It was John Livingston, who was my Masters supervisor, who said 'oh for heaven's sake, scholarship can be a form of activism' – and for him, in his life, he had spent the majority of his life on the front lines, he worked for Audubon and Nature Conservancy and lots of things and he only came to the academy later. And he came to the academy he said because he wasn't convinced the root issues were being addressed with activism and he saw academics as having a role to play in terms of critically reflecting on our assumptions and the root issues instead of putting out or fighting fires all the time. And for me that helped me think that this was something that I could do – that fits my personality, my interests, my skill set. So I was able to come to terms with being an academic."

Connie took on an administrative roll at Lakehead University which, as she discussed, gave her some mixed feelings and inspired her to reflect on her subjectivity as an academic and administrator which are both closely linked and enmeshed with her environmental subjectivity. Connie discussed

“I’ve been having some midlife angst having been an administrator for a while and especially a female administrator that I haven’t had the time to write and work on some of the projects I’ve wanted to work on. Initially I was feeling bad about that and thinking ‘what am I doing with my professional life?’ and ‘am I making a difference?’. But I think I am. I’m making a difference as a teacher, for sure, and as a supervisor, I have a lot of grad students, and as an administrator in terms of doing pretty significant program changes for both Masters and Ph.D. programs. I haven’t been writing as much and it does bother me that I haven’t been writing as much but I think academic lives have phases. I’ll be leaving administration in a year and a half and then I’m going on sabbatical and then I’m hoping that I’ll have more time for writing again.”

Balancing between the interests and wants but contrasted with the demands of the academic position that researchers hold, particularly if it means that there are administrative demands, can be complex. Being in an administrative role, Connie mentioned that there were complexities between what she wanted to be able to do and what she felt that she had time to do. I mentioned that it sounded a bit like a tension that exists in the academic discourse and institutional discourse of universities. Connie replied

“definitely. That is a bit of a broader topic and I have talked, for example, to our vice president academic and other administrators here about it because it seems, in fact, like it’s a bit of an international phenomena of expectations of academics to be doing more. What you’re being expected to do as a Ph.D. student is really quite unreasonable. I have a good friend who is a full professor now who is 67 and she just retired a couple of years ago and when she graduated with her Ph.D., and she was an anthropologist so it was a year’s worth of field work, she was done her Ph.D. in four years and she had never taught in higher education and she didn’t have a single publication – and that was normal, that was expected because then you would get a job and you would be paid while you were doing those other things instead of all these years of unpaid work as an academic to build that CV to *maybe* get one of the

few jobs. So conditions have changed a lot and I don't think it's healthy. Looking at my colleagues I see many of them are very stressed out because you can't possibly do everything – you can't teach well and publish a gazillion things and be a good team player in terms of service. You can't do it all so you have to decide what you can do at a particular time.”

While administrative demands are pressing for Connie at the time of our conversation, I asked her, since she mentioned the timeline for her working in that administrative role, what she was looking forward to being able to do when she no longer had those administrative responsibilities and was able to focus more on the projects that she was really interested in working on. She responded

“I think I haven't quite started thinking that way yet because I'm still about a year and a half away from sabbatical and I think that sabbatical will be a very important time of reflection for me in terms of 'what next'. I want to try to catch up on my reading, I have all kinds of stuff that I need to do with the Journal in terms of being up to date and administrative tasks with that. I'm really happy that I've finally written about fat pedagogy in environmental education – that's been on my “to do” list for about four or five years now so I've finally squeezed in some time to that which is pretty exciting! I suspect I'm going to continue to write in those sorts of areas – areas that are still marginalized around things like queer pedagogy, fat studies – the things that are still on the fringes of environmental education.”

Additionally Connie discussed her interest in continuing to pursue intersectional analyses and bringing attention to various marginalized voices which is something that has been done in the past but that she feels needs to be reintroduced particularly for those who are operating in something of an ahistoric approach to environmental education research.

What researchers might like to do sometimes does not always align with how we are able to embody our subjectivities. At the same time embodiment of our subjectivities is something that individuals can consciously reflect on as it does often present tangible examples of ones worldviews. Connie described several

aspects of her life where she felt that there are ways in which her environmental subjectivity is embodied. She said

“while I think we all have contradictions between what we say we want to do and what we actually do and I really do try to pay attention to that. When I’m teaching I really do make an effort to bring together the social and the environmental, to constantly be raising those issues, pointing out to students where there are issues that they might not have considered and the social implications. In terms of content, the content itself is pretty congruent with what I believe is important. In terms of actual teaching practices I don’t lecture very much, I keep things pretty mixed up in terms of having activities and discussions. I definitely try to embody a critical pedagogy approach to my teaching as well as pay attention to power relations and different learning needs of students.”

She continued, in regards to her teaching practices that “I think making sure I get outside at some point in both undergraduate and graduate courses so that I’m not merely talking *about* the natural world but actually getting out into it.” In regards to embodiment of her environmental subjectivity in her research and writing she said

“I think that I am very much in my writing. I have always written from the first person and often use anecdotes from my own experiences. I try to be honest about who I am and the struggles I’m having so I hope that that is there in my writing. I’m not really interested in the more objective or pretending that I am not in my work or passionate about it.”

I asked Connie if, based on her own understandings and the theoretical framings that inform her environmental subjectivities, if there were things she felt were important, theoretically and methodologically, to be taken up in environmental education research. While she was hesitant to suggest what others *should* be doing or to suggest that there was any true answer to that more broadly within the field she did suggest that

“one thing that I’d like to see more of is more attention to history. I think that one of the things that drives me crazy as a journal editor is seeing papers where folks, say, will write a paper and say that they are the first person to ever to have ever thought of this when in fact, and I see it all the time

particularly with the socially-critical approaches, they just haven't really done their homework or perhaps they are working with a faculty member who has no expertise in environmental education and so they aren't being advise to go an look at some of the works that have already been published. So I think that people having some sense of history would be good just so we aren't reinventing the wheel and I also think that it is a more generous approach in terms of acknowledging that folks have been playing around with these ideas for quite some time."

More specifically in relation to theoretical approaches she mentioned

"I think that one thing that might be helpful is perhaps people reading beyond our field. While I want people to know environmental education history I also think that there is much to be gained by engaging in either other conversations happening within education or other conversations happening in other disciplines whether that's women's studies or sociology or whatever. I think that that broader engagement and reading serves to enrich the field. But I also recognize that people don't have time. I'm barely reading in the field at this point let alone beyond the field. I'm pretty excited about my sabbatical and getting a chance to get caught up on some reading."

Connie's interest, while time constraints and challenges limit the amount of time that can be spent, in keeping up to date and reading both within the field of environmental education and outside of the field in areas that could potentially offer possibilities for new or reconsidered approaches to environmental education research brought up a tension for Connie. I mentioned that although it seems to me that we are in a time and place where we have more access to research and writings through electronic sources that it sometimes seems as if full advantage isn't being taken of that privilege. Connie replied

"my area of inter human-animal relations there is tons of stuff because right now it's quite sexy so there is tons and tons of writing and I just have not been able to keep up. I feel fairly confident in reading most of the environmental education stuff but even that I'm feeling like I am slipping a bit. I would like to start reading more in fat studies too."

She continued

“we are living in a time where I think that things are different than they were just a few years ago. As a young Ph.D. student one of my closest friends, who is now in her sixties – she had no publications and no university teaching experience, she went and did her fieldwork as an anthropologist and wrote her thesis. She was then hired in a tenure track position and it was expected that she would learn how to do everything else that she hadn’t experienced while she was getting paid. What we *now* expect of Ph.D. students it is little wonder that it takes them so long to do their Ph.D.’s – you folks are all publishing and everything and I think that the game has changed so much that I don’t think you really have the time that graduate students used to have and I think that is really unfortunate and indicative of wider societal problems.”

Both in terms of her environmental subjectivity, but also as that intersects with her subjectivity as an academic, I asked Connie if there were, in addition to the discourses of academia in terms of expectations for graduate students, concerns that she had with the direction of the field or with things that she sees going on in terms of the research being done. She reiterated her concerns with the ahistoricity of some of the research but also mentioned that

“some of it just seems so damn boring. I just think so much of it feels careerist. I’m not seeing people who are passionate about what they are doing. Now maybe that’s because of the tradition in which they are writing where I don’t see **them** but for some of them it really feels like publish or perish – that they are just churning out these really boring articles. For me some of it I just don’t think is actually pushing the field forward and that it really is just reinventing the wheel or maybe doing slight comparisons but that they are such minor contributions. I still think there are many great things being done and I see lots of really good things too but I’m also seeing more boring things. It’s something I’m seeing in human-animal relations as well. So environment, it’s sort of sexy so that there are people working in the field who I don’t think are necessarily actually committed to the environment and that it’s just an interesting intellectual idea or it’s something that might get someone some publications. That worries me.”

At recent conferences conversations have come up regarding the importance of keeping a critical perspective and being engaged in the field. When the reality for some researchers is that they are the one, or one of only a few, environmental education researcher at an institution engagement and maintaining a critical

perspective can be challenging. Conferences and engaging within the field, as well as engaging outside of the field of environmental education research, are important so that those in the field can continue to be critical of the theoretical and methodological approaches used and, as Connie discussed, that this is particularly important for those working in relative isolation at their institution. Connie mentioned

“at Lakehead our graduate students have access to several of us working here from different theoretical traditions and who have different histories so there is a community here. I still think it is important for our students to get out and have conversation with other folks but I have been an external on exams where the dissertation wasn't very good and it wasn't that the student wasn't smart but that they were advised so poorly and somehow had missed a chunk of work and they weren't working in a community and hadn't been coming to conferences so they didn't know. So I think it is particularly helpful for isolated new academics to be coming as well. But I do think it is really important. It's the informal, the dinners, the chats between sessions that often those connections are made or just sort of, and I remember this from being a grad student, sitting of and listening to conversations and starting to get a lay of the land. Otherwise that is something I wouldn't necessarily have known.”

Keeping perspective and maintaining a context within the field are important aspects of the social side of the subjectification process. Connie said

“even at Lakehead it is a pretty isolating process as a graduate student and quite frankly as an academic – it's pretty lonely work sometimes. You're just off in your office reading and writing and ya, sometimes you really need to get out and meet with other people and bounce things around and then you think 'ok, I'm fine'. I know some of my grad students, when the Invitational Seminar was in Quebec, were able to go since it was near by. They told me afterwards that they felt, like you said, like they had read most of these people and am at least somewhat familiar with the writing. I think it gave them some confidence in what they were doing. And it's also meeting people and realizing that the people you are reading works by are real people and you can actually go and ask them a question.”

However, Connie did suggest that she felt the interactions she had experienced with environmental education researchers were somewhat different than interactions

she had experienced outside of the field in academic contexts. She mentioned interactions with researchers outside of environmental education who

“are pretty much a feminist nightmare. Luckily our world [within environmental education research] doesn’t have too much of that. But it sure makes it harder to cite those people when you see them behaving like that and how they are really such hypocrites. That does matter to me. You’re saying one thing and then doing this?! When you talk about identity work that is why I want to see real people in their papers in terms of I want to see authenticity and that people, I mean there are always contradictions, at least trying to live our ideals and embody our ideals in our work in our personal relations which I think is important.”

I asked Connie about the ways in which she felt her environmental subjectivity is influenced by her engagements outside specifically environmental education contexts. Although quite a complex question Connie was happy to discuss her ideas about this. She said

“I think for me there have been a few things. One was environmental philosophy. Doing my Masters in environmental studies at York was really a time where I had a lot of ‘ah-ha’s’ unlike any other time in my life. All of a sudden I had language to talk about what I had been feeling. Engaging with ideas around social construction of nature, anthropocentrism and all of those things was and still is foundational to the work I have done. People like John Livingston, Neil Everndon – Canadian environmental philosophers – or David Abram. All of those folks were really important for me to be able to describe what I was feeling about the natural world and other animals and what some of the root causes were. So I think that was also where I started to grapple with feelings that we can’t just stay at a superficial level and that we actually have to look more deeply and more critically at our relationships. That was really key.”

Following her Masters and continuing into her Ph.D. Connie mentioned the importance she felt in engaging with critical pedagogy and

“people like Patti Lather, Giroux, McLaren and many others who inspired me then in terms of looking at social justice issues and how we teach about those issues and how we discuss those issues. And then when people like the ecofeminists talked about how that all connected – those were all really foundational for me.”

Connie's interest in feminist theory and feminisms are also something she mentioned as being intimately connected with her environmental subjectivity. She discussed how

“feminists work, I'm thinking of someone like Donna Haraway, was absolutely key for me because she was looking at more root issues and because she was bringing the social and the environmental and the animal together. It took me a whole term to read her *Primate Visions [Gender, Race, and Nature in the World of Modern Science – published 1989]* because I had never read feminist poststructuralist work before. It was a big read and a lot to understand. Now I find her work pretty straightforward to read but I think that's maybe because I have met her and realize that half of what she was saying were actually funny jokes on the side.”

She continued, more specifically related to feminist perspectives in environmental education research

“my identity as a feminist is absolutely key which I know drives some of my male colleagues in the field crazy because I am always after them. The feminist part is this huge silence. I think it's key. I think that remains a key aspect of my identity which informs my social justice commitments so that is always there so it does really drive me nuts when people don't pay attention to social justice stuff or reproduce oppression in their work because they are so narrowly focused on the environment or on animals that they dismiss that.”

Along with feminist issues, Connie discussed how social class issues are something she links with her environmental subjectivity and interests within the context of the field. She discussed

“I realize as I get older how working class and how rural I am – that even though I can perform as a middle class person, speak like a middle class person there are parts of me that are always going to be rural and I'm always going to be a farm girl. Initially when I was starting out in the academy, I can't say I was embarrassed by it but I didn't highlight it I didn't really think much about it. Now as I get on and I see how few people in the academy have working class backgrounds, have experienced poverty or who make classist comments pretty regularly in terms of dismissing people as working class or poor people as being stupid – that is coming to the forefront for me more now. I'm finding that I'm reclaiming that identity more and more. I've just started now to look at the fat issues which I think is going to be something that I can talk about more in about five or ten years in terms of what that meant and to start

reclaiming that identity and actually looking at that identity and how that has influenced decisions I've made. That will be fun to start playing around with."

Connie also mentioned that at first she did not realize that her interests in critical pedagogy and other qualitative approaches were on the margins of the environmental education field initially. She said

"it wasn't until I started reading and realized that there had been some paradigm wars and big arguments about methodology. For me, recognizing who I had affinity with and how they were naming things made me connect with those interested in the kind of work that I'm doing."

I responded to Connie that I had felt, in coming to understand the field of environmental education, how very broad the interests within the field are and how individuals find niches that fit their interest and yet that those within the field generally are able to come together on some quite fundamental worldview points.

Connie reflected

"I think it will be interesting to see what it will be like – say if you did this research in twenty years again and looked at folks who are your generation or younger whether their experiences entering the field will be different. When I started out EER had just started and CJEE had just started – it was just at that moment. There wasn't a lot out there. Now, I have students who are doing their masters in education where environmental education has been their focus from day one or who got turned on by it in their undergrad program. Their journey is going to be a little bit different I think."

She continued

"it will be really interesting also in terms seeing if that will really make a difference. I'm thinking of what Neil Evernden wrote like 20 years ago where he was looking at the environmental movement and he said that there have been changes but that he didn't see anything that had changed very much except for the names of the poisons. And I think that is interesting, because of the sort of foundational things that need to happen in that we are embedded in this sort of capitalist and consumerist society, whether in fact knowing a bit more environmental science disrupts much at all. Because I do see that when I go into high schools that students are way more sophisticated in terms of environmental knowledge, social justice knowledge, some students are vegetarians – there were NO vegetarians when I was in high school – that

wasn't on the radar at all. So then I get quite hopeful thinking that things have changed. But then you still wonder if things have actually fundamentally changed? It still seems to me that we are on a pretty environmentally destructive path and that people have a hard time making connections between their own personal actions and wider societal things."

With some of her interests making a move "in" from where she initially saw them on the margins of the field of environmental education research, I asked Connie how she felt that environmental education research was an area that made sense or spoke to her or, in other words, seemed to "fit" with her worldview and the ways in which she wanted to position herself. Connie said

"I entered this field as environmental activist – first and foremost I was concerned about environmental sustainability or whatever language you want to use and education was a tool for addressing some of those problems. For me it's absolutely central to my identity. I could have become an environmental activist working for an NGO or I could have become somebody working at a zoo trying to make things better for animals. There are a bunch of different ways I can imagine my career having gone but at the heart of it is concerns about environment and social justice and animals. Initially because my Masters in environmental studies didn't have much of an educational focus I could easily, had I stayed and done my Ph.D. there, I might actually have been in a different field. Part of it is that I ended up getting a job in a faculty of education and I had specifically chosen to do my Ph.D. in education because I felt like I needed to know more about education. So education, for me, is always just **one** response to the problems we face. For me it's a central response and it had become something because I know more about it and I'm embedded in it that it has become central for me."

Connie's teaching of both undergraduate and graduate courses includes discussions of identity and subjectivity and she also mentioned how she felt understanding a concept like subjectivity and having awareness is important. She described

"I teach both the critical pedagogy course and an environmental education course and the two of them constantly overlap. Even if I'm not teaching a critical pedagogy course right now it still influences my environmental education course teaching. I think identity is central in terms of talking about a privilege if you are talking about things like environmental justice and why the

poor and racialized communities are impacted disproportionately by climate change or environmental degradation. I emphasize is the notion of 'spending their privilege' because there is nothing they can do about being born a straight, white male. So given that they have those privileges, what are they going to do with that privilege? It has also been important for my aboriginal students in terms of having these issues explicitly discussed and they can talk about their environmental identity in terms of how their identity as an aboriginal person, having a different epistemological and ontological relationship with nature, influences their day to day lives and discuss issues and feel like they can talk about their identities. That has been really important for them to understand their relationship to the natural world and relationships to each other and then what they can do with those various identity locations. So I do think it's key – I think it's really, really important."

Connie's interest in intersectionality, marginalized issues within the field of education and her interest in taking up issues of identity/subjectivity with students show some of the ways in which Connie's environmental subjectivity and ongoing subjectification processes are continually points for critical reflection. Connie added

"I think that what's so interesting is, like the cliché of life long learning, it's clear to me now, as I'm approaching 50, that this is an ongoing process. You start to think at 21 that you know who you are and what you're doing and then you realize that you don't completely. I'm excited by your research and want to see what you find now but I do think there is some longitudinal potential in that in terms of seeing how people shift over time. And then sort of making that connection to wider societal forces in terms of what is going on in universities and in society generally and in schools."

### **Charlotte Clark**

Dr. Charlotte Clark positions herself as an environmental educator and researcher at Duke University in North Carolina although, as she pointed out early on in our conversation, Duke does not actually have a school of education and has not had one for some time since it was closed. Her primary appointment is within the Environmental Science and Policy Division within the School of Environmental and is the Director of Undergraduate programs. Drawing on information from her

CV and her faculty page, Charlotte's primary interest is the intersection of collective learning and collective action and she studies how environmental education can contribute to the management of resources and how informal learning processes engage with behaviour change for individuals and communities around environmental issues. She also leads the Education Subcommittee on Duke's Campus Sustainability Committee where she frequently applies the concepts and findings from her research. Charlotte's areas of interest include environmental education, sustainability education, collective action, responsible environmental behaviour and the food/environment intersection.

Charlotte began our conversation by describing how she felt that she came to position herself within the field of environmental education and to realize her environmental subjectivity, as she described, 'later in life'. However, her interests in environment and environmental management began much earlier in her life and noted in particular her Master's degree and choice of attending Duke University as important point. She said

"Duke is a pretty environmental science, economics and policy place. There is no teacher training. You can, as an undergraduate, go out of your way to be certified to teach but you do have to go out of your way in order to achieve that. From the time I got my MEM I did some air pollution engineering work. As you probably know EPA [*Environmental Protection Agency*] has branches all over the country and the air one happens to be here in North Carolina. So I worked for a consulting firm doing air pollution engineering. And I had kids. When my kids were young I was doing a lot of volunteering in their school settings and working in the environment field."

It was then a happy coincidence that around that time Duke's School of the Environment got a grant to set up the Center for Environmental Education. She continued

“I was sort of looking for a job change so I basically harassed them until they gave me the job as their first executive director even though I had absolutely no skills in environmental education at all. But because it was a school of natural science they valued that background that I had and perhaps they shouldn’t have believed that I could learn the other, environmental education, side of things. I think that sometimes people can be a little bit flippant about what it takes to understand environmental education and I’m not sure everyone does. So I started the Center for Environmental Education at Duke.”

Although pioneering the environmental education initiative at Duke, Charlotte described how she soon after her appointment to the position the social interaction aspects of the field of environmental education began to impact the development of her own environmental subjectivity. She described how she

“started attending conferences and I became really fascinated with the research that was happening in environmental education and that was what then propelled me to start a Ph.D.. So I started a Ph.D. at age 42 or 43 and finished it just a couple of weeks before turning 50.”

Coming from a place where there was not a community of environmental educators, Charlotte acknowledged that the interactions with other environmental educators were important to her own positioning. She said

“I credit a lot of my process in joining the national environmental education academy and feeling welcome there to your Dad and, as you know, his incredibly warm and inclusive and welcoming and gentle ways. I will always be grateful for that because I was not a traditional Ph.D. student and I wasn’t a traditional environmental education student either and I came from an institution that – perhaps didn’t value it is too strong a way to say it – certainly didn’t have expertise there. Therefore I came to environmental education from a very programmatic standpoint. I came to it first trying to initiate and run environmental education programs at the higher education level but with a focus of taking things from the higher education level and doing outreach in the Durham community at other levels – whether that be in non-formal areas or in a K-12 formal setting. So I was trying to get our undergraduate and Masters students out into the community and doing environmental education in productive ways.”

Because of her background and coming to her doctoral program from a programmatic starting point, Charlotte described how through her doctoral process

and developing her question for her research she continued to consider her interests but also what might be useful in the context at Duke and to the Center for Environmental Education. She described how she felt that

“because I was at Duke I had to find a Ph.D. question that not only did I think was important for the world at large and something that I was interested in but something that Duke would value. What I learned, which did and does truly fascinate me, is that there were real experts at Duke in collective action.”

The combination of her interest in environmental education and the expertise of faculty in the area of collective action helped direct Charlotte towards concepts that would become integral in her doctoral research and later in her career. She said, of the field of collective action

“I want to bring this up because it does anchor my place in environmental education. You probably dozens of times have had to read *The Tragedy of the Commons* by Garrett Hardin. It puts forward the opinion that people are rational, selfish beings and therefore you have to have private property or you will destroy your environment. So that came out and back in the day there some people led by a woman named Elinor Ostrom who began to find examples all over the world that broke his rule. There were places where groups of people, at cost to themselves, were managing their environments collectively.”

Charlotte described several examples of the ways in which communities had been documented in case studies of managing a variety of resources using this philosophy including forests, aquifers, meadows and fisheries. She described how the evidence from those case studies was used to form the basis of the Field of Common Pool Resources or Commons Analysis. Charlotte identified Elinor Ostrom as someone she felt was, as she put it, the “penultimate mentor or influence”. Charlotte went on to say that

“Elinor Ostrom, who in fact just died late last year, won the Nobel Prize for Economics for this work. She was the first woman to ever the Nobel Prize for economics and she wasn’t even an economist so it’s pretty phenomenal. She

was, in fact, at Indiana for her whole career. Her husband was recruited to Indiana and it's a great story because when they got there as a couple, and this was back in probably the late 1960s or early 1970s and she had a Ph.D. and she wanted to apply for work and they told her that the only work she could apply for there was administrative work. So she basically started doing secretarial work at Indiana and then ended up being a Nobel Prize winner from Indiana. I have met her and she is wonderful."

Charlotte's interest in commons research was further supported at Duke during her doctoral studies by committee member and commons scholar, Meg (Margaret) McKean. Charlotte described how she

"realized that I was really interested in not only how people learn individually but how do people learn collectively. When I started talking to Meg and to Elinor and I said it's great that you know what these characteristics and features are but how do these systems come to be? And not 'how do they come to be' like now we are managing the fishery, but who taught them? How did they learn what the fishery was, that it was in danger, what are the steps that would be sufficient to protect it – how did they learn that? What environmental education happened? It must be there and the answer was that no one has studied that formation process yet."

Charlotte described how she sees her place within the field of environmental education and her positioning as it formed around the common pool analysis work and around commons work. She described her arriving at this positioning being in part "because it was my interest, because it was something that was needed and because it was a form of environmental education that my institution valued."

However, Charlotte created a niche for herself and

"for the five years since I graduated, in the position I am in, I have slowly been weeding my way into the system. One of the things I learned is that the things that they value that I might call environmental education have slightly different names. So I am positioning myself to do research translation and community education, community engagement and community outreach. I use different kinds of terms that are ones that are understood by the academic community in which I reside."

Using language that is understandable and relatable is important but at the same time, as Charlotte said, it complex to communicate. Although she is somewhat isolated at Duke, Charlotte described how she continues to keep connections with the national and international environmental education community. She described

“I’ve tried to make sure I keep really close ties with NAAEE and the Invitational Symposium and I’m travelling to Morocco to go to WEEC. I try to maintain my academic ties with that community even though there is no one at my institution who does what I do. I do have some colleagues at Duke who are very involved with that who are going. I don’t have colleagues at Duke who are in the environmental education and environmental education research field so part of my work has always been trying to look around and find the hooks or the places that work for me and are true to what I want to do but are also realistic for where I am.”

I asked Charlotte if she could describe things, including events or people, that she felt related to her coming to understand environment, and later environmental education, as being important to her. Charlotte said

“my Dad was a really important figure in my life. He was a medical doctor but he had never practiced and he had always done research his whole life. He was just one of the most genuinely curious people I have ever met. He has passed away but I know that I am formed in part because it didn’t matter where we were or what we were doing or whether it was in his field or not but anything he had an interest in or was curious about he would pursue wherever we were. If we were travelling we had to learn all about where we were going. And it was never homework but it was his innate curiosity. Maybe there’s an intuitive thing that’s happened there, a genetic thing, or maybe it’s a lived experience thing that gets adopted, but I really appreciate that.”

Charlotte recounted a memory from her time in England during one of her father’s sabbaticals. She said

“I can remember vividly going to a small island off the coast of England. It had a very rocky coastline and the tide was out and there were little rocky tidal pools that were maybe a couple of feet deep. You could look down into these tidal pools and it was clear water and everything was there – anemones, crabs, small fish, seaweeds – and it was just beautiful. So you had almost a microscope into a little microcosm of habitat. Every morning we went and looked at those pools and he saw me get excited about that so we went and did

that every day. In my mind, looking back, that was when I decided I wanted to be Jacques Cousteau that was going to be my life goal.”

Charlotte described how even though she had an interest in science and ecology that college science, and particularly maths, was not for her. She described that her initial interest but frustration with college science classes made her less confident about what she wanted to do. She did, in all the frustration, find that she enjoyed writing, doing research and the social science side of natural science research. I asked Charlotte if, following her experiences at the start of college if there were, after that time, branch or transition points that led her towards environmental education. She mentioned that she had examples she thought might help illustrate transitions she had made or helped facilitate. She described how

“many institutions of higher education are wanting to reduce their carbon footprint and increase their energy efficiency and it is often more of an operational type of focus rather than an educational focus but there also are a number of educational aspects to it. So when I finished the Ph.D. and was trying to figure out how to stay on at Duke I was able to get them to pay me to teach a couple of classes just as a contract instructor and then I got the office of student affairs to pay half my salary to help write our campus sustainability plan and actually to write the education angle on the campus sustainability plan. The Association for the Advancement of Sustainability in Higher Education (AASHE) put together one of many charters that universities could sign and this one was called the American College and University Presidents Climate Commitment and Duke signed it. If you sign it you have to write a plan that commits you to taking actions that will make curricula and other education experiences include sustainability and carbon neutrality – for all students. I was able to grab on to that sentence and say we have promised to make sustainability and carbon neutrality part of the curriculum for all students so could I do that part of the campus sustainability plan. So I was able to spend about half my time that first year going and visiting other campuses and really thinking about how other campuses were trying to do that. I kind of took campus sustainability and found the environmental education hook within that and I did write that part of our plan.”

Charlotte described another transition and example of embodiment of an area of interest that led to her positioning as an environmental educator. She said

“I’m also really interested in issues where voluntary behaviour is really needed. We’re not going to pass a law and we are not likely to find a market incentive but these are really important environmental issues so you’re going to have to have voluntary behaviour to make them happen. I’m interested in that because that often gets back to education. Even if you can’t say knowing something promises behaviour you can say that outside of pure coercion, if you don’t know it the behaviour certainly won’t happen. So the reverse can be said with some causal link, I believe. Also voluntary behaviour fits really well into the commons, because these were communities that were taking voluntary behaviour, so I was studying that already.”

Charlotte said one such example was that of food and food production and the links to climate change. However, she maintains these interests even though they are not a priority and are not part of any of the schools at Duke. In spite of the lack of popularity, individuals on campus at Duke are addressing food issues. She said

“it turns out that there were a lot of them but none of us knew each other and it wasn’t really my area either so all of this was new learning on the fly. I could go into all the things that are happening but now we have a campus farm and we are going to have a Certificate in Sustainable Food Systems and we have a lot more classes, some of which I teach, around food and environment. So another piece was that I grabbed on to this food and the recent upswing in interest in food and then the tie in to campus sustainability.”

Another opportunity that helped Charlotte realize her interest in research and the dissemination of information that was meaningful in the institutional context related to the Super Fund Research Center at Duke where the research group uses funds that top polluters pay to clean up of orphaned or abandoned hazardous waste sites. She described how

“the faculty member that was heading up the research translation core left Duke so they needed someone to be that member of the center. Somebody said that maybe I could do that because research translation and environmental education might be close. I realized that it was a fabulous opportunity because, in fact, research translation, which they like to call science communication, is just environmental education in another sector by another name. I have jumped into that and if it doesn’t kill me, because there are so many hats, that has been a really fantastic hook. I hadn’t realized that that hook or niche existed but it has been a really good place for me directing what they call the

research translation core of the super-fund center. That has been a really good place for me too where I can kind of slide my environmental education into the Duke world.”

While subjectivity is partly individual there are also social aspects to consider. I asked Charlotte if there were interactions that contributed to her own positioning and understanding of her environmental subjectivity. She said

“yes and I should say that I would have told this story no matter who you were. It involves your Dad but it’s not because he’s your Dad that I want to share this. And it’s not only your Dad – but I would say one important thing is that the environmental education academy certainly has its quirky people, it certainly has its egotistical people but I have been to a lot of science conferences and I have been to a lot of education conferences and I think the environmental education academy is a pretty unique academy of people who are not only warm and welcoming in a cursory, superficial way but they are so inclusive.”

Charlotte continued to describe the sense of community that she feels exists within the field of environmental education that she has experienced by saying

“at the research symposium there is often someone saying ‘this is my interest – would anyone like to join me?’ and not ‘this is my territory – stay away’. It started for me at the Research Symposium in Alaska. I was going to NAAEE anyway I heard about that and I contacted your Dad by email and just said that I know I’m not a scholar and I haven’t been invited but I would love to come – I will take notes and make copies but I would just love to meet people there. He wrote back and said that’s a great idea and that they should invite grad students to it and in fact let’s take a half day for grad students to present their ideas and he would make sure that faculty spread out among the concurrent sessions so that every grad student has some faculty to give feedback. The feeling was never as though there were knowing nods or winks or exclusions. I *have* seen that at other conferences and I have never felt that at environmental education events.”

Connected to the social side of subjectification processes, I asked Charlotte if she felt that there were instances where there was overlap and her multiple identities either melded together or collided producing tension. She described her position as a lecturer in sustainability and how that relates to others within the school. She

described her subjectivity as a teacher being different than that of her as a researcher. She said

“one of my niches is that I teach environment content and I teach environmental education content but I also teach in qualitative methods because that is something that the school needed and valued. I also do a lot of teaching and consulting around In Vivo software because Duke has a site wide license for that so people can get it for free on campus.”

Charlotte also described her role as the Faculty Director for Sustainability at Duke.

She said

“I chair this education sub-committee of our campus wide Campus Sustainability committee. I run a teacher workshop every May where we invite professors to submit ideas for revising syllabus or writing a new syllabus where they would incorporate sustainability into that syllabus regardless of their content. With the faculty director hat on I try to encourage faculty, I try to develop student opportunities whether those are academic or co-curricular or both, I try to identify things across campus so that people can find them and the one thing that will be our focus next year, which we haven’t done well yet, is assessment. I have the Directing Research Translation core of our super-fund research center and I’m also the Director of Undergraduate Programs so I also manage another staff there.”

I asked Charlotte if there were particular theoretical perspectives that she felt most at home with or that she felt related to her own understandings of her self in relation to the world. She mentioned

“certainly the interpretivist and constructivist frame is one that I tend to reside in most of the time. Thinking about the commons is an area where I’m often present. But I also do have this strong natural science background so I have a love/hate relationship with positivist research.”

I mentioned that her use of questions that begin with ‘how’ as opposed to other phrasing of questions suggested a particular approach and perspective when it comes to the ways in which we frame our approaches to research. Charlotte responded

“I do ask a lot of ‘how’ questions and I think there is a real pragmatist in me that wants to do something that is applied and I don’t have the patience for things that are going to stay in the theoretical realm. And that would be true wherever I am – I think that is why I was frustrated in the bench science world. I think that I would have a hard time saying I’ve isolated a new protein that might have use some day in a small way. Even though it could be really important I just don’t think I would have the ability to do that well. I don’t just want to tell the story of how this one community came to develop a common language and set of behaviours and belief system but I would like to think about how that might apply elsewhere.”

Charlotte also described several ways in which she sees herself embodying and the manifestation of her own environmental subjectivity both as part of her professional and personal life. She said

“one of the books that I love is called *The Consumer’s Guide to Effective Environmental Choices* – it’s not new, it’s by Brower and Leon and they basically ask the question about what are the most effective things that a consumer can do in the US to make the biggest impact on the most important environmental questions. Part of what I do is guided by what I learned from that book and from reflecting on that book. In the book they end up with three things: one is transportation, one is household operations and one is food – those are the three big categories that people in the developed world and consumers in the developed world could do at the time they wrote the book to have the biggest impact on the most important problems. I try to think about that and I also have the philosophy that I try not to give myself a hard time for the thing that I don’t do well or ‘right’ but to pat myself and others on the back for the things that they do try to do well.”

Charlotte described the ways in which she tries to address transportation through the purchasing of an ELF vehicle (see <http://organictransit.com/>) but that due to her location the weather does play a part. She also described, also connected to weather, the home heating and cooling demands and the ways in which she works to make that as efficient as possible. Charlotte also talked about the third factor, food, in terms of how she embodies her environmental subjectivity. She described

“my husband, Jeff, and I decided with some good advanced planning to try going vegan for one month. It was actually much easier than I thought and we did fine with that. But I really missed cheese – that was kind of my downfall –

and Jeff really missed fish so then we cut it back to being vegetarian and we have been vegetarian since then.”

However, she also mentioned how throughout the process she continually researched and reevaluated her belief in some of the studies that had previously supported her dietary decisions. Charlotte also mentioned her interest in avoiding use of single use plastics, walking up and down stairs instead of using an elevator and even things as simple as being aware of turning off lights and trying to use less water every day.

Considering how as part of the field of environmental education research, and as a reflection of her own environmental subjectivity, I asked Charlotte if there were directions that she thought weren't being addressed or should be taken up by those within the field. Charlotte said

“I think my first thought in response to that stems from the research work I did with Nicole Ardoin and Elin Kelsey where we talked to or read from current researchers in the field. I became persuaded through that work that we are a little too insular as a field and that we would be well served by branching out and reading journals other than our own. Perhaps I'm speaking for myself only and I don't want to make any assumptions about what other people are reading. Things like publishing in journals other than our traditional environmental education journals and attending a broader set of conferences. Again, it's not like I have mapped out specifically for all of my much more published colleagues where they should go or where they don't go but my sense is that we talk to each other more than we should and that we would be well served by talking more, researching and publishing with, and spending time with folks in other fields.”

She added, relating to areas in which environmental education researchers could consider applying similar approaches, that it is important to consider the language and jargon that seems to get thrown around without consideration of the assumptions that go along with that language. She said

“I think we are too apt to use words that become second nature to us because we use them a lot within our own theoretical walls but that are really confusing and perhaps stall or stymie people from joining us. I talk to my students and ask them about their epistemology and ontology and paradigm and it’s just really easy to do. I think we privilege, as a field, the use of jargon more than we should and we should privilege more plain speech. I’m not sure it takes that many more words, if any, to speak more plainly.”

Charlotte had already expressed her interests and ways that she takes up her environmental subjectivity so I asked if she could describe how it is that she came to believe that those were important kinds of things to be doing and an important positioning to take up. Charlotte described that

“I think that in part is a conviction that I have developed that time is short to accomplish things for the environment. It’s a conviction that comes out of some of the things that I’ve just talked about and a conviction that I’m not going to listen to the part of my brain that says what I do won’t matter – I’m going to make a conscious decision that the small things and the voluntary things I do **do** matter because that’s core to my research being is believing that it is true.”

She also added that part of why she thinks she does the things that she does is because she acknowledges that she is able, financially, politically, socially, to do so. She said

“I am going to buy a \$4000 ELF even though I have a perfectly good little Toyota Camry and a bicycle. We are going to pay a little extra for this kind of more environmentally conscious water heater. Yesterday I was coming back from DC and I took this bus called the Mega Bus. I had never taken it before, it was a five hour trip and it cost \$28 from DC. Mostly I just wanted to try to because it’s a much better carbon choice, than a flight, and they said that they have Wi-Fi and desks and power plugs so I thought maybe I can do the very same thing on the bus that I would be doing at my desk anyway. I looked around me at many of the other people in the seats and although I could have said that as well my guess, if we were making judgments about the people in the other seats, was that for many of these people that wasn’t true. One was a family of five, one was a gentleman who seemed to have some mental disability and so I do have to acknowledge that I have the where-with-all to make choices sometimes like that whereas others don’t.”

Our conversations concluded with me asking Charlotte about what makes environmental education appealing and how she thinks that aligns with her own worldview such that it is more than simply something she does and it is internalized as an environmental subjectivity. She reflected “that’s a great question. Why is it that this is my passion professionally and personally whereas for others it is for some other social cause? That’s a fabulous question. If it was one that we had the answer to we could be very rich individuals.” I mentioned that rather than any one generalizing or all-encompassing answer I was interested in her own ideas specially in relation to her own experiences and ideas. She added

“I know what answer comes to my mind but I’m not sure I believe it but I’ll say it anyways. It was important to my Dad and my Dad was very important to me. He showed me things about the ecological world throughout my childhood which, for me, landed somewhere really deep – and I don’t know why. It’s not like now I spend a lot of time camping or hiking and it’s not like I’m out there all the time but this is definitely the problem the world face and I want to address more than any other. Whenever I think about it I go back to those early experiences. The reason I started by saying I question that is there are so many variables in ones early life and so, well, I’m just not sure.”

Ideas about ourselves and our subjectivity, the ways we position ourselves in relation to others, and our understandings of these things are extremely complex. Charlotte’s interests and institutional contexts provided possibilities and also barriers to taking up environmental education as a professional vocation. However, rather than seeing the lack of support for environmental education as inhibitory, Charlotte saw that as a possibility for her to be able to bring to, and make applicable, her interests and growing experiences in environmental education in ways that would be valued and applying concepts that made sense in that time and space.

**Mark Rickinson**

Dr. Mark Rickinson works in the Faculty of Education at Monash University where he is the Associate Dean (Engagement). Prior to he and his family moving to Australia, Mark was based in the UK and, in addition to consulting work, was a Research Fellow at Oxford University. His CV and faculty page indicate that his real interests lie in understanding and improving the use and usefulness of educational research and that his research focuses on knowledge utilization, research impact, evidence-informed policy and practice as well as learning in environmental sustainability and outdoor education. His work has included projects for government departments, government agencies, research collaboratives, national and international organizations, educational publishers and local authorities. In his role at Monash, Mark's work focuses on leading the Faculty's engagement activities (i.e. contract research, consultancies, etc.) both domestically and internationally, establishing a new program of work around the utilization and impact of research in educational policy and practice and developing research and teaching in environmental/sustainability learning, particularly the use of indoor and outdoor learning spaces.

At the time of our first conversation, Mark was, as he had been for several years, working as an independent educational researcher doing freelance research and work on consulting projects. Our conversation began by discussing some of the points that Mark felt contributed to his positioning as an environmental educator researcher, and therefore also to his environmental subjectivity. Mark completed an

MA at the University of Toronto (1992-1994) in environmental geography and environmental studies. He said

“there were possibilities of doing further studies, a Ph.D., in that area but for me, at that time, education really appealed as a research area because of the potential links between research and practice. I had been working, as it happens, on conflicts around national parks and conservation and had been doing a case study on East African wildlife parks. It felt a bit strange because those sorts of issues were nothing to do with my reality or even my background or anything to do with me really. That really felt like a decision point where if realized I wanted to go into a field where yes, there were research opportunities, but it *also* links with practices and issues that have some connection with my reality. That is a decision point that comes to mind. And I think that realization and decision about the importance of that link between research and practice has become a powerful thread throughout my work in educational research. Environmental education research is more of where I see myself.”

Mark’s article in collaboration with Louise Robinson (Rickinson & Robinson, 1999) is one example of the ways in which the “research into practice” connection is made and happens to be one of the articles that Mark sent as part of his “key articles” collection.

Prior to his Masters work, Mark described having an interest in geography at school because of how geography is

“the discipline of the *real* – it’s what you can see, what’s there, what your reality is – it’s what out there and what’s happening in society and nature and that’s what I think I really liked about it. It’s the one sort of traditional discipline that bridged the social sciences and the natural sciences and that was very important to me.”

Rather than the segregated approach, either geography degrees as a BSc in physical geography or a BA in geography, Mark

“wanted to do a program that was completely integrated so I could do both – so I could be doing soil science and development studies right along side each other. And that was what always appealed to me. So I suppose the environment and environmental issues were at the heart of what I liked about geography and the kind of geography that I connected with. Environmental

geography at Toronto was a program where you could do that. I think that applicability is really important to me in what I'm doing. Where that comes from – I don't know really. I think I'm just generally quite a pragmatic person. I like to think about things carefully. But I also really like the practice side of things. I think there is a lot of knowledge in practice – in expert practitioners too. Research has an important role in developing practices but I think practice is really where it's at. Research serves practice – at least it should."

In addition to interests that guided his choices in his education, Mark described other interests that contributed to his decisions that led him to environmental education. He mentioned that he

"tends to be a very active, physical type person – I'm energized by movement and that change of environment, from outdoors to indoors. I can really see how young children need that and to have access to their environment locally. And having children and thinking more about things like health – thinking about things like food and growing are threads within my life. So I think that really we are all a product of the times we live in. There have been policy pushes in the UK over probably the few years for learning beyond the classroom – including things like food and farming, connections between those. So I have found myself doing work in those areas – using my research skills around those topics – and with that and in combination with having young kids and being involved in things locally have kind of made those stronger parts of my environmental identity. We are affected by the work we do as well. I did a lot of work with learning through landscapes probably 10 years or so ago – and that was another thing, thinking about school grounds and learning beyond the classroom experiences. So I see those as other threads that have also woven in."

However, while outdoor spaces are important, Mark pointed out that it is important to communicate that environmental educators and researchers are not necessarily environmentalists and come from a variety of contexts and with varying interests.

He said

"I remember a phrase Noel Gough used, and he said 'I'm an educationalist, not an environmentalist' – and I felt a real connection with that. I thought 'Yes! That speaks to me'. I suppose I'm really most interested in 'what are we learning about learning' and not as much questions of 'what are we doing about the environment'."

Mark described how he felt as though experience and time in the field of environmental education has contributed to his own perspectives and the decisions he has made in terms of how he engages in the field. He said

“I’ve always seen myself as in environmental education research. Once you’ve worked for a while you have an understanding of things and how a field works and that is valuable. You know if you’ve been in a field for 15 years you have some understandings that are important because you have that sense of perspective and how things have developed and you can separate out the superficial and at least have a view of what perhaps is more important or well done and what’s not.”

However, that experience and familiarity can also highlight the ways in which the field can also be seen as frustrating. He described how

“what it’s about or has to be about is a field that challenges the mainstream, in terms of views of knowledge and contexts for learning and all sorts of things. It has to be about being/thinking differently – but the trouble is that, because it’s about being different, it also is on the margins so it needs, just like charitable organizations that are involved in environmental education, to prove its worth and value which becomes problematic in terms of narrowing research agendas – it becomes more about evidence as proof rather than evidence as raising questions. I think those two things (1) needing to be different and (2) needing to prove our value hold us back in terms of really making progress on what have we really learned about learning.”

Mark’s positioning as an environmental education researcher is unique in that although he has worked at large universities he did make the decision to continue to follow his interests outside of those institutions. I asked Mark about his decision to make that change. He said

“I suppose I just felt as though I needed to try something different. I think it does link a bit to ideas about environmental identity in the sense that, for me, *balance* is really integral to what I’m about and that does link – I can see real links with environmental thinking. I feel like I find myself in a lot of situations where I’m in meetings with people who are in organizations and, this might sound a bit bizarre but, they just *look* really unhealthy. Peoples physicality is very reflective of how they live their lives – what they eat, whether they exercise, how much stress they are under, all those things. I do take a lot of inspiration from environmental thinking about respecting that we are physical

beings as well as cerebral beings and that the body needs balance. So for me working freelance was about that – that I was able to structure my days so that I was productive but also very active.”

Mark also mentioned the overlap of his multiple subjectivities and how freelance work allowed him

“be much more integrated into the family rhythms but also to work by being able to structure my schedule myself ... you’re constantly being brought face to face with questions of identity actually – you know, who you are, because you’re not defined within an organization, you are creating this sort of professional outlook and identity and goals all the time, *for yourself*.”

Since it is sometimes possible to better understand an individual by knowing who they find to be inspirational, who they reference and with whom they find resonance and even helped them make sense of their own subjectivity I asked Mark who he felt contributed to his positioning as an environmental education researcher. He said

“I think Bill Scott at Bath University – he was very supportive of me at a time that, when I look back, was very important when I was at the National Foundation for Educational Research. He just, in a quiet sort of way, encouraged me. I’ve always also drawn a lot of inspiration from outside the field of environmental education research – that’s been very important to me ... to kind of look at people who are doing really good work beyond the field and then think about, well how could that be brought in. I worked with Leslie Saunders at NFER and she did a lot of really interesting work about connecting research and policy and the use of research and the complexity of knowledge processes. She was someone I was interacting with who was very encouraging of me as a researcher – I knew that was important at the time but now that I look back and see it *was* definitely important. And your Dad as well. He’s taken seriously the ideas about teachers’ knowledge and teachers practices and really in an in-depth way drawn on broader work across the social sciences in relation to accessing practitioners’ beliefs and thinking. And I was particularly inspired by Anne Edwards’s rather sophisticated use of theory. I think theory is often used very poorly in research, particularly in Ph.D. research. I don’t think we really understand how to use theory, I think it’s really hard. Just in a very subtle way she showed how theory *can* really enrich what you’re doing and improve the power of what you can do.”

Following our initial conversation Mark sent me an email. He felt that he wanted to include two more influences that he had not mentioned when we spoke. He wrote “one thing that struck me as an absence in talking about my identity as a researcher is the influence of my Dad. My Dad works in cancer research. His work is a part of him. He has great humility about his work and rarely talks about it at home in family settings but I know very well that he has been a real leader in his field (Epstein Barr virus, the first human cancer virus, which is linked with cancers in parts of China, parts of tropical Africa and glandular fever/mono in much of the rest of the world). What has all this got to do with me and environmental education research? Well as I get older I realise that a good deal of my thinking about the process, role and purpose of research has been informed by ideas I have picked up from my Dad very subtly over the years. Through my Dad I feel like I've had the privilege of knowing what a really gifted and dedicated researcher looks like and what it takes to really make progress with difficult questions. My Mum too, a nurse, a teacher and then a psychologist/counselor, has also had a strong influence - but more in the issues that interest me (people and their development, learning, growth and experiences) and the processes that attract me (coaching, teaching, facilitation, mentoring), as opposed to in what it means to be a good researcher and to do good research (which is more my Dad).”

Embodiment of our actions and practices can help illustrate our subjectivities. Mark mentioned that he felt that actions speak louder than words and that there were three things he wanted to talk about related to embodiment of his subjectivities. He said

“one thing that has been very important to me is trying to make evidence accessible to non-researchers ... I think that making evidence accessible, it’s not just a communication issue – you really have to build relationships with people and work together on something over a period of time. In terms of identity, that making research accessible is really critical. Another one is just simply saying that we need to look at and think about research as an evidence base, a body of evidence, and approaching it as an evidence base and collating and synthesizing and interrogating the evidence – that’s important to me as an environmental education researcher and I also think it’s important for the field.”

Mark continued

“relating to that is also thinking about what sort of evidence we are generating? What does it all add up to? The only way you can get a sense of that is to take seriously the task of collating, synthesizing and interrogating the evidence. Doing the review that I did that was published in 2001 was very much motivated by that interest as well as, to some extent, a bit of a frustration with a lot of reviews of research which had but done but were kind of more often using methodological categories which can be very useful BUT it’s useful for other researchers and not useful for people who aren’t researchers. I think the third thing is I’ve kind of created my own way of working as a researcher – outside of academia but still connected with it. What is that about in relation to identity? It’s about the importance of a life-work balance and health, both emotional and physical health and those kinds of things that have been important to me.”

While he identified with the field of environmental education research, Mark also pointed out that there are both strengths and weaknesses that he sees within the field. He described his concern around the

“kind of a disconnect with other kinds of educational research. So, work on environmental learning wasn’t well connected with broader research on learning and I think perhaps that is starting to change. But I think that has been an example of where there is better use of theory and there is more connection with wider educational research.”

Mark’s interest in learners and learning is evident in his critical review article published in 2001 in *Environmental Education Research*, 7(3) and has been an especially well cited article within the field of environmental education research

because of the links drawn between learners and learning in a practical sense.

However, at the same time he mentioned that he feels

“one of the strengths of environmental education as an area of research is that it is a bit on the edge and it is really asking serious questions about how do we do education? and what does education mean when we take ecological issues seriously? If we are needing to think seriously about different forms of knowledge and ways of knowing and processes of learning then we also need to think creatively and differently about the research process and the kinds of knowledge and evidence that we are looking to generate. All of that is very productive, creative – it’s an interesting area to be in as a field of research.”

He also mentioned that he feels that “sometimes we need to think just slightly differently about how we could hook up the sort of issues that we are grappling with and the work that we are doing to bigger picture, more mainstream but still very challenging and enduring educational questions.”

Working outside of a larger academic institution, Mark mentioned that he sometimes felt isolated and a bit “out of the loop” in relation to some of what is going on in the field of environmental education research. He acknowledged that he reads books, articles and follows the conference proceedings but that it is still different than interacting in a community of practice which seems amplified when you are in a field that is already on the margins of the education field. He said

“people have to fight hard to keep a connection with the field when they are in their own institutions and then when they come together at conferences or symposia or whatever there is this feeling like ‘oh it’s so nice to be around people who understand me and I can talk to and who share similar values and interests’ and back in my institution it is really difficult to find that. And I understand how that is. I think the strength is that there is a resistance and wanting to do things differently but it can be an unhelpful isolation. I actually think often people say that we can learn from other areas of research but I think we can actually contribute a lot more than we give ourselves as environmental education researchers credit for.”

There is complexity and almost a relationship that exist working within a field, and also working to bring what the field can contribute to other fields of research and then also seeing what those other areas of research can contribute to the approaches used in environmental education research.

I asked Mark about theorists and theoretical concepts that he found to be useful or that informed his approach to environmental education research. He began by saying that his felt that theory

“can be very unhelpful and I think people get encouraged to use theory in their research too early and not in a way in which I’m sure is completely helpful. I think it is easy to use theory badly in the sense that it’s just something that everyone feels they have to have and it closes you down rather than help you better understand your research topic.”

However, Mark suggested that

“there are philosophies and theories of learning but they are very specific – and it’s usually specific to language, specific to certain strains in curriculum subjects like science or mathematics or literacy. I don’t think we have a really powerful theory of learning in our area. Definitely work is being done and certain theories are being applied but I guess I’m motivated by the idea that we need to work on building that and we need lots of different forms of expertise involved in building that – it’s not just an academic researcher’s job. But I think academic researchers need to initiate it and create the space or conditions or forum for that work to take place.”

An important reading that Mark pointed out as influencing his thinking was by Frederick Erickson, an educational psychologist (see Erickson, F. & Shultz, J. (1992). *Students’ experience of the curriculum*. In P. W. Jackson (Ed.). *Handbook of research on curriculum*. Macmillan, New York.) which combined the sociological and psychological research and argued that educators need to understand how the curriculum is experienced by students and that distinction between the prescribed curriculum, the enacted curriculum and then the experienced curriculum in terms of

what sense individual students make of it. Mark said “reading that article honestly was such an incredible experience. It just encapsulated *everything* that I was trying to do in my thesis. It was just right there.”

In relation to influences on subjectification processes and individuals sense of positioning within the field, Mark added

“I think it is really taking seriously that idea that you need to find what you are here to do and what contribution can you or do you want to make. I think there is a danger in just people looking to emulate others or trying to be too good at too many things or be just really academics.”

To further illustrate his point Mark used the example of his experiences doing triathlons. He described how

“there are so many different types of triathlons and so many different kinds of courses. After doing it for many years you realize that you really have to play to your strengths – you have to work out what sort of courses suit you and there are different variables and you have to figure out the strengths and weaknesses. When you first start out of you think of it in very plain terms like how you’re not good at swimming but you’re good at biking. Then over time you realize that there is so much variety. I think it’s the same in research. There are so many different types of research and so many different potential roles and issues that we need to deal with. I suppose I wish people would think more about what their strengths really are and what contribution they can make to the field because sometimes there are too many people trying to be everything or trying to be what other people expect they ought to be – I think that sort of limits what we can achieve.”

Returning to environmental subjectivity and worldview in relation to environment, in an environmental education researcher sense, I asked Mark if there were any influences that contributed to his environmental subjectivity that we had not already discussed or that he felt were important aspects contributing to his worldview. He said that

“geography and environment have been a theme in my life – it’s a thread. It is a context that I have found myself in from school through to university

undergraduate and post-graduate. There's a history there. That is something that makes it part of who I am."

The connections that are made with other like-minded people are also something that Mark indicated as being important. He said

"I get together with people who are in the environmental education research field you can feel a connection. There are people who are interested in the outdoors, they're interested in health, they're interested in food and they're interested in things that are also important to me. And I think that goes right back to the beginning of our conversation because it can be a little bit of a sort of a comfortable place to be and we sort of connect by the fact that we are sort of resisting and doing things differently. But that is there, and I had kind of forgotten it. But when I was out in Australia I realized and remember how good it was to be around other people that you share certain values with. I think that kind of connects with who I am as a person. And I think another thing I might say would be related is kind of really *questioning* about what kind of knowledge, what sort of learning – there is a serious questioning of thing within the environmental education research field which I find stimulating and helpful because I am interested in those sorts of things."

Reflecting on environmental subjectivity as integrated, entangled and enmeshed with other subjectivities that we may self-identify, Mark described the complexity of articulating our sense of self and worldview. He said

"there is a lot of me that is into a lot of the things that are in the field. But I also get very frustrated by environmental education research because I think it can be quite an inward looking community and too precious about being different. I don't feel too much like that right now but that has been something that at times I have gotten a bit frustrated with and that kind of connects with academic researchers way of writing and communicating that seems more like it is useful to other researchers and no one beyond that. I think that there is a part of my identity that is someone who can get a bit frustrated, and it's not specific to environmental education research but all kinds of academic research."

I replied that there can sometimes be an elitist or "Ivory Tower" syndrome that *can*, but does not always, creep into the research that is being one. Mark replied

"yes and I think that can be really very unhelpful. One of the really good things about environmental education research is that it helps to break out of that because it is making those connections between how you live and not just how

you think and how you talk. So in some ways I think it challenges a lot of dualisms but it can also get tied up in theorizing how distinctive and different it is and how it challenges the mainstream – I think it can get a bit lost.”

I mentioned, in respect to the kinds of research that are being done it's not necessarily helpful to critique in an attacking sort of manner and rather that there needs to be thoughtful responses that help move forward. Mark replied

“that's actually something that I hadn't commented on but I agree strongly with that - all the sorts of paradigm wars and so on. I think that goes back to the thing I was saying about if we really take seriously the idea of what sort of evidence base are we generating then I think if you make the argument on the grounds of saying that we have lots and lots of studies like this and we don't necessarily need more of them but there are these other questions we need to put our heads together on. I think that's a kind of different way of thinking – saying look, lets see what we are generating here that could be useful to others. But so many times the kind of critiques that are written feel like they are just trying to fill up journal space and there are real issues that we need to be dealing with rather than practicing our critiquing skills which is sometimes what it feels like.”

Rather than being negative, although Mark acknowledged that research needs to be well conceptualized and framed and that poorly conceptualized research does need to be addressed, he described a more positive approach to moving forward. He suggested

“it's about trying to identify the questions we really need to work on and really be led by the question so we need to be really creative here and really, well innovative isn't the word, I guess creative in terms of how we go about approaching these questions. So often people are defined by their theory, their theoretical approach or their methodological approach or expertise and I think that is really the wrong way round. All of that stuff is good if it helps us to answer the questions we need to answer but it's not good in and of itself.”

### **Nicole Ardoin**

Dr. Nicole Ardoin is a professor at Stanford University in California. Her appointment is held jointly between the Graduate School of Education and the

Woods Institute for the Environment. She has a Masters degree in Natural Resource Management and a Ph.D. is in Forestry and Environmental Studies and with interests within that field relating to social ecology. Prior to returning to graduate school to do her Ph.D., Nicole worked for the World Wildlife Fund and worked in non-formal education settings. Her research interests focus on environmental behaviour as influenced by environmental learning and motivated by place-based connections, with people-place relationships being of particular interest. Her work in non-formal environmental education relates to program evaluations with museums, zoo/aquaria and residential environmental education initiatives. Nicole's current research engages a variety of topics around the use of education to engage individuals in a variety of settings in dialogue about environmental decision-making and informed conservation behaviours.

Our conversation began by talking with Nicole about her view of the field of environmental education and the ways in which she sees herself being positioned within that greater context. Nicole remarked on the complexity of a question like that and began with what she described as caveats that she felt were important to discuss first. She said

“I think that in the field people often tend to come to this from two background or directions or motivations. One in general tends to be the motivation towards environmental conservation and one tends to be more the motivation towards the education angle. I think you see that reflected in the research and in the practice and perhaps even in the journals in which people are publishing or the university departments in which people sit or the degrees that people hold with regards to this area.”

Nicole continued by discussing a piece written by Harold Hungerford that she often refers to in her teaching about the myths of environmental education. She said

“one of my myths that I talk about a lot is that environmental education is about two things: (1) kids in school and (2) kids going to nature camp for a week. Most of the work that I do is actually not with kids – I love kids and I’ve worked a lot with kids – but I do a lot of community based work. I do a lot of work in international and field-based settings so in those settings it’s usually entire communities – so sometimes it might be kids but it might be parents or it might be people who don’t have children or policy makers or people working at non-profit organizations. I also work a lot with zoos and aquariums and museums and parks so in those settings it really is thinking about environmental learning and environmental education opportunities not only for youth but also for families or visitors from 8 to 80. I think environmental education is about learning throughout the life cycle.”

Nicole had mentioned her Master’s program in Environmental Science. I asked her about her specific interests of her research and if that connected to environmental education or if she had come to environmental education from a more science based background. Nicole described

“my Masters is in Natural Resource Management and within Natural Resource Management my emphasis within that was Environmental Education and Interpretation. It was within a College of Natural Resources, which is interesting too but we can get to that in a minute, and within that there were different tracks. There were people who did wildlife and fisheries track and there were the forestry group and then there were the human dimensions of natural resources group. So I was in the human dimensions program and within human dimensions there were some people who did economics and policy and then there were those of us who did environmental education and interpretation. It was actually interesting because there were about 50 grad students within that program at any one time and you had to go to eight or ten Friday lunch sessions and someone was always presenting on their masters research.”

She continued

“I had to take a forest ecology class, which we used to call ‘forced ecology’ because it was not only boring but SO hard. We would go out and measure trees and have to climb up trees to measure their heights. But I think it was really good for me because it led me to an interesting appreciation of what a school of Natural Resources does which is different and they used to joke that the guys in forestry, and we were in Wisconsin for this, and I realize I am stereotyping by doing this but it really was what it was like because they were guys and they wore their plaid flannel sort of iconic lumberjack types. They were really great and really fun guys but they would joke that they were in

forestry because they love to cut down trees and they were in a program with those of us who were in environmental education and interpretation and we were very much pro-conservation behaviour but it was a great opportunity to really understand these different perspectives on natural resources and natural resource management.”

While she described it as being a fabulous experience, Nicole also noted that it led her to a deeper understanding of different kinds of programs. She said

“for example where Phil [Payne] did his Ph.D. he was at Georgia, which has an ecology program which also has within it a track of people interested in environmental education. So within that ecology frame it is very much about understanding forest ecology not with the interest of cutting down the trees but rather with the interest and concern in biodiversity. It is a really interesting and different frame. So my Ph.D. then was in the Yale School of Forestry and Environmental Studies, which is an interesting marriage traditional forestry and then environmental studies which has more of a conservationist and preservationist perspective – so there’s kind of an interesting tension.”

The experiences Nicole mentioned were clearly influential in her own understandings and perspective. I asked if there were other transition points or experiences that she now associates with her developing and pursuing her interest in environment in her degree programs. She said

“I do talk about that a lot with my students. I have mixed feelings, like I think a lot of people do, about significant life experience (SLE) work. So I think the answer is yes and no and I hope that most people would have that kind of answer. In retrospect, which the SLE work all is, and I think that’s why it’s complicated because people reconstruct their identity they think they have or they want to have. I ride horses and I’m a horse person so I spend a lot of time outdoors and I’ve spent a lot of time with animals. I’m sure that contributed to part of it but I did not grow up hiking and camping and doing a lot of outdoorsy kinds of stuff. I have always been a very pro-social kind of person. I’ve always been the kind of person who is really cause oriented.”

Nicole talked about her parents, who are both teachers being very cause oriented as well as very politically and civically engaged and active. She described spending a lot

of time outside, particularly unstructured time, during the time that she grew up over seas. But she went on to say

“this is where I think the SLE argument is a tricky one, everyone else I knew there spent a ton of time outside and not everyone I know ended up in environmental education. I think it was kind of a generational thing for me. I think a lot of kids spent all of time outside doing unstructured things. When I was in college, and just after college, I was kind of searching for what I thought I wanted to do and at that point my college majors were international business, French and art history and I wanted to work in an art gallery – my dream since I was in middle school was to work in an art gallery or to work in an art auction house like Christie’s or Sotheby’s and sell art and work and live in Paris. I interned at the Smithsonian during the summers in college and I worked at the college art gallery through college.”

Working at the Smithsonian, Nicole said she spent a lot of time inside, by herself, in a dark basement and that was not something she wanted to do. Her self-described pro-social views contributed to her interest in her first job after college, which was running a horse farm. She continued

“as I started to apply for more ‘real’ and long term jobs I was volunteering at a women’s shelter and I was thinking about if I wanted to go back to school for social work – and so I made a long list, for myself, of those kinds of things. They were all very cause-oriented and environment was one of them amongst many. When I was in college, I had applied to an internship at WWF and didn’t get it. One of the things that I applied for, when I was working at the horse farm, was to work for a student conservation association. One of my best friends had done that and there happened to be a position that was a hybrid of an interpretive ranger position and working in a museum at the Grand Canyon National Park. That was the internship that came through. I had been doing the volunteering at the women’s shelter, and it was really intense and difficult, and I was trying to decide if I wanted to work in that field or with the homeless and then the environmental one came through.”

Nicole said it was the desire to give back to, and be part of, the community that contributed to her decision to take that internship.

Nicole also identified an experience during college that she felt contributed to her pursuit of environmental education, but, as she said, it came out of quite a different context. She said

“when I was in college I worked for campus police, because it paid the most money and I stood in the middle of the street and basically told people that they couldn’t drive down a particular street and that it was for faculty and staff only. At the time I was reading *Anna Karenina* because I was really into Russian literature and a good friend of mine worked there with me. He was two years older than me, and I admired him, and he was a Biology major. One day he came up to me and said ‘have you ever read Aldo Leopold’s *Sand County Almanac*?’ and I had never heard of it but he said that I **had** to read it. So I read it and of course I thought it was **amazing**. Again, I still remember standing in the middle of the road reading that book.”

However, Nicole also mentioned that she recalled reading a great many books, and of her love for Russian literature, and that contributes to her skepticism about any particular experience being particularly influential more than others. She recalled

“when I went to the Grand Canyon, that environmental education job, where my first day as an interpretive ranger I was walking into the Canyon and I had a group of about 20 visitors with me and they were all listening to me and suddenly I was this expert when really I’m an art history major. I remember looking back the trail at them and they were listening to me and here I was in this beautiful place and I remember thinking that this is what I want to do with my life. Really since then I haven’t looked back.”

I mentioned to Nicole that there it is interesting to hear her talk about an interest in combining the social with the ecological/biological and the importance of interrelationship, at least for me, led me away from the field of ecology and more towards environmental education. She said

“my other thing is I have to tell people that I’m not a science person. My Ph.D. is in Social Ecology meant that I took a lot of classes in sociology and anthropology, both kinds of those classes were really hard but I loved it, and a lot of them were upper level ones with seniors who were majoring in sociology or the anthropology ones were often with graduate students. I struggled through them but I remember being in tears my first couple of semesters at Yale thinking, ‘I can’t read this stuff’ and ‘I just don’t get it’. I don’t have a lot of

a science background because I didn't do it in my undergraduate, I took some community college classes to get into my Masters program and then in my Masters program I struggled, really struggled, through the science classes because they were Masters level science classes in a program that was very science oriented. I think that is such an astute way to think about these significant life experiences is that you're right, in environmental education it is as much about the socially critical aspect and this engagement in our society as the pure environment or ecology part."

She continued

"the most interesting to me or that I find fascinating is this engagement with environmental behaviour kinds of questions and what does learning mean for behaviour. Whether or not we think that is the direction we should be going, which I also think is an interesting question, how much do we prescribe behaviour and what does it mean to be prescriptive about behaviour and what does it mean to prepare someone for behaviour, but I think it's fascinating. Reflecting back on my experiences I think it's true that I probably could have gone into any of these fields that were about making the world a better place in some way."

Although Nicole mentioned that she is trying not to take on new projects at the moment, because she is at the stage of reappointment where she is trying to not take on more, she said she has had a hard time resisting and has felt that they were so meaningful that she just had to be a part of the work that is going on. She said

"a project that was started by a good friend of mine called *The Great Ape Diaries* is about the areas of the world where the five great ape species exist and most of them are on the edge of extinction. They are on the edge of extinction mostly for reasons related to mining issues, civil war issues and human rights related issues. He started talking to me about going to these refugee camps where people are fighting each other to spend one night under a canvas and where the conditions are so dire and terrible. The way he describes these places it's just so horrible so when I hear that kind of thing I think 'what the heck am I doing sitting in this cushy office and worrying about words on a page and wasting my time checking emails'. I think this goes back to thinking about being socially critical and thinking about what I could have done with my life or what I do with my life and I think there are times like that when you think there are few projects that have such a huge impact."

Nicole reflected

“I guess I think that in environmental education we can and we do sometimes have the opportunity to really make a difference but it requires us being willing to engage in projects that are really hard and sometimes asking the hard questions. It is interesting to think about, with regard to significant life experience, what piece of it is the piece that is significant? Is it because it’s about ecology? Is it because it’s about science? Or is it because it’s about people and social justice and about getting other people to care about something that is really important.”

I asked Nicole if there were particular things about the field of environmental education that made her feel like she belonged or that aligned with her own worldview and identity. She said

“there are a number of thoughts that are swirling together when you mention that. Just yesterday I had a meeting in the city, which meant that I was in the car for longer than I usually am – it’s about a 45 minute drive into San Francisco, and I heard a couple of things that influenced what will be my response. One of the things that I heard was an interview with Obama’s main speechwriter who is just leaving the Obama team but he has been with them for a while. But it was interesting because as I was listening to him I was thinking about how closely and scarily aligned I feel like my perspectives are and I wouldn’t say necessarily democratic worldview or liberal worldview.”

Nicole continued

“it was interesting because the story followed that was this story about these people in China who speak English very well and watch usually American sitcoms or dramas and then translate them into Mandarin. They were talking about how in their socialist worldview they said that they were proud of their socialist worldview because they watch the American TV shows and see that, in the shows, there are a lot of people in the US also with this worldview. So I was listening to that and contrasting it with the speechwriter and thinking that I have a pretty socialist worldview and humanitarian worldview. I was thinking about that and that is often taken as an insult that people on the right like to throw at people here in the US if you agree with Obama too much. We are just getting ready to pay taxes here and although I feel like it can be painful I think I’m happy to pay taxes.”

Although she said that her thoughts about the radio broadcast itself were not necessarily directly related to environmental education, Nicole described how she

felt her thoughts about those two particular items reflected how she approaches environmental education and her research. Nicole noted

“it’s an interesting thing because I do spend a lot of time wanting to argue that environmental education is not just liberal and that it is for all of us and I feel like I’m constantly making this argument that it’s about a healthy planet, opportunities for all of us to have clean air and water, an equitable economy – basically that environmental education is about a better world for all of us which I do in my heart believe and I don’t think it’s about a liberal agenda.”

Nicole described

“I also recognize that there are people who perhaps don’t believe that all of these abundant resources should be equally available to everyone, which then I realize that my shock and horror at seeing that not everybody believes that is colored by my worldview. I think it’s interesting to try to disentangle all of that and again it’s this notion of a fish in water – it’s so hard to see what is all around you. Living in California where, for the most part, people are very liberal so I don’t really have a lot of other people around with different worldviews. So I guess my deeply held values are in that I value people having the opportunity to have a clean and healthy environment and have a society in which their views can be heard, whether those views agree with mine or not, but I also value that people, if they have access to those healthy and abundant and clean resources and access to information about what is happening to those resources based on our consumptive lifestyles – I do believe that they will make decisions that I think are the right decisions, which are about reducing consumption and leading a more environmentally conscious lifestyle.”

Nicole mentioned that one of the constant tensions and challenges for her in environmental education many in the field so deeply believe if people really had the right information, were empowered with the right skills, and had the opportunity to appropriately debate issues, then they could engage with these issues in a meaningful way and then take action. But she followed by saying “and yet we know from behaviour theory that there are so many different influences and so many different barriers that come between people and them doing what we think are the right things to do. I think it’s fascinating and it’s what keeps me in business.”

I mentioned that the interests that Nicole described, in her positioning as and environmental education researcher, with respect to worldview seem to me to help to make our own worldview more known when we see other worldviews that are counter to our own and that can contribute to the oppression, marginalization and power imbalances that exist. In considering differing worldviews Nicole mentioned that one way she sees a revealing of differing perspectives is somewhat painful and comes as a result of having family members as friends on Facebook. She said

“sometimes they make comments that remind me what the real world is like. The example I’ll give is we were at a family member’s house washing dishes and another family member was rinsing all the dishes a lot before putting them in the dishwasher and someone made a comment about how because they have a new dishwasher you don’t have to rinse the dishes as much. In response the second family member said ‘oh it doesn’t matter how much we rinse them because we don’t pay for water here’ and it made me think oh my gosh, that’s how you’re rationalizing this using water in terms of how much you pay and not whether we are wasting it. So from her point it wasn’t meant to be malicious but it was a really good reality check for me. But I do try to look at those times as research opportunities because it gives me a chance to see how the rest of the world thinks – or at least others within that particular context. It is very interesting because otherwise you wouldn’t have those glimpses into what the rest of the world thinks about. The challenge, though, is that sometimes it can become so overwhelmingly depressing because you realize **that** is probably 98% of the world.”

I said I felt that sometimes we are not always aware of our own worldview unless we see something that counters it in some way. Nicole responded

“I think it reminds me a bit of *The Matrix*, which I hadn’t seen in a long time, but it was that idea of that once you have seen it you can’t not see it and I felt like I wanted to go back and almost that I didn’t know because it would never be as simple as before I knew again. It was just last year, the first sentence in the article on my dissertation research on the sense of place in environmental behaviour and how reports suggest that basically we have twenty or twenty-five years – we are on the edge of ecological collapse and I felt like I wanted to go back to not having read that article and not knowing that. But once you’ve read it you just can’t pretend that it’s not happening.”

Nicole continued

“I have a joint appointment between the School of Education and this environmental institute and when I’m with my colleagues from the environmental institute we all know these things and we don’t sit around and waste time and most of our faculty meetings are about issues. That same sense of urgency is not present in the School of Education. There are other times, and this relates to an article that is written by my good friends Charlotte Clark and Elin Kelsey and myself and it’s about this whole notion of are we ‘fiddling while Rome is burning?’. That’s the thing that sometimes I’m completely fine with being slow but there are other times I feel like this is the time and this is so critical. And again, getting back to the behaviour thing, I think that is why some people feel like, and I don’t agree with this, the whole path of social marketing to environmental behaviour is the path to take the issue is so critical and how can we not do this.”

In light of what Nicole was saying about her interest in behavioural aspects and critical components, I asked if there were particular people, colleagues or authors, that influenced her positioning and her own understandings of her environmental subjectivity. Nicole responded

“because I have ended up doing a lot of ‘place’ stuff for my dissertation there are a couple of books that are like Bibles to me for that. There’s the Altman and Low book (1992) called *Place Attachment* and there also was *Senses of Place* by Feld and Basso which is also an amazing book. My advisor for my Ph.D. was Stephen Kellert and certainly his thinking. I have nine Ph.D. students and it’s so interesting and has made me reflect a lot on my relationship with Steve and how he was as an advisor and my relationship with him. What students expect here is so different from my relationship with him. Here students expect much more of a one on one and daily relationship and I talk to my students all the time. Steve is one of the smartest people I have ever met and he is really thoughtful and when I had his time I was really grateful for it but he was so not a micro-manager. I joke about it but it is completely true that at Yale in general, and certainly with Steve, once I passed my qualifying exams they basically said they would see me in four years and people were so independent with their research there. But that’s a long way of saying that Steve had an enormous amount of influence on my thinking but not necessarily on the day-to-day of my research.”

Nicole continued

“Rich Stedman is somebody who I have just recently been working with on a chapter and he’s great and has written a ton of place stuff. One of my favourite place articles that I have been citing a whole bunch is by Maria Lewicka and she wrote a great overview of 40 years of place attachment research and there

are a whole bunch of people in that vein. I would say the body of “place” research has been really influential for me but that’s different than the place-based education research. And I definitely would make that distinction. The place research I’m reading is more anthropology, sociology and some geography in base and not so much place education.”

I asked if there were those within the field of environmental education that Nicole felt she identified with or who she felt were influential to her positioning as an environmental education researcher. She said

“within environmental education it’s interesting because what I’m looking at here I’m seeing these free-choice learning books and that’s outside of environmental education and more like science education or museum education and like Joe Heimlich and John Falk. I always cite Martha Munro who writes on behaviour. Bill Scott of course. Bill was one of the first environmental education researchers I met and has had a huge influence on me certainly through reading his writing but certainly as an individual. I would say he is a tremendous mentor and such a kind person and so thoughtful. He’s really very good at formulating questions in a broad, applicable to real world way and then thinking about what does that mean for research and what does that mean for practice. Bill had a huge influence on how I ended up framing my research questions in my dissertation. So Bill is definitely someone I would think about as an influence in environmental education.”

Nicole also mentioned her Master’s advisor, Dan Sevik, whose advisor was Harold Hungerford. She described Dan as being a kind person, emotionally supportive and very supportive of Nicole doing work internationally. Nicole said

“I would say I think, in terms of learning from Dan, I learned from him how to be a good mentor. He was a great mentor just in the sense of him being supportive and hands off. What I learned from him was that I also really liked the way he was with students. He was very careful to always, instead of just lecturing, have hands on demonstrations. He’s really quite a quiet guy and not super charismatic in front of a group but by having some kind of hands on piece to it then it wasn’t as important that he was sort of on stage and it took the focus off of him. And he also is super genuine and it’s so clear that he really cares about students and I think that really influenced me as well. So I think that influence has always stuck with me.”

## **Greg Lowan-Trudeau**

Dr. Greg Lowan-Trudeau is a Métis scholar and educator and assistant professor in the Faculty of Education at the University of Calgary. He credits his childhood experiences, family stories and cultural teachings. Greg was previously an assistant professor and continues to serve as an adjunct professor in the Department of First Nations Studies at the University of Northern British Columbia. His CV and faculty page describe Greg's research and teaching interests as including land-based education, Indigenous science and environmental education, traditional ecological knowledge and philosophy, community and environmental planning, the relationship between pedagogy and activism, Métis languages and cultures as well as interpretive and Indigenous research methodologies.

In the time between the first and second conversations we had, Greg and his family relocated from Prince George, BC, Canada, where he had been working at the University of Northern British Columbia, to Calgary, AB, Canada where he took up his position at the University of Calgary. Greg discussed the importance of cultural influences on how he believes he came to position himself as an environmental education researcher. He described how

“there are these cultural aspects and then the traditional Western science and even Western educational influences. Being from a family of teachers, my grandfather was also a teacher in Saskatchewan and Calgary, I was successful in the Western school system but as a Métis child I realize now growing up in Calgary that even though I had great experiences there was sort of that idea of the null curriculum at play where there, outside of my family experience, was very little cultural content in any authentic way in my schooling.”

Greg also described, looking back on the past from his current positioning in relation to his environmental subjectivity,

“formative childhood experiences, whether it’s culturally or spending lots of time out on the land and recreationally or fishing or picking berries with my Grandmother and those family stories, which are largely cultural ones, combined with relative success in a Western school system and growing up with a Father and Grandfather who were Métis and were science teachers. I guess for me I try not to separate those influences so much anymore.”

That integration, rather than separation perspectives, is also present in the ways Greg embodies his subjectivity as an environmental education researcher. Greg continued

“so that cultural aspect of what it is to be a Métis person, an Aboriginal person, learning about science and environmental education really wasn’t part of my schooling until probably later on when in my twenties I was involved as a guide and outdoor and environmental educator with groups like Rediscovery, which is a really excellent informal culturally-based environmental education group, and also the folks at Lakehead University where I did the OE3 program and my Masters degree. For me that was where I really started to form my unique niche within the environmental education world both as a practitioner and as a researcher in terms of through bridging those different worlds.”

Greg’s publications are, as he explained, primarily in science, environmental education, outdoor education and experiential education. However, in his new position at the University of Calgary where he is part of Indigenous initiatives in education and across campus he suggested that there is a lot of “cross-pollination” between the aforementioned areas and his work in Aboriginal Education and Indigenous Studies and that crosses over to his research and scholarship as well.

In discussing his perspectives on environmental education Greg had already mentioned some points in his life where he felt decisions were made that impacted his environmental subjectivity. However, Greg also pointed out what he felt were some ‘ah-ha’ moments in his subjectification process. He recalls how he

“went through a transition point between high school and undergrad where I made a conscious choice that I was sort of feeling overworked and just burnt out from organized sports and also feeling like I wasn’t getting enough time to

spend outside and in the mountains and near the river – those things that I had done more earlier in my life and with my parents and I wanted to be able to get back to that less structured sort of routine and spending time doing that.”

In favour of having more flexibility, Greg turned down chances to play soccer and football and run track and field at several universities and colleges in Canada and the United States. His interest in sport and biology led him to do an undergraduate degree in Kinesiology at the University of Calgary. He reflected that

“I’ve always had sort of a really eclectic interest pallet and so I spent enough time, I think I took three years of Japanese as well, and explored around in the social sciences. My most favourite course in undergrad was during my final semester. It was an Ethnobotany course and it’s funny because it’s actually become a really big part of what I do now.”

At the end of his undergraduate degree, the nature of his degree, a general interest in education and leadership, his parents’ encouragement **not** to go into teaching and the provincial politics of the day all influenced Greg’s decisions about what to do next. As a result Greg took part in the JET program, which led him to live in a small town in Southern Japan where he got some formal classroom teaching experience teaching English and some cross-cultural education. He said

“I spent a lot of time exploring the mountains and surfing and spending time in the ocean in my time off. That experience, I had a definite ‘ah-ha’ moment after that year, because I realized that being that 9-5 kind of classroom teacher is not what I wanted to do – I felt a bit confined. I had a great experience there but came out of it thinking that I still wanted to be involved in education but I didn’t think that being a full time classroom teacher would work for me.”

Greg came across Lakehead’s OE3 program and quickly felt like it was the right fit for him. The program provides an opportunity to receive a Bachelor of Education and an Ontario Teaching Certification but is largely based on outdoor, experiential education with an ecological focus. He describes that time as a turning point and that

“all three threads of the biology, the outdoors and experiential and the education side all came together as well as the cultural aspects too, because of the program emphasis on Aboriginal perspectives, and I was already looking ahead, at that point, to graduate school possibilities and there seemed to be that opportunity there as well. It’s funny how you go through these different stages in life and once I had made that decision and things kind of started to fall into place I got a neat job back in Calgary developing an outdoor program for adults with disabilities and got involved with Rediscovery in Calgary and the Banff area and things just really started to gain momentum as I went to Lakehead the following year.”

The program at Lakehead was influential for Greg and he described how the opportunity

“really formalized some of those thoughts and even about some of those areas that I mentioned coming together in different ways. I had some neat work opportunities with different groups around Thunder Bay as well as with Outward Bound Canada to work with their Aboriginal programs and that became the focus of my Masters work. With all of the excellent mentorship available at Lakehead in both Indigenous and Environmental Education that’s really where I started to learn about being an academic and how to have that balance of being a practitioner as well as doing graduate level scholarship.”

Greg also reflected that, from his position now, the infusion of Aboriginal Education and Environmental Education was something important to him but was something that others did not necessarily understand. He said

“people would ask me if I focused on Aboriginal Education or Environmental Education – as if you have to choose one or the other – and I would say that I do both and that I don’t really draw a line. For me that fits into the theory and philosophy and community teaching that I have had.”

It was this lack of understanding that he felt was important in clarifying his own understandings of his positioning and interests.

At another transition/decision point, Greg applied to the Masters program part way through his BEd year, where he had Bob Jickling as his OE3 supervisor. A teaching placement at Pelican Falls First Nations High School in Sioux Lookout, about 5 hours northwest of Thunder Bay that serves students from all of the fly-in

communities in Northwestern Ontario was another experience that he identified as influential to his decisions about his career path. He described how

“they have a really unique program there based on a combination of learning traditional land skills and traditional ecological knowledge out on the land around the school as well as traditional laboratory science and technology and so everything is documented using photos and video. Following that experience I applied into the Masters program wanting to explore those sorts of practices more – again bringing cultural pieces into experiential and environmental education. I went off to Outward Bound and was involved in their Aboriginal programs for the summer and then had to decide if I wanted to go back to school for another couple of years or just continue working in the field. I decided right at the end of the summer that I was going to go back and start my Masters. In the Masters program at Lakehead there are generally lots of options to take courses in both Indigenous Education and Environmental Education and then also just generally really strong scholarship and critical pedagogy and I was fortunate to take many courses like that. I had the opportunity to focus on my Outward Bound experiences though interviews with others for my thesis work.”

The decision to continue into a doctoral program following his Masters was another transition point that Greg identified. He said in regards to that decision

“it was probably some of the best advice that Bob Jickling ever gave me, and he gives all sorts of advice which is usually pretty good. The advice that Bob gave me was to not start a doctoral program unless you really feel passionate about something. You need to feel that inner fire and drive because a Masters is one thing but a Ph.D. is at least 4 or 5 years or maybe longer and you need to have something that really, really catches your enthusiasm and passion to carry you through that because it’s a very individual journey. It’s great if you have others around to chat with and support you but ultimately you’re basically on your own. So I think for me I felt like I had that. I had quite a powerful experience with my Masters work. It was not without challenges as I ended up doing a fairly strong critique of the Outward Bound Aboriginal Program. There were largely a lot of enthusiastic responses and support from within and without the organization but whenever you critique an organization, especially as an insider, there’s bound to be a little bit of tension. I think all of that, for me, just increased my curiosity and my motivation to continue working in my specific area and more generally in our field, to expand respectful and constructive dialogue and understanding.”

Greg said that the decisions around his choices for his doctoral program were still not easy. He described that

“it was a difficult decision deciding where to go because there are different influences and then do you stay at the same place if it’s working for you. There are very specific people working in very specific areas and you wouldn’t necessarily just up and leave for the heck of it. Also with communication changing and technology it’s a lot easier to share ideas and talk to people far away and be able to collaborate with different people. I ended up coming back to Calgary so I did two degrees at Calgary and two at Lakehead.”

Greg’s Masters work also played an important role in his decisions about his doctoral program and, at one point, had considered doing work in New Zealand. He said that

“one of the big themes that came out of my Masters work was interest from both participants and instructors with that program to increase inter-cultural sharing and understanding and programming and so that was the big theme I wanted to explore in my doctoral work. I looked around and I ended up connecting with Gail Jardine in Calgary. She was one of the few people at that time who I could find working in education that had interest in both Environmental Education and intercultural Aboriginal Education and experience in those areas. Gail is also very grounded in the scholarship of critical Western scholars such as Gadamer and Foucault which lead to many interesting and illuminating discussions.”

Greg discussed his experience with conflicts he had encountered and how that made him think carefully about differences between critique and being critical but also being constructive and the importance of that in his practice. He discussed that

“there is a difference between critical dialogue and debate and bashing. It’s a fine line that I think I’ve come back to in my work now where I’m starting to work more explicitly looking at activism and, based on some of my experiences this year in Northern BC it’s hard to not be a part of some of the cultural and environmental activism that is going on. There is definitely a conflict element to that but there’s also a major collaborative and pedagogical space that I think is created.”

Greg’s position at UNBC provided opportunities to instruct courses on community and environmental planning and traditional land use studies which he described as having a more geography and environmental studies focus which expanded his

understandings of those fields and their relation to his work but that his move to the position in Calgary would provide some different opportunities that he was looking forward to. He said “I’m very excited to move back into the field of education more explicitly and I’ve kept my research with an eye always on the educational aspects of whatever I’m doing.”

Greg’s embodiment of his environmental subjectivity came through in examples of projects that he was working on at the time of our conversations. One, from his doctoral work looks at the experiences of relative newcomers to Canada with learning about Indigenous Ecological knowledge “because that was a bit of a blind spot identified by some of the participants in my doctoral work and something that several suggested I should look at more.” He noted that the cultural perspectives brought into diverse Canadian classrooms makes science and environmental education classrooms and centers interesting and complex and that there “are increasingly, now, emphasizing Indigenous perspectives as well as Western perspectives. So rather than the idea of two-eyed seeing, there’s almost a three- or four-eyed seeing thing happening which can be very rich but also very complex.” A second project Greg discussed relates to pedagogical aspects of Indigenous Ecological Activism. His time at UNBC positioned him at the heart of an environmental controversy around the proposed Northern Gateway pipeline and he described

“it’s hard not to be moved and impacted and impassioned by some of the events of this past year in both directions, both positively and negatively. I have noticed that there is a lot of informal pedagogy happening on both a community and a personal level where people who are getting involved in these activist events and are naturally going out and learning about legislation and history and things like that and attending events and so on. There is

conflict because people have different understandings but also my hunch is that there is some real pedagogy happening. So I'm just getting started on a narrative project looking into those sorts of experiences."

There is something to be said for the ways in which we try to ground and find language for our own ideas. Understanding our own ontologies in relation to theoretical concepts can give us language as well as help others see the understandings and assumptions behind the things we create. Greg's own work is influenced by theoretical concepts that he described to help illustrate the ways in which theories inform the approaches he takes to research and his own positionings. He described how

"I really feel like I have found a home in environmental education as a field is because of its inherent interdisciplinarity. Like you said whether it's cultural influences or spanning the spectrum from environmental studies and philosophy to environmental science and geography and all of the different influences that shape what we call environmental education or those of us who are part of it intuitively understand but from the outside it might seem like kind of a hodge-podge of all different influences. For me the focus that became my doctoral work was looking at theories of intercultural, transcultural and multiculturalism from a cultural perspective but also from a theoretical perspective. The concept that really caught my attention was *Métissage*. So as a Métis person there is etymological links to that concept of blending or mixing which has crystallized in Canada as the Métis people but also in other places around the world."

In regards to the influences he feel contribute to his ontological positionings and theoretical approaches to research continued that

"for me, my theoretical work and my practices are influenced, as I've said, by Western Science, traditional ecological knowledge or Indigenous knowledge and also methodologically it worked too. In terms of drawing on different influences, looking at work by folks like your Dad – he has written some great papers on qualitative inquiry in environmental education and interpretive inquiry. What I was really doing was looking at and considering say, ok, I'm primarily a qualitative researcher and I lean towards interpretive narrative approaches but I also really work with Indigenous methodologies and how can I bring those different areas together. What I ended up doing was in my own *Métissage*, or *bricolage*, as the starting point and brought those methodological

influences together in a way that seemed to work for me and also still work with in projects now.”

Greg pointed out “if you take seriously ideas from the big Western theorists, someone like Gadamer or Foucault, who think about societal change and really considering other peoples ideas then yes, you have to be at least open to considering that not all of your ideas are correct. Everything is contextual. I’m still working on that.” He also suggested that

“a lot of my work has been a personal project as well as enacting that in my own pedagogy and research in terms of how do I stop separating those silos and bring them together. I think in a bigger societal picture too which may be me projecting my own personal ideal, I don’t know if it’s exactly how I live, but ideas that I believe in terms of a big societal scale would be bringing those ideas together as well.”

In addition to the theoretical concepts Greg discussed, he also mentioned several individuals who he felt were influential in his own positioning as an environmental education researcher. He said

“definitely a lot of the folks in environmental studies like the deep ecologists and the bioregionalists, for example, and some of the big Indigenous theorists like Gregory Cajete, Ray Barnhardt, Oscar Kawagley and Leanne Simpson – people like that who might not work in education but certainly influence our field. Others like the Two-Eyed Seeing group at Cape Breton University – Albert Marshall and others – all of those different people I guess we sort of develop our own frame or bag of influences. I think it is ever expanding. Looking at activism and things like that has prompted me to revisit some of Bob Jickling’s work recently because even though he has been a major influence for me I hadn’t really used a lot of his scholarship in my own work. In a similar manner, I have also recently made more explicit connections with some of Gail Jardine’s work related to Aboriginal rights and treaties. In both cases, I have increasingly realized how influential they have been in my work, even though they weren’t pushing me to engage directly with their own scholarship during my graduate studies, a supervisory approach I deeply respect. It’s an ongoing process I guess and I try not to be stuck with my dozen or so references or whatever even though it’s really easy to do that.”

However, Greg also felt that for his doctoral research, as well as for research he is interested in pursuing, that any one theoretical frame is not really appropriate for the kinds of questions he is interested in investigating. Rather he suggests that it can be a matter of assembling a theoretical framework drawing on concepts that support the research interest. He described how

“I developed this concept of *Ecological Métissage* which was articulating those different influences. As much as I don’t like to admit it, it was almost like a Grounded Theory kind of approach where I developed a personal ecosophy and then went out and talked to other people about it and asked if this was how they also saw things or asked how they approached these big questions.”

However, he also acknowledge that the theoretical influences and what theories you draw is “an ongoing thing. I think we all make conscious and unconscious choices, and each of us is different, and strategically decide so hopefully you’re following your personal passions because ultimately, even beyond graduate work, that is what carries you through and keeps you going.”

Greg’s positioning in his new appointment at the University of Calgary is one that he identified as allowing him to explore ideas that he is interested in and within a context that is quite open and which presents opportunities for collaboration.

However, there are also tensions that exist within that context as well. He said

“the Faculty of Education at the University of Calgary has a huge number of really awesome critical scholars like Shirley Steinberg and David Jardine and Gail Jardine – a lot of the people I worked with and who are very critical and forward-thinking people and especially in the cultural context of Calgary environmental issues are certainly just rife with tension.”

Along with the institutional aspects, Greg also described some internal tensions he was (re)experiencing in his relocation back to Calgary. He described

“growing up, my parents were liberal and environmentally-minded teachers and academics, but I also had conservative friends and family members

associated with oil and gas who also deeply love the mountains. It's complex. Similarly at U of C there are many really fabulous critical scholars in all different areas but it's also known as a centre of conservative scholarship with links to the oil patch. It's a very complex place as a city, as an institution and as a province. I'm a little nervous about it but at the same time it's really exciting and I kind of feel like I have a mandate to go in and present those critical perspectives and do that work which will be hopefully very fruitful and foster mutual understanding rather than alienation."

Greg's interest in research around activism seemed to me to be a form of activism in itself. It creates a space and, as Greg remarked, relates to

"the concept of Voice – with a capital V – especially in Indigenous and Critical Education. I've been advised by senior faculty members that our Indigenous initiatives and my work in critical environmental education may not always enjoy 100% support from all faculty, but that I should speak my truth and tell them about my work honestly and not be shy and or be afraid to take up that space. Our senior administrators and faculty are consistently very supportive of that and they seem to get it that it's not just about telling people what to do but it's about creating that space for those of us on the inside to come and share out ideas."

The idea of creating space for new ideas where in the past there might not have been a space is encouraging in a field that often faces marginalization within educational discourses. Greg said he found the opportunities for disruption

"really hopeful. And I think that is where the messiness of daily life comes in too in terms of whether it is drawing on multiple influences or just truly considering other perspectives. I think maybe my views have softened to a certain extent in terms of I'm not against **every** form of development or every single resource project but I understand things more now on a case by case basis and whether it's from an Aboriginal perspective or an environmental perspective, and those are very often interlinked."

Being both an outsider (not originally from BC) and an insider (as a faculty member at UNBC) gave Greg a somewhat unique perspective. Greg said "being at UNBC has been very interesting because the image that the rest of Canada has of BC is sort of this Greenpeace paradise as well as some of the tensions and conflicts that happen with the Aboriginal groups here." However, he also described some of the

'insider' experiences he had as a member of the faculty and community where he saw

"some really neat examples of groups coming together collaborating with science and government and other grassroots organizations to develop co-management of salmon fisheries or co-management of a parks area and those kinds of things. For me I love to see that sort of thing because, going back to individual identity, that's kind of the validation and that's ideal for me. That we don't all have to squabble, whether it's on an individual and inside level or on a greater societal level, and these different perspectives can live together and not just live side by side but actually start to intermingle and influence each other."

While describing his thoughts about his environmental subjectivity Greg was thoughtful about the ways in which there is an enmeshed nature to the multiple subjectivities that he lives. The cultural and social influences Greg discussed combine with the other lenses through which he views the world and makes sense of himself and his positioning-in-relation. Among the many things that Greg identified as important, family is of great importance and impacts the way Greg lives. He said his own understandings of himself and his environmental subjectivity as one aspect of his multiple subjectivities is something that is evolving and

"I think for me personally that that is what happened and continues to happen, especially over the last 10 years or so where I have put on more of an academic hat and had the privilege to spend a lot of time naval gazing and considering these ideas and then trying to put them into practice. I think becoming a Father and growing older and getting some white hairs and things like that and having some experiences like I mentioned working more in the resource and environmental planning area are all important. I think first off having a family and stuff, for me anyways, has made me think more pragmatically sometimes in terms of having a little guy who depends on me. Also sort of realizing that most people are just trying to make a living and support their families."

## **Jonas Lysgaard**

Dr. Jonas Lysgaard had, very recently prior to our conversation, just completed his doctoral studies at Aarhus University in Denmark and was looking towards a faculty appointment in the Danish School of Education at Aarhus University. Jonas's dissertation provided a comparison involving environmental NGOs in two different countries. Jonas's interests intersected with my own in relation to identity and his interests in philosophy as foundational for research, and valuing and investigating "bad practices" as being important ways to move forward have guided some of his early scholarship. He also has interests in policy related to environmental and sustainability education. Jonas's research interests include: environment, climate and energy; climate; climate and culture; education for sustainable development; environmental education; education, teaching and philosophy; pedagogy and education; philosophy of education; and history of the concept of education.

As our conversation began, Jonas asked me to describe my research to him so that he could have that in mind during our conversation. Knowing of Jonas's interest in identity, as well as interests in the philosophical foundations for concepts, I gave Jonas a brief overview of my interest in environmental subjectivity of environmental education researchers as well as the subjectification processes through which they have come to position themselves as they have. Jonas responded that

"in many ways I work with identity too and the formation of identity but I used the psychoanalytic perspective more. But in many ways my thesis also deals with NGOs and people working in environmental NGOs and how work and their thinking about the environment and their own role towards it and how they try to qualify their own position working with the environment."

Realizing that culturally the emphasis in Jonas's context on environment is quite different from many parts of North America I asked him about his perspectives on environmental education research and how, from particular context, he sees himself in relation to the field? Jonas provided some context saying

"I graduated with a degree in history and political theory and then by chance, more or less, I graduated with a Ph.D. in environmental education. So environmental education is not my initial background but it is now. I really enjoy the field but I still view myself as a bit of an outsider – I'm not really outside the field, I'm very much in it, but I'm newer to it than some others. Many of my colleagues in the field were teachers to begin with and then got a Ph.D. in environmental education. So I really enjoy the field because it forces a close relationship with practice ... and with something real. I'm very interested in theory development as well – and one of the wonderful things about environmental education is that in addition to the theory it forces you to go somewhat beyond the idea that everything is socially constructed because there is still something out there that we need to relate to and this is a big theme that is reinforced in environmental education. I thoroughly enjoy the field but I also try to draw on my background both working in historical perspectives and also from theories from sociology."

Having made a decision to transition from another field into a doctoral program in environmental education I asked Jonas about that transition as part of his subjectification process as well as other points that he felt were key transitions that led him to his current positioning. Jonas described his interest in the concept of nature and experiences growing up that contributed to that fascination and curiosity. He said

"I grew up in the countryside here in Denmark and very near the sea where we have this marshland. The land is extremely flat, you can see for 10km, and there is really nothing there. So for me, growing up, nature was not something that was charming – it didn't really seem that nice – it was just cold and windy and extremely flat. But trying to understand the relationship between human beings and nature and figuring out what that means. We sometimes describe humans as the clever animals. But we are connected to nature and we have to relate to this and I think we do but somehow through the process of culture and civilization we have tricked ourselves into believing that we can negate nature and negate environment and somehow transcend this weird thing

called nature. So that relationship between culture, civilization and nature has always been something that I've been very interested in."

The link between nature and education was not immediately a comfortable position because of the complexity and contextuality. He said

"combining a focus on education and my interest in nature and the environment really constantly pushes me outside my comfort zone where I actually have to relate to something real and not just what is going on around my desk. So it is a very interesting field to be part of and I really like it and I think it has great potential because there is an obvious *link* between how we live, and us as animals, and nature. That link does not disappear just because we live in cities, drive cars and fly around in airplanes – we are still very much animals that just try to make some kind of society where we don't kill each other."

Jonas described that it was that interest in linking the theoretical and the practical that drew him towards environmental education. He described

"when I studied particularly political theory where I thought that the insights that you can gain from working in sociology and philosophy are extremely valuable. Of course you should spread this knowledge as much as you can and you should engage society and engage the people with these ideas. But I'm afraid that at universities we are not very good at that and I always questioned that among my teachers – why didn't they relate more to society and why didn't they actively engage society?"

The combination of environment and education, which is informed by and has some groundings in sociology and philosophy but also is practical in terms of educational practices, means that there is a necessary engagement with people and society.

Jonas said "this combination in environmental education works ... I could also work in the philosophy of nature or the philosophy of environment primarily but having this focus on education I think is extremely valuable."

The doctoral process is intense and requires a level of passion and commitment and therefore seems to need to be something, even if an individual evolves from it, to be part of who they are. I asked Jonas about his doctoral research

and his decisions around his approach particularly in relation to the theoretical framing he chose. He described his interest and focus of his doctoral research as looking at

“non-formal ESD in Denmark and in South Korea – education for sustainable development is a frame that we tend to work with here although it could just as easily have been environmental education, from my perspective. I looked at environmental NGO’s and how they engage the public as a learning entity and how they understand their own role towards the public as a learning entity. It ended up with an effort trying to understand the dilemma between constantly trying to do something good and then in practice always doing the opposite. Of course we try to do good and the people are very good, they are good educators who try to do good but in their own personal lives, as human beings, it is very hard to be sustainable.”

Jonas’s theoretical framing used Slovenian philosopher, Slavoj Žižek, and his approach to Lacanian psychoanalysis in order to try to understand ‘how do we make sense’ working with something as huge and potentially far reaching as environmental education. What Jonas found was that there importance in focusing on bad practice because there is so much of it. He said

“we tend to talk about best practice and most promising practice but there is very little of it. It’s not because I want more bad practice – not at all – but I want to understand why there is so much, up to 95% of what we do from a sustainable perspective, is bad practice. I tried to understand it as how having bad practice is what makes it possible to continue to have these ideals of doing good and doing right because, as I said, if you do want to be good and right and be sustainable you have to live in a cardboard box out in the forest. From time to time that approach can sound counter intuitive but the idea is that our bad practice is what makes us human and that it’s a human condition that there really is no way around and it is part of a meaning making process.”

Jonas described his argument as there is a need to understand the importance and significance of bad practice better in order to further develop notions of good practice and best practice because otherwise we can end up as utopia-ists that will be very hard to reach and we will continue to dance around in a lot of bad practice.”

I asked Jonas about how he came to establish his direction and questions that guided his Ph.D. Depending on the institutional context it seems some graduate programs are more guided by the supervisor and an already established research program whereas others are quite open and more student determined. Jonas replied that

“the direction for my Ph.D. was something I developed myself. There was an open call for Ph.D. students within ESD. In Denmark Ph.D. students are fully funded for three years so it is much more like being part of the staff or faculty at the university. I started out wanting to do something comparative and push myself out of my comfort zone – and that was the role of South Korea, I knew nothing about South Korea and had never been to the country. But there are similarities [between South Korea and Denmark] – they are relatively small countries with liberal economies, high levels of education and big neighbours. And of course there are huge cultural differences as well as regional and geographical differences. So that was my starting point – wanting to do something focusing on the non-formal education.”

Jonas continued

“here in Denmark, as well as in Scandinavia, we have this concept which directly translated it’s called ‘Peoples’ Enlightenment’ and it’s a form of social education and non-formal education and to goes back about 200 years and it was where originally the farmers, in winter, would go to city schools and learn philosophy, poetry, music, agricultural techniques and so on – and this practice still exists today. So when we talk about non-formal education in EE and ESD we are very much within the Peoples’ Enlightenment notion. I wanted to see that tradition and compare it to something else. But this whole idea about bad practice, and the significance of bad practice, that took me a couple of years to get to narrowing my interest to that topic. I think I had figured out the plot after about two years and I think it’s fair to compare it to a story or a movie script – you need to find your ‘bad guy’ and your plot. We have a unit of about eight or ten people working in EE and ESD at my university so we do interact a bit about that but the theoretical perspective and argument I make is my own.”

I asked Jonas if there were things, both positive and perhaps less positive, that influenced his views of the natural environment and maybe sparked some interest or contributed to theoretical perspective from which his worldview is informed.

Jonas mentioned he often finds there is a conception of nature in a lot of environmental education as something that is inherently 'good'. Jonas said

“for me it was really interesting to try to work with this concept of nature and I think that I already, before even having the theories, thought about this as a child and about the fact that I didn't necessarily see nature as inherently good. I think that different movies and directors sometimes influence the view of nature. Nature is portrayed as being benign but then it turns out, in some cases, that nature is evil, more or less. It's an interesting concept and I've tried to work with that for some time because it's still very provocative.”

He continued “I think of course being close to nature in my childhood had something to do with that also because nature was cold – I had to do my paper route and that wasn't all that fun but at the same time it was there and there was no way around it. So it was very real in many ways.” Jonas recalled that as a child that he did not view nature as being something that was good or evil and rather that nature just *is* and that now, in hindsight, that is quite an interesting way to think about it. He remarked, in regards to nature,

“we can change it, or alter it, or damage it but it will still be there in some form. I think one of the most inspiring and interesting things about working in this field is trying to cope with the notion that things around us don't really have an intent. I think that is quite hard, both from a philosophical perspective but also as a human being, that it isn't really fair but that it's just there.”

I commented that, from what it had said, the natural environment seemed to have had an influence on his worldview and his place in the world. However, even with the ways in which nature was very present in his childhood Jonas said

“I'm not particularly fond of going out into the forest and looking at birds – it's not stuff I do. When I have time off I work on vintage motorcycles – that's my hobby. I don't have this urge to have a deep emotional link with nature but it very much attracts me. Also there is this whole discussion of authenticity. My Mom, she worked with her hands, worked with pottery and ceramics. I never learned a craft and I think that is something that I have always regretted. I see a direct link between us as human beings, and being able to do something with our hands (having a craft), and the concept of the environment and of nature –

having a close link to some kind of causality that you can see – you try to change something and you can see that there’s a direct reaction if you are working with your hands. And I think that’s true in nature as well. Being an academic it can sometimes be difficult to see the direct impact of what you are doing.”

The opportunity for engagement and seeing the impact of work was something that was appealing about the field of education, which can be quite normative at times, and more specifically environmental education. Jonas described

“here in Denmark it’s extremely popular to talk about *action competence* – this idea of having a critical, enlightened base of knowledge from which you can make informed decisions in life and these decisions shouldn’t be what you tell them to choose but you should make them capable of taking on these decision themselves. But even that is extremely normative. I like that we don’t kid ourselves into thinking that we are doing something objective here. We want to have an impact, we want to understand the environment better and we want to try to engage people in order to treat the environment better or use it in other ways. So I like the knowledge of normativity part of it.”

Normativity can, depending on the context and those who are directing it, can be seen as negative. However, Jonas pointed out that he feels within environmental education there is normativity associated with what environmental educators and researchers are trying to do. He said

“I like being critical but I also like being normative. I think we always are in many ways. Here we are actually allowed to say it and to mean it because we are working with environment. The point of us working in environmental education research and environmental education is not that nothing should happen and it’s not that people shouldn’t care about environment. We have a strong agenda and we don’t hide that agenda – and I really like that because I think in most education and in most different research areas there is always a normative idea about what is better and what direction we should go and why we are doing this. But in environmental education it is just very explicit. So there aren’t that many real understandings of that normativity but the one I’m subscribing to is the one where there is an intent. I’m not trying to manipulate my students but I have an intent and I want to do something with them. And I like that part.”

Concern about normativity or indoctrination, even from within the field of environmental education, have been raised and researchers have noted the importance of critical environmental education. But interests in a variety of environmental issues at all scales, from local to global, and having a better world, socially and ecologically, are essential (Orr, 2004). Jonas described

“I think most people tread the environment badly. That is why I worked in my thesis research on the concept of ‘bad practice’ and how this also constitutes meaning also among us as researchers and as teachers. Because it is very normative but also the demands, the weight that we put on our shoulders working with these concepts, I think are extremely heavy and extremely difficult to lift. You cannot live a life just by being here or just by being alive – it’s extremely unsustainable. No matter what I do or how I live the rest of my life, no matter how I try to push society and my students in a better environmental direction it will still be unsustainable. I think that is extremely hard to cope with.”

Findings from Jonas’s doctoral work led him to conclude

“it’s not just an easy idea to get people to turn off the lights or eat organic – it is an impossible task. But there is also something very nice about having an impossible task and that we should still work continuously at it because it also makes it evident that other kinds of things that we have tried to do, like be democratic or be good, which also seem to be impossible to do in its most extreme forms – to *always* be democratic or *always* be good. You cannot be entirely democratic with your children – you have to decide when they go to bed and so on. And you can never be entirely sustainable ... I don’t even know what it means to be truly sustainable. So trying to work with these notions and I still don’t want to be a paranoid, disillusioned academic – I’m very much looking forward with a great optimism and a positive perspective on this impossible task of environmental education.”

Given his expressed interest in philosophy, I asked Jonas if there were particular theoretical perspectives or concepts from particular theorists that he felt a particular connection to. Jonas said

“I’m very interested in speculative realism or speculative materialism by Quentin Meillassoux and Graham Harman. What brings them together is a critique of the use of social constructivism. I am very much embedded in social constructivism but I am slowly starting to have a suspicion that there might be

something out there that is real and that isn't socially constructed – hence speculative realism and trying to speculate about what is real. This theory isn't about leaving social constructivism behind – not at all – but having the concept of something that is real. Žižek could also be understood as being part of this tradition of speculative realism and by tradition it is very new, it's only a couple of years old and it is still developing. I try to work with that concept and I would also like to work with that and develop theory because I think working with nature, and my latest interest is working also with the body and the role of the body in relation to participation, connects to working with something real. I know with bodies that understandings of that are socially constructed but there are organs and we get scared or feel cold or we feel happy – all these emotional as well as physical responses to what goes on around us – and I would like to understand that better.”

I mentioned that the physical and materiality of being still exists independent of the language we might have to describe it. For examples, feelings can be difficult to articulate but that does not make them any less real just because there is not a socially constructed articulation of it. Jonas responded

“I think that's quite right. The linguistic turn and the French philosophers of the last century have influenced my whole education. In many ways I think this starting critique of the socially constructed is important – and again I'm not discarding the theories – but I think often in the use of discourse analysis and looking at Foucault and his work using an historical perspective and reading hundreds of books and papers just to try to understand a concept better and how it was understood in its time. I think we should be very careful in trying to see an easy fix in language and using language and deconstructing language and thereby using language to deconstruct everything because we also must have a language and have concepts for what we cannot understand. Where are the gaps in our theories? Lacan and Žižek talk about the *real* and they have different orders and comparisons – they have the real and the symbolic – where construction goes on, the social construction and true language of everything but there is still something real. Whenever we try to describe the real we draw it into the symbolic or the social but by doing that we also ultimately fail to describe it accurately. Language is not that precise and words are things that we made up.”

Similarly to language, discourses are also constructs that come to be almost invisible but still exist in a real, physical world. Jonas added that he

“would like to also use the speculative realism approach to try to include concepts of the real within my work within environmental education. Of

course plenty of people have done that – I’m not trying to revolutionize or invent anything but I am trying to push myself because it is very easy to get tangled up in the poststructural focus on language.”

Jonas’s formal education was influenced by environmental education and education for sustainable development as a result of foci of the Denmark education system. He described how

“the concept of environmental education is linked very much with biology in primary school and is accepted. Everyone in Denmark goes through that. But working with the concept of sustainability – it has been on the agenda in the Danish school and educational system since the 1980s, or even late 1970s, but it’s not that widespread and it is not that much in use but it is getting better. We are just having a new school reform here where it is being pushed harder in primary schools.”

From Jonas’s description environmental education and ESD are important in subjects beyond science and are linked to broader learning goals in Danish curricula. Jonas said

“working with history and language there would be things that would relate to sustainability or environmental education in almost all of the different subjects. But of course it needs to be developed further and the teachers also need to work with this because as is often the problem is that it gets put in the science ‘box’. So the social side and the societal side of EE and ESD is often overlooked. But I would say that children’s’ programs and Danish broadcasting work with sustainability and environment all the way down to very young children, pre-school children, so that they are learning about this. So there is a national focus on this I would say.”

I asked Jonas if there were particular projects that he was interested in getting started on as he moves into his new position. He said

“right now I am working on developing further the concept of participation using some of the concepts from my dissertation. I tried to work with concepts not only of participation but also interactivity and also focus on ideas about interpassivity and false or pseudo activity – sort of pseudo concepts that connect to ideas from psychoanalysis – I guess it’s my trick to always be looking at the flip side of things. So we are constantly running after best practices but to be able to look at what is also going on, really going on, I try to

make that more explicit by not just looking at the interactivity but also the interpassivity.”

Jonas continued

“I think the concept of participation is extremely important and I would really like to push that concept and with taking ideas from psychoanalysis I think there is great potential there from an educational perspective. And another thing then, also as I mentioned before, is the whole concept of the body and role of the body and the real in EE and ESD.”

In addition to the theorists and theoretical concepts that he had discussed, I asked Jonas more specifically about his interests within the field of environmental education in terms of concepts but also in terms of those whose work he identified with or with whose ideas he liked to engage. He said

“I have drawn a lot on Alan Reid who is at Monash now. I met him earlier on in my Ph.D. when he was part of a steering committee for a big Swedish network for graduate students in EE and ESD. I think he has some very good ideas. I’ve also been influenced quite a bit by Heila Lotz-Sisitka from South Africa and Arjen Waals. And some of the Sweds – we had an open call for three Ph.D. positions here in environmental education and ESD and in Sweden they had something like 15 that started at the same time that I did. So we were something of a cohort where we were invited into the Swedish network and there are lots of good people up there – for example Per Sund and of course my good friend Stephan. And then of course your Dad – I like what he does and he manages, after working so many years in the field, to still be very critical and very theoretically informed and I really like that.”

Jonas mentioned how he felt the 11<sup>th</sup> Invitational Seminar had been an important event in terms of meeting researchers engaged in the field of environmental education. He said “ I think that was a bit of a turning point also in getting to meet the *elite* from all around the world and they were very open and very engaging and Alan Reid helped me a lot there.”

Our conversation returned to ideas about tensions or frictions and Jonas discussed how not being as much of an environmentalist and more of an

environmental educator and enjoying the associated philosophy was a source of some friction. He said

“my professor is very much part of the environmental movement and historically has been an important part of it as it grew in Denmark during the late 1960, and then the 70s and 80s. And through him I have met a lot of wonderful people and a lot of NGOs working with the environment and environmental education in different forms. For me they are extremely interesting and they offer a lot but I also feel like I belong to a different world in many ways. Perhaps I’m not as idealistic as they are – not in the field of environment at least – as a researcher I’m very idealistic. They have ventured out on countless demonstrations and they stopped us having nuclear power plants here in Denmark and they are still doing a lot but they belong to a very activist.”

Jonas’s mention of activism led me to ask him how he reconciled the idea of being an activist and having interest in environmental issues while still seeing his environmental subjectivity as that of an environmental education researcher and not environmentalist. I asked Jonas about how he viewed that distinction and he described

“I do not view myself as an environmentalist. My professor wants me to lift his ideas and lift his work and continue his work – and I will do that – but at the same time I don’t have that burning desire to chain myself to trees and do those kinds of things. There is a different perspective there – a different way to do it.”

Jonas’s discomfort with environmental educators and researchers being assumed to be environmentalists reflected, once again, the concerns around how environment is defined and how it can sometimes be misinterpreted as purely the ecological and nature dimensions. The diversity and interest in the ecological as well as the social, cultural, political and aesthetic, among others, dimensions brings a diverse group of researchers to the field all of whom have environmental subjectivities but, at the

same time, all of whom have specific interests that build on foundational principles.

Jonas mentioned that

“the concepts of EE and ESD and I think that is very interesting – less focus on blind idealism, in my opinion, and more focus on sustainability as an integrated part of peoples’ lives that they see as normal. We’ve been taught about it in primary school and it has been part of the agenda here for my entire life.”

The theory and practice link can be challenging and, to some degree, it seems that within the context of some research within the field that there is a need for the application of new or different theories which could contribute to different kinds of questions being asked. I asked Jonas, given his interest, about his experiences and interests in terms of application of theoretical concepts to his research interests as well as how he felt that reflected his own environmental subjectivity and subjectification process. He described how he felt

“a lot of the Sweds are very strong in their theory and theory development. But I also think that that is part of my background not coming from education. Not only working with educational theories but linking the educational theories to their background in say poststructuralism or theoretical background input that might have formed the educational theories. So I think there is a strong and healthy focus on the philosophical backing of what we are doing. But I think, in more general terms, that strong philosophical backing is not always the case in a variety of fields such as education in the larger sense – there is often too weak a link to the philosophical background that informs what we do. I think that is quite important. But it also takes a lot of time.”

Jonas returned to his ideas around the importance of having well conceptualized research and the need for considering how theoretical framings inform approaches to research by saying

“I’ve actually submitted an article together with Per Sund for a special issue, [of *Environmental Education Research*] that Bill Scott is editing, where we argue exactly that and that we need more philosophical grounding. Of course we need practice – we need to be informed because we need to learn. Lots of people, exactly as you said, have been thinking about issues like this for

hundreds of years and of course we can't know all of this but we need to know enough so that we can navigate that field and to be able to know where we come from and what our perspectives are and what we do or do not take for granted."

Jonas's interest in research and the ways in which theoretical perspectives inform the framing of research are foundational within his context and as parts of his environmental subjectivity. While early in his career, Jonas's subjectification process in regards to his environmental subjectivity has clearly had influences from his particular educational and cultural context but his awareness of, and benefits to, understandings of bad practices or as he described, looking at it from the other side, also illustrate a critical perspective of research and practices that exist. He describes *using* what is regarded as bad practice, because there is so much of it, and seeing what we can learn from it that could influence how we think about moving forward.

### **Summary**

Perhaps rather than conclusion to this chapter it is really better described as "ongoing thoughts". There is no end to the narratives that participants contributed. What is presented here are the thoughts participants were so graciously willing to share about their own understandings of the ongoing subjectification processes with regards to their environmental subjectivities. However, it is not a conclusion. No one claimed to have a solution, final answer or, as Annette suggested in her reference to Sandra Harding, "one true story" that can perfectly encapsulate environmental subjectivity. Rather we see several examples from participants all of whom come from a variety of social, cultural, political – that is to say "environmental" – contexts and all of which contribute to the unique ways in which

they describe and enact their environmental subjectivities. There is, however, the discourses that emerges from these narratives that reflects that environmental subjectivity, in it's variety of forms, *is* something that these environmental education researchers are interested in attempting to articulate and share with others.

## Chapter 5: Reflections and Possibilities

Critique is understood as an interrogation of the terms by which life is constrained in order to open up the possibility for different modes of living; in other words, not to celebrate difference as such but to establish more inclusive conditions for sheltering and maintaining life that resists models of assimilation.

(Butler, 2004, p. 4)

### Introduction

With so much complexity, depth and richness, how can one make sense of the thoughtful, insightful and compelling narratives? I will connect back to the theoretical framing which I began to discuss in Chapter 2 and draw on those concepts to make sense of what has been said, done and written. I will not use the words *data* or *analysis*. I believe that the theoretical and methodological framing I have drawn together firmly contradict that sort of positivist language and turn more towards understandings that can be made from the contributions of participants as well as considering how what has been shared and the process of this doctoral study can be legitimized.

Jackson and Mazzei (2012) suggest “Judith Butler’s theory of performativity is central to all of her work that seeks to undo normative categories that place rigid structures on how people live their lives” (p. 67). Performativity makes sense in terms of coming to understand the ways in which subjectivities are enacted through the performances, or ways in which people live and work within and against discourses faced in their lives. While performativity is helpful in understanding participant descriptions that illustrate what they *do* as a manifestation of their

subjectivities, I do not propose to use that concept as an analytical tool. Rather, performativity could be considered as a lens through which the narratives, my reflections on those narratives, and the process itself can be viewed. Likewise the concept of subjectivity, as informed by critical and poststructuralist theories, is crucial to understanding the ways in which both environmental subjectivity and the subjectification processes of environmental education researchers are understood from their narratives and through their writings. Subjectivity can be thought of as an ongoing performance in and through our everyday actions and then through these contexts the narratives emerge (Watson, 2008, 2012).

Through both the narratives about their own ideas, their embodiment and their writings, an assemblage that reflects each participant emerges. I do not believe I should judge, transect, or process participant contributions. However, what I do propose to offer is the sense I can make of my own understandings of my environmental subjectivity based on the ways in which participant narratives and writings help me make sense of my own positioning and worldview. Additionally, through my own onto-epistemic context, I have illustrated what I see to be environmental education discourses that contribute to environmental subjectivity and subjectification processes. These environmental education discourses are explicitly stated and also emerge in what was said by participants as they responded to questions and conversed regarding their environmental subjectivity and subjectification processes as environmental education researchers. I do realize and acknowledge that mine is a unique reading of these narratives and texts, and that others may make different meaning from what they have read in Chapter 4. I believe

providing opportunities for readers to make sense of the narratives and their own environmental subjectivity is entirely the point (see Jackson & Mazzei, 2012).

### **My Own Positioning and Reflections**

My own context and collection of enmeshed subjectivities are present throughout this work. From what I have chosen from the narratives of participants to the ways in which the research questions are structured to the theoretical and methodological framing, my presence is in every aspect. My worldview being reflected in every step of the research process is not something I could say I understood prior to beginning. Constructing the interview questions and points for conversation made me consider my own responses to the questions I was going to pose to participants and further thoughts that resulted. Why have I come to be interested in environmental subjectivity and how people come to position themselves as environmental educators and researchers as an indication of that environmental subjectivity? What were the decision and branch points in my own subjectification process which have led me to where I am today? What are the tensions I have experienced? How do I feel about the prospect of entering a field that is on the margins and other than the dominant educational discourse? What that could mean for career and life decisions?

The interview questions I constructed, which is a conformation to language used by the Research Ethics Board at the University of Regina rather than points for discussion as I had proposed, did not quickly nor easily evolve. As discussed in Chapter 3, the style of interview was that of a conversation more than a formulated

series of questions that were asked identically of every participant. The ways in which participants responded helped guide the ways in which I would introduce the next point for discussion. There were broad areas of interest that I thought would be important to include in our conversations and that would help guide discussion towards areas that I felt would inspire talk that would reflect practices, interests and participants' own understandings of their environmental subjectivity. What I came to realize was that although I had questions that I thought would guide and promote this kind of discussion, the discussions I had with my participants really were not about what I thought was important, or how participants responded to questions but how participants interpreted the question and then guided the conversation to discuss the points *they* thought were relevant to the question I had posed or point I had raised. Since my interest is in environmental subjectivity among environmental education researchers I did ask for clarification about how each person felt what they were saying contributed to understandings of their environmental subjectivity as interwoven with their multiple subjectivities.

Part of my own journey in the process of writing my dissertation was an ongoing self-check to see that the practical side of my work aligned with the theoretical and methodological framing I set out to underpin the entire project. I was conscious to not let the espoused theory remain simply in word alone. However, at times that was easier said than done particularly because of the concepts I had assembled and the theoretical frames from which they came and had been chosen. Similarities jumped out of conversations as did the differences. My own context and subjectivities brought what I understand to be discourses of

environmental education researcher together to shape my understandings of the conversations. At the same time the discrepancies and differences between participant narratives spoke loudly bringing me back to the reality and understanding that while similarities may be present the differences make the richness and diversity *within* the field. Deleuze's concept of the rhizome seems to be a helpful figuration where the similarities and differences between the participants' narratives emerge and form rhizome-like tendrils that periodically overlap but then diverge and take different directions (Jackson & Mazzei, 2012; Mazzei & McCoy, 2010). Each narrative of individual environmental subjectivity, as one of several interconnected subjectivities, contributes to an overall image of what environmental education discourses exist. The intersections and divergences between narratives of each of my participants are multiple and continuous forming a multi-dimensional mesh or network of strands that connect and diverge and then (re)connect with (each) other over and over again.

Imagine each story represented by a web of lines of a particular colour. But it is not simply lines but more like threads or pieces of yarn that are not simply two-dimensional but circular. And it is not really yarn, but a living and dynamic thing that twists and turns and has life like a tendril of a vine. Think of each of the nine narratives as being a different colour and each line is not straight or singular but branched. At some points these lines intersect, meet and then pass and continue on as the story is told. Some lines may run parallel for a time and then diverge and intersect again later or perhaps never intersect again. Then the added complexity is that these lines run through time making them not three but four-dimensional. As

well, they do not have end points. They are continually growing and emerging. The narratives that were constructed and form the body of this dissertation are snapshots at moments in time and what participants thought about their experiences, actions and embodiment of their environmental identity, as they understood it, given their own context at that time/moment. As Noel Gough (1994) suggested what is written here is what was felt and thought at that time but that it should be taken as such and with the understanding that we “change our minds frequently” as our thinking evolves in response to changes in our understandings of our selves.

### **Discourses of Environmental Education**

While my primary interest is on individuals’ environmental subjectivities and subjectification processes as environmental education researchers, I quickly became aware of some common tenets and beliefs that provide a foundation upon which the statements and narratives made by participants scaffold their environmental subjectivity. Recalling the foundational statements present in the Belgrade (Robottom, 1987) and Tbilisi (Palmer, 1998) documents, (see Appendix B), I found participant statements frequently referred to ideas about environmental education research that are grounded in these early statements that have contributed to the formation and evolution of the field. However, the neoliberal agenda evident in the language used in *Our Common Future* (United Nations, 1987) and at the Earth Summit Rio (United Nations, 1992) forever shaped the ways in which environmental education discourses continue to be marginalized. The notions of

individualism and consumerism espoused by neoliberalism (Castree, 1997, 2005) are in direct conflict with discourses of environmental education and are critiqued widely among environmental education researchers, including in a special issue of the journal *Environmental Education Research* titled “Environmental Education in a Neoliberal Climate” (Hursh, Henderson & Greenwood, 2015). Pearce *et al.* (2012) suggest that any meaning and significance has to be affectively charged for it to constitute your experience. So there were meanings made by participants that reflected particular discourses in different ways. While unique to each participant, conversations with each participant did reflect discourses of the field of environmental education research that could be considered important when considering environmental subjectivity. The responses to questions are varied but rather than the responses themselves, that participants felt the need to discuss these particular points is, I believe, important to consider. I have included three points that I feel are of importance and contribute to understandings of environmental subjectivities among environmental education researchers and environmental education discourses. My interest in the ways in which participants’ responses contribute to understandings of environmental subjectivities is in part because of the variations and differences in responses but also because participants themselves felt that there were dimensions or aspects of environmental education research that are of importance when considering how environmental education discourses pertain to their individual environmental subjectivities and subjectification process.

### ***Participant Perspectives on Environment***

In any context, attempting to describe and explain the meanings associated with language used is important. In the second chapter of this dissertation I attempted to provide a theoretical framing and context for this work. By discussing the use of a theoretical frame that is both poststructurally- and critically-informed, as well as the use of concepts, which are grounded in those theoretical frames, I hoped to establish a starting point for the language of this dissertation, and clarification about the ways in which language is used in this research. At the outset of each initial conversation I found that participants were interested in clarifying their use of the word *environment* and their perspectives on, and contextuality within, their positioning as an environmental education researchers and with respect to the use of that language. As previously discussed, the concept of environmental education is a complex and contested one and often means different things to different people. Additionally, when considering discourses of the field of environmental education and understandings of environmental subjectivity, how we view the field can contribute to our own readings and understandings of the meanings we make. Describing our ideas in relation to our position within environmental education can help provide a contextuality to narratives. Thus addressing perspectives on environment in the context of environmental education and environmental education research seemed like an important place to begin conversations with participants.

Annette described her perspective as “environmental education has been around for a very long time and that the name changes to sustainability and

sustainable development and things like that are really more rebranding than really changing the initial intent.” Having been part of the field of environmental education over a period of years, Annette discussed how there have been changes that have impacted the ways in which there has been an evolution of the conceptions of the field including that,

“environmental education certainly has evolved from the first conceptions of [Bill] Stapp in 1969. What was written at Tbilisi in terms of total environment and the physical, social, ecological, technological, economical and all that sort of stuff – that’s really still the essence of what we are calling education for sustainability. I see it as not just being the ‘nature study’ that some people keep saying is where environmental education’s origins were. If you really look at what the concerns in the 1960s and early 1970s period were, about the quality of air for people in cities and so we had the ‘Clean Air Act,’ we also had the ‘Clean Water Act.’ Those things are still there and an important part of environmental education.”

Phillip responded saying that

“I think there are a few ways I could think about my perspectives and that I think environment is central to my life. When I say central it seems to me that there is so much that needs to be said about our connection and our relation, both good and bad, with aspects of nature, however you want to conceptualize nature. Conceptualizations of ‘nature’ is important – inner, social, and various outer ‘natures’ variations of which I think the reconciliation of the three, even if partial, and constrained is a big part of my ‘identity’ challenge and how I see my role as ‘educator’ and researcher’.”

It is impossible to extract *a* subjectivity from the many others with which it is interconnected. It seems that both professional and personal subjectivities intermesh, overlap, influence and are influenced by others.

Regula felt it important to discuss some history to help contextualize her response and positioning and then responded that

“environmental education, in my understanding, is much more than teaching students, children, young kids, about the environment. It is more about the background, the interest of people, the way that knowledge is generated and those kinds of things. To understand this you must know that in the 1970s

when environmental education was getting recognized and generating questions in our country, everyone was thinking about environmental education as changing behaviour – immediately changing behaviour in terms of how you treat things and how you are organizing travel, for example – traffic was a big issue then and so was forest die back – both were *big* issues. In this field I wanted to go in another direction and look at the *sources* of the problems and not just to let children learn how to change behavior. Environmental education is a political thing and a societal question – it’s not just about changing individual behaviour – that is my big issue – it’s more than that.”

Connie described her perspectives having been quite narrow at first but that they broadened quickly when she came to understand both the social *and* environmental justice were areas of interest within the field. She said

“I had the good fortune of taking courses in my Masters program from Leesa Fawcett and Diane Moreno and they made the connection between social and environmental justice and I was very interested in social justice issues having been a social worker and environmental justice issues I had witnessed growing up. And I thought ‘Oh, environmental education is much bigger than I initially thought it was’ and there was room there for animal issues, there was room for social justice issues. I see it as a very complex field and I take a socially critical approach and am very concerned about the connections between social and environmental justice.”

The responses from all of the participants resonated with me and I felt as though I had a similar experience. I felt a particular connection with aspects of Connie’s response. My own understandings of environmental education broadened and deepened very quickly after starting to read within the field and coming to know what it means. Often assumptions, by those who are unfamiliar with, new to, or are from outside the field, are made about what environmental education is, and what environmental educators mean when they use the term environment. How much variation is there and does that matter? As a result there are also assumptions made about environmental educators and researchers that are not necessarily part of how those individuals might describe themselves. Environmental education is

sometimes equated to environmental science and therefore environmental educators and researchers are assumed to be scientists, biologists, ecologists or from somewhere in the natural science field. But rather than make assumptions about how one understands the concept of environment, in relation to environmental subjectivity and environmental education, there needs to be a discussion to clarify how that language is used and that is crucial for understanding the narratives of participants.

Although he engages in the field of environmental education research (from his interests as described in our conversation and writing) and seems to have quite a clear environmental subjectivity, Mark was hesitant to too quickly self describe as 'environmental' and described that his subjectivity as a researcher was more how he sees himself. Mark described his interest in doing good research that happens to coincide with environmental education and he associates with those in the environmental education research field. He said

"I think my perspective is that our perspectives on environmental education aren't really that important as researchers. What we [environmental education researchers] need to be good at is *doing* research. I don't feel that we have progressed very far really in terms of the contribution that research has made. I don't know that we have really moved on that much. My take on it, and maybe it's where I am and my forte is not theorizing about environmental education and there are some people who are really good at it and that's great but everyone else should be, I don't know, doing something else. I don't feel comfortable with that always because as someone who has published in this area, and has kind of been thinking about things, then I should have a considered perspective on what good environmental education looks like or where it could be going."

Mark acknowledged his own uncertainty and described how he felt that

"it's like the more you work on things the more questions you have. And I feel very unsure about things. My wife says 'whenever education comes up in conversation you just go quiet, why is that?' Partly for me I think it's because I

think the level of what people are talking about is so uninteresting or fairly trivial and at the same time I feel that I don't have anything insightful or powerful to move the conversation along with and I feel that happens in environmental education in a way."

After my conversations with Mark, I thought what he shared quite clearly showed a strong environmental subjectivity even if his description of his perspective suggested a resistance to that. His environmental subjectivity and positioning as an environmental education researcher, which he described as being more directed towards interests in doing good research, really illustrates the fact that his ideas about education reflect what environmental education says education should be.

Nicole described how she frames her approach to environmental education as from a conservation background. She said

"for me I think about environmental education and environmental learning as a path to engaging individuals and communities in thinking more critically, and not critically as in negatively but as in a way that is empowering and thoughtful, about their connection to the environment and the natural world to our use of resources in the short and long term and in an individual and a communal sense about that and around those kinds of issues and opportunities."

Part of how her perspective on environmental education comes from the ways in which she feels she needs to describe it to others. Nicole said

"often when I talk to people who aren't in environmental education I say that within our field we are really fortunate, I think, to have these diverse perspectives. So we have some people who really have spent their entire careers focused more on the education and learning sciences aspect, we have other people who have focused more on the environmental studies/environmental science/natural resources perspective and then we all come together around these issues of environment and how people learn about the environment and what motivates people to take action around these complex issues. It's complex and really diverse."

Greg's perspectives on environmental education also brought up ideas about what he sees as potential for what environmental education can do. He said

“if you look at the bulk of my scholarship and research, it’s looking at how do we bring Indigenous perspectives into environmental education and both in a pedagogical sense but also in a research sense. Looking at those research questions and what that really means to embody Indigenous perspectives in environmental education research is something that I’m sitting with and working on a lot these days. My background is I am Métis on both sides of my family and I’m a third generation educator; my maternal grandfather, both of my parents, and my step-father were all educators and very involved in science, outdoor, and environmental education in different ways. So I was raised in that kind of family environment both culturally as well as educationally. But they weren’t always necessarily overlapping. Looking back I realize well there were family stories and cultural influences and then my Dad would be running a junior high outdoor education camp, or something, and there wouldn’t really be much mention of the cultural aspect within that. I was raised valuing and being introduced to, from a very young age, a Western science perspective as well. And that was alongside stories of my great-grandmother, who was a traditional medicinal plant healer in Northern Saskatchewan.”

The responses from participants to questions about perspectives of environment and environmental education all directly or indirectly speak to their environmental subjectivities and the approach and worldview they bring to the field of environmental education research. While differences exist in the ways in which participants, and those in the field of environmental education, frame the concept of environment, these differences enrich the field of environmental education research and contribute a variety of perspectives within the larger context of worldviews in which environment is of importance. I think that these differences contribute in positive ways rather than creating conditions of fracture or partition. Principles of environmental education (see Appendix B) speak to individuals in different ways depending on their positioning, as reflected in the conversations, and therefore are taken up in different ways. But these principles make sense in terms of individuals’ understandings of their own worldviews and positionings. They can contribute to individuals positioning themselves as environmental education researchers even if,

as Mark pointed out, being an environmentalist is not a subjectivity with which they identify. Conflation of environmentalists with environmental education researcher returns to questions of worldview that have been raised by environmental education researchers repeatedly over time. Fien (1993) suggests critical consideration of environments and the ways in which individuals in societies and cultures engage with the human and more-than-human worlds. Regardless of the specifics and details, common values and worldviews produce points of union among those who identify as environmental education researchers. While the sense of unitedness may be of interest to some areas of research, the fact that many individuals with diverse backgrounds and interests come together with concerns for the environment can, perhaps, provide more opportunities for meaning-making for others if those stories can be shared.

### ***Tensions Resulting from Discourses***

What one would like to do and what one finds oneself about to do because of their context can create internal tensions (Timmerman, 2013). Consider that there are interests that environmental education researchers have and would like to pursue. Juxtapose those interests with the *expectations* of the context in which the individual finds her/himself. Expectations, social and cultural discourses can impact the ways in which individuals can conceive of positionings and of themselves, and tensions can arise when those dimensions are at odds. Participants shared descriptions and performances of their own beliefs, values and worldview which they feel contribute to their environmental subjectivity and sense of self. Participants described experiences of tensions and concerns about how their own

beliefs countered social, cultural and institutional discourses in particular times and places. These conflicts resulted in feelings of a need to conform to expectations dictated by dominant discourses. Those sources of conflict and feelings of tension contributed to participant understandings of the ways in which they navigate their subjectification processes and can embody their environmental subjectivities.

But where does that pressure or feeling of tension come from? Why do individuals sense a need to behave and act in particular ways? The theoretical groundings informing my research would suggest that there is no single way for a subjectivity to *be*? It is an impossibility to think of any subjectivity as any one thing because of the complex interconnections that exist between the multiple subjectivities of each person. While there might be elements that are common among those who describe positioning themselves in particular ways and having a particular subjectivity, as one of many, the combination makes it impossible to separate out one subjectivity from the others. The concept of subjectivity supports this complexity and also considers the fluidity and changeability of what individuals describe as their multiple subjectivities and allows for the overlap of subjectivities in descriptions and articulations of dimensions of one particular subject positioning. Returning to theoretical framings of research, the very reason for the choice of language, identity vs. subjectivity, was made to consider the complex and contextual nature of human ideas, beliefs, values, worldview, and positionings. The best that we can do is try to show, through examples, the ways in which those who self identify as aligning with, or living, a particular subjectivity best describe their own positionings, ideas, and ways in which they embody that subjectivity and present it

for others to see to help them better understand and articulate their own positionings and subjectivities.

In an academic context, several participants discussed pressures to produce a certain numbers of articles, presentations, book contributions, participation at conferences and symposia, membership on committees, supervisors to graduate students and expectations for performance in their specific academic contexts. There, again, exists the tension between what an individual has interest or desire to do vs. what is expected as a result of the academic social and cultural discourses which can have an influence on subjectivities.

Several participants provided examples of tensions that they experienced in their lives that were in contrast to what they would like to be doing as environmental educators and researchers. Pressures from institutional, social, and cultural discourses were sources of tension and, to varying degrees, clashed with their environmental subjectivities. Also, connected to institutional discourses of universities, faculty members have pressures to publish, teach, grade assignments, supervise graduate students, be on committees and a host of other responsibilities that can take time away from researchers being able to focus on projects of interest. Although not all participants were faculty members at the time of the conversations, tensions between the realities of their lives and their interests and ambitions were apparent in their narratives.

As suggested in the framing of research around concepts of subjectivity, both the ways in which our interests and worldview align with the discourses we encounter and also the ways in which there is contrast and contradiction that

contribute to the subjectification processes are important. Exploring those contradictions and tensions can be enlightening because they help to illustrate subjectivities. What participants chose to tell contributes to illustrations of their subjectification process because meaningfulness of events helps illustrate the ways in which individuals position themselves and make sense of themselves and the contexts in which they live.

Tensions arise when what one would *like* to do contrasts with what the individual believes is expected or required of them. Additional tension is experienced when the expectations of an institution/department/faculty are in opposition to personal interests. Institutional demands affect the choices about the projects that researchers take. The numbers of publications in particular kinds of journals (rated according to impact factor which is another issue for another day) count as tick marks in the *good professor* column and the number is considered as a quantitative measure of productivity and as independent of the quality of the scholarship whereas beliefs about the kinds of scholarship that are important to the individual may have to be set aside in favour of the recognizable productivity (Confidential interview data). The external demands can result in subjectivities and issues that individuals feel to be important being oppressed.

One tension Annette described was how she feels environmental education still seems to be a marginalized area in the framing of curriculum and environment content often gets pushed out because of the already over-stretched programs. She said "I think that's why we took up notions of it being an orientation in the

curriculum so that everyone could buy into it – but then of course nobody does.” The tension around the marginalization of the field is ongoing. She said

“I sort of describe myself as having a very flat head because it’s been bashed up against brick walls so often for the last 40 years. It’s a frustrating area so that even just a couple of weeks ago someone asked me what I worked in and I said I did research in environmental education and they said ‘what’s that?’ And I thought gosh, after 40 years people still don’t know what environmental education is. I think it has always been an uphill battle.”

In spite of interests from individuals, Annette suggested that there has to be a broader uptake of interests in environmental education for it to become more mainstream and that

“it’s always seen as too expensive and it’s always the first round of cuts in any budget constraints that’s anything to do with the environment. People see the economic value of something far before they see the environmental value of something.”

However, she reiterated that because environment is often marginalized in favour of the economic that it will not be seriously taken up and become more mainstream without having it become part of the mandated curriculum and made a priority. She described that

“environmental education is so often on the margins or it’s an elective or something that happens in the extra-curricular space or whatever does happen in the curriculum is very knowledge-based and not even skills based, let alone action based. It’s about getting it seriously into the curriculum and getting teachers to own it and prioritize it.”

Having environmental education informing curricula and having environment content being part of programs is critical so that young people have an opportunity to develop environmental subjectivities.

Phillip described sources of tension and feelings of restrictions in terms of what he is able to do within the institutional context. He said

“I think the way that universities operate now, we certainly know about the neo-liberal critique, but they have become very limited in terms of how most people see the purposes of both universities and teacher education. Universities seem to be becoming far more pragmatic, less principled, more vocational...and *Far* less critical. Far more opportunistic and pragmatic and basically just jumping to the university or corporate expectations.”

Phillip described experiences of seeing staff being co-opted or coerced, or voluntarily taken on board, into the corporate and neo-liberal line. He said “I constantly find myself feeling disappointment, tensions, anxieties about the loss of a critical perspective of the university. It seems that most universities have become very corporatized and neoliberal and operate in a very functional, pragmatic way.” Due to pressures from institutions and changes to the institutional structure that newer career researchers are experiencing, Phillip described feelings of tension around the need for those entering the academy in environmental education to maintain a critical perspective. He added

“by that I’m talking about a more critical materialist perspective. I think poststructuralism has created some wonderful gains but that it has also created some real problems in terms of viewing the world as text and language primarily. And that’s the point of my article in 2005 in EER on life-world and textualism. It was sort of a conversation with Marcia (McKenzie) and a few others about some tensions that were never really fleshed out about modern critical theory and postmodern critical theory. I think to be clear here, in terms of my own identity, poststructuralism has helped us with our conceptual apparatus, sharpening that, but needs to be seen in the service and supporting of the socially critical and more modernist critical theory and not as a separate sort of ideology in its own right that has no anchors, or moorings, or bearings.”

Some tensions Connie experienced as she was working towards positioning herself and coming to understand her own environmental subjectivity came out of her initial feelings that many environmental educators were outdoor educators and that was something she felt she did not identify with. She also felt that some of the experiential learning conferences she attended, although they connected with

nature, did not *fit* well either. She recalled “initially when I was in that outdoor and experiential education world it seemed like a lot of people dismissed the philosophical side as it seems like there was some anti-intellectualism that sometimes happens particularly in the experiential/adventure/outdoor sorts of education.” Connie also described her feelings of tension and of imposter syndrome

“around my body as a fat person because I was seeing all these hard bodies in their recreation gear and it started to feed some old feelings from high school. It was something that made me feel quite uncomfortable and judged because my body didn’t look like the stereotype of outdoor educator. Looking back I think, my goodness that certainly wasn’t a good enough reason to leave, but it was something that made me feel less comfortable.”

Connie did come to feel at home in the field of environmental education and her experiences outside of the field of environmental education contributed to her understandings of her own environmental subjectivity. She said

“thankfully I eventually did meet folks like your Dad and other people who had much broader conceptions of environmental education and realized that there was a much wider community for me. Environmental education did make sense to me because I eventually met kindred spirits – I had already met Leesa and Diane, but then also meeting folks like your Dad, Justin [Dillon] and Alan [Reid] and other folks who had more critical philosophical approaches – and I felt like I had found people I could have a conversation with – knowing you’re not alone.”

Mark’s positioning, having been an academic at an educational institution previously, doing freelance work produced some different kinds of tensions and intersecting with different subjectivities than those who are currently positioned at academic institutions. Mark described the uncertainty, including in relation to income, associated with the freelance work that he has been doing. But the greater tension he mentioned related to what he felt was professional isolation. He said

“you can, at times, think you have slipped off of everyone’s radar. Of course you know when you get good feedback from clients and you wouldn’t be able

to make a living unless you were doing a good job. In terms of networks and collaborations they sort of pre-suppose that people are in organizations – when you're part of that you don't really notice it because you have that but when you are independent you really do."

While institutional expectations have not dictated a level of participation in international conferences and seminars, Mark also noted that they are

"just ridiculously expensive or just not particularly productive so unless you are there as a bit of a break from your regular job or they are part of your job (requirements, expectations or in terms of funding) whereas for someone who is independent after a while it just doesn't add up."

Another tension Mark felt related to his working independently and that

"in terms of the type of work, inevitably, because you're an individual, the scale of projects is small and typically quite short term. You can work on writing projects that can take quite a lot longer because there isn't the time pressure to publish. But in terms of actual project work you tend to do smaller pieces of work over shorter time scales."

Nicole's context in a position that centers around research means that, in general, she described feeling that her tensions are around not having the teaching opportunities she might like in order to be able to share her interests in environmental education and environmental education research. She described

"the challenge here with being the one environmental education person is that whenever there are these great opportunities like that it's really hard for me to try to stay focused on more the kind of work I do. That said Stanford is an incredible place in terms of there are so many opportunities here."

Nicole described the excitement that exists for collaboration in the appointment that she holds but that this can also present a tension. She said

"the drawback to that as an untenured junior faculty member is that it takes a lot of restraint on my part to not become over committed and it is hard to not go off down all of these rabbit holes and to try to chart my own course and say what is my area of expertise and where do I want to keep focusing myself."

Nicole described that she has had similar experiences with regards to the diversity in graduate students and that “they have areas of interest that aren’t necessarily directly aligned with my own expertise or interests. But that is also great because I kind of feel like I’m going to school every day.” However, Nicole described, “the drawback of [that diversity in student interest] is that I don’t get the chance to deepen my own expertise in the way that I would if I was at a university with a lot of people.” Although she described wanting to deepen her own expertise within the field, Nicole is also very much a specialist in that she is the only environmental education faculty member on campus. She said

“I do one course that is the theory and practice of environmental education, which means that I cover environmental education in one quarter. I also co-teach one on science and environmental education in informal settings. And then I co-teach a first year course for all of the doctoral students in IPER, which is our interdisciplinary environmental program, on research methods and environmental problem-solving and it’s the core course that they all have to take to try to think about if you’re dealing with research. And I won’t even get into how broad those students are.”

Trying to cover environmental education *and* for students to understand it beyond a superficial level is indeed a prospect that would provide a source of tension.

Greg described some tensions that he has experienced throughout his journey to his current positioning as an environmental education researcher. He described experiences in his doctoral program where he did connect with some people who like me weren’t coming from a traditional 20-year classroom teaching experience or a school administrator kind of perspective. He felt some tension around the way he was perceived as “a crunchy granola, environmentalist. I could see that when I would do presentations and things like that some people would be excited and others, even some professors, especially the more conservative-minded

ones, would not agree with me.” In hindsight he described that while it was a tension it probably was

“a really good experience because it forced me to get out of the comfortable pond of Lakehead where people generally are thinking along more similar lines and even somewhere like here at UNBC where cultural and environmental issues are very much at the forefront and they call themselves a ‘green’ university.”

He continued

“to be at a place like the University of Calgary, was challenging sometimes and I felt even though I was in this big program I worked completely by myself for a couple of years with my great supervisory team and then I went back to Lakehead to teach sessionally for two years. It did force me to clarify some of my ideas and consider the perspectives in terms of if we take someone like Gadamer’s work and hermeneutics and others like that seriously then the other person might be right. I had to consider and engage in conversations with people that I wouldn’t have otherwise if I had stayed somewhere more comfortable.”

However, in spite of the tensions, Greg felt his experiences were worthwhile because of where he finds himself now. He said

“I think in the end you know you look at this opportunity that has now come up where there has been many changes at the U of C and they are emphasizing Indigenous and Environmental perspectives as major priorities across the campus and in the faculty and hiring five Indigenous scholars at the same time is just unheard of. You just never know how things are going to come around and I know that there will be challenges in this new position but it’s also kind of exciting and as well a sense of validation I guess in a way too. Things do change and places change.”

Jonas, in a place where he is beginning his foray into academia as a faculty member, presented a perspective that has not, to this point, seen much resistance or tension to his pursuit of his interests as his doctoral research was of his own design.

He described

“when I started working on my Ph.D., that coincided with the big COP 15 meeting (see <http://denmark.dk/en/green-living/> - includes information about a strategy for Denmark to be independent from fossil fuels by 2050) in

Copenhagen was a big climate summate. There was discussion about climate issues and sustainability issues and those were the number one issues on everyone's agendas. So at that time it was seen as the wisest career move ever. There was no resistance towards working with issues of environmental education or sustainability or climate education. I think it is something that most should include somehow when you think about a career in many different fields. People working with the economy or in political science and of course education – sustainability comes up constantly. So I wouldn't say it was going against any norms but rather going along with them or part of them. It's a focus here on environmental education and sustainability."

Jonas's experiences show a different perspective than what seems to be an emphasis in other parts of the world. However, taking up a position at an academic institution does come with pressures and expectations. Of the institution in which he will be working Jonas mentioned

"they are becoming increasingly strict with that. I think we have to publish two articles in peer-reviewed journals and teaching – all new positions are based on how much teaching is done so there is a heavy focus on that. And that has really hit me hard. After finishing my Ph.D. it seems that the good times are over. I could go and have fun with my own little project for three years but now it is another reality as a "grown up" or new academic."

With changes in context, politics and culture that seem to be emerging over the course of time that I wrote my dissertation, I feel that my questions about tensions and pressures experienced by participants might be one of the most interesting to follow up. Annette, Regula and Phillip are all in varying stages of moving into retirement from academic institutions but have indicated interest in remaining engaged with the ideas they are passionate about and continuing research of their choosing. Changes in governments in Canada and the United States pose possibilities for reinstitution of funding for environment and sustainability research, and thus connections to educational research initiatives with similar interests, but also possibilities for funding cuts depending on the politics of the

elected party. The devaluing of universities continues to be a concern across continents as pressures continue in terms of performance expectations. In the future I would like to revisit this topic with participants to see how their ideas, because of changes in their own positioning and subjectification processes have continued.

### ***Moving Forward – Ongoing Subjectification Processes***

Ideas about subjectification processes being ongoing and continual, as conceptualized through poststructuralist framings, suggest that considering how individuals continue to work to position themselves in an ongoing way is important (Davies, 2013). Participants' reflections on their own positioning helped to further describe ways in which environmental subjectivities for environmental education researchers continue to be shaped and changed. Although more specific to an environmental education context my own readings of what participants said in their conversations echoed Lather's (1991) description of the need for researchers to continue to "open up new avenues for recognizing the workings of power in the ways we construct our world and its possibilities...[and toward] developing more effective social change practices" (p. 100). This reflexivity is important in considering the ways in which we establish understandings and principles from which we can move forward (A. Gough, 1999a, 2013).

For change to occur people need to be encouraged to engage in ideas that reflect the interests of a particular movement for change. Annette described the need for others to engage in environmental education research as well as the need for funding to support those kinds of research. However, she argued that many

universities are challenged in this respect because of increased competition for dwindling available funds. She says that there are

“people like Noel who will happily research away and write without funding but if you are going to go out into schools and collect and analyse data then you need funding because it all takes time – it’s not just head work it’s field work too.”

Funding concerns aside, Annette described concerns about the nature of the research that is becoming more common in environmental education. Rather than having new ideas driving things forward she sees less innovation or different ways of conceptualizing research being engaged compared to the possibilities that exist.

Annette shared

“I’m concerned that we might be heading down the small and meaningless study path or phase. Some of the papers you get at AERA are very much in that phase and some of the manuscripts that come across my desk for reviewing from journals go into the ‘so what?’ category. But there is also some interesting stuff going on too. I think it is moving forward. We seem to have lost some of the cohesiveness. I think the disparateness is good but I’m not sure we’re communicating it as well as could probably because there are almost too many places to communicate it. There are more and more journals coming out which means there must be people writing but it’s getting harder to have a conversation – it seems to be more dissemination and less conversation.”

Annette continued

“I think there is more and more of the post-positive and interpretive type research going on and less of the critical and the poststructural. We’re almost missing some of the pushing the boundaries stuff – we seem to be going around in circles. Perhaps that is a bit of a stagnate. It’s only occasionally that you’ll find someone who is bringing in a different way of looking at things that make you go ‘ahhh, ok’ and maybe decenters the argument a bit. I think that takes time and the freedoms that are getting harder and harder to find in universities.”

In terms of research and knowledge generation, there should be a forward momentum that is leading to new ideas and understandings that contribute to equality and change for the better, some perpetuation of dominating and oppressing

discourses still exists which further contribute to maintaining the systems of power that contribute to injustices that many environmental education researchers are working to alleviate. Annette suggested that there is a “heading down the cultural reproduction side of things instead of the social reconstruction that dominated so much around the time that environmental education was emerging. I think that is having an effect on the sort of research that we are doing and ways that we are pushing boundaries or not pushing boundaries.”

Connie continues to remain positive about how many ways there are for the field of environmental education research to continue to evolve and move forward rather than becoming stuck in the cycle of ‘reinventing-the-wheel’ by those who are less familiar with, and have read less within, the research of the field. Connie said

“I think engaging with other educational research, talking to other educational researchers and not just talking to ourselves is important. I think that we need to be publishing not just in environmental education research journals but in other education journals because I think I’m seeing people, like the critical pedagogy people, actually interested in environmental education now and so I think there is an opportunity there. I think that engaging with the wider field, both in terms of us reading what’s going on but then also writing for those other communities would also be important. I think it’s like coalitional politics, in terms of engaging with other forms of education that are connected to social movements. So, for example with the latest Canadian journal [*Canadian Journal of Environmental Education*], having Indigenous Education and environmental education together I think is a really important conversation in terms of what can we learn from each movement and what happens when we smush them together? I think that is *really* important.”

Connie described her interest in having marginalized voices, including feminist pedagogy and feminist and gendered education, brought forward in the field of environmental education research and while acknowledging that this is not a new idea (see Russell, 2005; Russell & Fawcett, 2013) she said she would like to see more of it actually happening in a more serious way. Connie also mentioned

“we really haven’t seriously engaged yet with things like poverty and social class, disability issues, body size, sexuality. There are a bunch of things that we still need to do if we are really going to have a movement that makes a difference – we have to connect to those social justice issues. So I think I still see lots of potential there that hasn’t yet been built on. I mean there are all sorts of other things that have been identified in the handbook that I know less about but I’m sure also need work in terms of theories about learning or looking at informal learning environments or social learning or whatever. There are all sorts of things and still lots of room for people to find their passion and make a difference.”

Engaging in critically reflective practice and reengaging and supporting curiosity are things that Mark indicated he felt were important in terms of continuing to see the field of environmental education research move forward. He described an interest in seeing more conversations and engagement with ideas about

“what are we learning about learning in the field? What are we learning about environmental learning? I don’t think I really hear – say when I’m at conferences which are mainly for environmental education practitioners and I pick up on a lot of passion and a lot of drive – but I don’t hear a lot of curiosity about what isn’t working in what we are doing? Or for what types of learners are we failing or are we not really helping? It’s almost like we need a bit more reflection and a bit less passion.”

Mark discussed a talk he gave at the Australian Environmental Education Association conference about what the role of evidence might be. He said

“the theme of the conference was ‘our courageous future’ and I gave a talk about what might the role of evidence be in this courageous future. But I came away from that having that feeling what learning was happening was not being considered. A lot of practitioners or people who are leading small environmental organizations are only really interested in evidence that shows that what they are doing is good so that perhaps they can get some more funding. And I understand that reality and I would be the same if I was working for an organization like that but we need to develop and grow more of a culture of really asking where are we not succeeding? Where are we not doing as well as we think we are doing? And what are we learning about the environmental learning that is or is not happening?”

Issues around quality of research, particularly in qualitative approaches, are important to consider and Mark's interest in ideas about research, and thoughtful approaches to research, might be useful to the kinds of questions that might be asked within the field of environmental education research. Also, consideration of issues of quality of environmental education research must be considered for the field to remain relevant in the ever-evolving larger field of educational research.

My conversation with Regula, when our discussion turned to thoughts of moving forward within the field, returned to talk of the same kinds of ideas around which our conversation began and also engaged ideas similar to those Mark described in that she articulated concerns about the quality and substance of articles being published in environmental education peer-reviewed journals and the need for quality environmental education research. Regula described how

“there was a time when there were more fundamental kinds of research papers which were very important. I think, just now, the papers are more on small projects in different areas of the world or different regions and they describe what people are doing there. And that is very nice – but it seems that they are seldom writing about general questions about environmental education and about philosophical questions or reflecting praxis or the concept “*environment*”? The current papers are more like nice descriptions about what is going on. I think environmental education research should consider this critical perspective on things – critical perspective on things like what are we talking about, what is it like in schools, what is really relevant learning. I think it should be more in that direction again. On the other hand yes, special projects or descriptions are good but even those nice projects should be reflected on as well as on a theoretical level. I miss seeing those kinds of papers.”

I mentioned to Regula, during our conversation, that I felt perhaps an emphasis and (re)consideration of the critically reflexive aspect of conducting research could strengthen some of the studies being done and that it could increase the depth of case studies or reports. Regula agreed and added

“I see that so many authors take for granted, when they describe a project on environmental education, that the pupils and the students will change and afterwards be good citizens and so on and I think that should be reflected much more critically. I see this to be a problem – they are not critical even against their own research and projects.”

That critical reflection of our own processes in what we do also informs the ways in which we engage in our own subjectification processes as environmental education researchers and how we continually work to navigate and reposition within a changing field.

Subjectification is a process and changes in thinking were reflected in some of Greg’s ideas about how the field might move forward or the things he feels are important to consider in his own practice and hopefully more broadly by others as well. Greg’s reflections about moving forward personally seemed to mirror much of what he had said about how, more generally, environmental education researchers can also think about their own constant (re)positioning as the time and place changes. He described how despite his idealistic views there is also a reality in which we live. Greg shared

“the reality of person X who I’ve met and worked with and works in the resource industry in a mining operation but who also still does traditional harvesting and loves the land and cares deeply for the land and doesn’t want to see the land polluted and degraded to a point where they can’t do that anymore or pass that on to their children. That is not to say that maybe some of those extremist views, or perhaps more extreme or strict, that maybe I might have had before have now softened and not to the point of being an apologist but to a point of understanding that unless you choose to completely live outside of society that we all need to work together. One of the quotes from one of my doctoral participants, who is an Elder from BC, she said ‘we all need to get in the same canoe’ and figure out how to work together. On an individual level that speaks to me as well as in terms of trying to enact that in work and community involvement. I’m not sure if that answers your question in terms of identity because I also agree that identity is shifting and changing.”

While everyone might have their own ideas about moving forward, personally, as a society and culture, and as a part of a field of research, the individuality of those involved is embraced; fundamentally we are all working with particular principles in mind but in our own ways.

### **Challenges of Subjectivity Research**

The challenges I have encountered during my doctoral studies relate less to the content of participant narratives and more to the process of engaging in narrative research about a complex concept such as subjectivity. I hope that by presenting narratives of environmental subjectivity and subjectification processes readers will come to understand their own environmental subjectivities. But this approach presents complexities because instead of performing an analysis, my voice is heard as integrated in participant narratives and in my own reflections about the process. I do not attempt to absolve myself of responsibility for analysis but feel that, given the theoretical and methodological framing, my task is not to comment but to challenge methodological simplicity by offering spaces for others to “analyse” and critically reflect for themselves (Koro-Ljungberg & Mazzei, 2012). It means, as Rosi Braidotti (2010) suggests, that as a researcher I am engaging nomadic thinking thereby adopting a relational ontology for the ways in which environmental subjectivities are (re)constituted in a process of becoming.

What I have attempted to do is complex. The literature available about identity and subjectivity itself is a challenge. Environmental education literature contains some references to identity (see, for example, Blatt, 2013; Stapleton, 2015)

but the ways in which identity is framed are quite different from the ways I have framed my study and use different theoretical frames to inform the conceptualization of identity. The studies mentioned do not take up the concept of identity as informed through poststructural and critical theoretical frames. Because the conceptualization of the word is different and assumptions associated with those theoretical frames are very different, while interesting these articles findings foci are quite different from my own. Therefore papers talking about identity have to be considered carefully because, while some do not reflect the perspective I have taken, many do even though the language of *identity* is used rather than *subjectivity*. The concept of environmental subjectivity must be considered as intersectional and not simply reduced to one variable among many that can be isolated or expressed as a simple binary.

Phillip Payne has tried to engage some of the more philosophical groundings around assumptions about identity (see Payne, 2001, 2005b; Reid & Payne, 2011). However, the ways Payne describes the concept of *identity* in his papers reflect what I would call a conceptualization that is better characterized as subjectivity. Identity, as seen in conversations with participants, is more comfortable language than subjectivity and is what most participants used in the conversations. However, in using the language of identity, this word was used after discussion with participants to clearly articulate how that word was being used, including theoretical considerations (reflecting poststructural conceptions of subjectivity), and the associated meanings so that assumptions were not made about language. In the end, the ways in which identity was used more closely reflect the poststructural concept

of subjectivity. The ways in which identity can be conceptualized more as subjectivity (although without changing the language) within the field and the understandings of theoretical framings that have not previously been used within the field are not well understood. Therefore introducing the post-critical is necessary to help bring to light assumptions being made and to create awareness about the ways in which the theories used imply certain things and that we must be aware of. However, the variety of ways in which the term *identity* is used creates the need to clearly articulate the assumptions and ways in which the language is informed by particular theoretical framings. Those theoretical framings are, perhaps, less explored outside of the field of environmental education unless interests in particular philosophies (e.g. Connie's interest in ecofeminisms and ecophilosophy and Annette's interest in those writing about feminist poststructuralisms) or philosophers and theorists (e.g. Jonas's interest in philosophers, and Žižek in particular, and Greg's interest in those writing using cultural and Indigenous approaches to research) inspires the individual to pursue that and bring it into the field of environmental education research through conference presentations and publications.

In some literature outside of the field of environmental education research, there is ongoing use of the term *identity* but within contexts that are poststructurally and critically informed. Although I argue subjectivity would be better language, the concept of identity is still used. In finding literature to help support and frame my research, care had to be taken when considering sources as only particular ones framed identity in ways that coincided with the approach that I

have taken. I think authors made this choice so as to not imply an acceptance of the whole diverse field of poststructuralist theories. Rather discussion was easier when the term identity was used as a concept informed by poststructuralist and critical theories. Therefore the use of both subjectivity and identity is not meant to be confusing but rather reflects language used by participants and the language used in the literature consulted.

Critiques also exist concerning how poststructuralism is used in educational research (Hodgson & Standish, 2009). Although emancipatory and empowering, Hodgson and Standish (2009) describe how poststructuralism can also create problems by being theoretical and not being seen in the practical aspects of the research. The authors argue that they show how “the purported adoption of poststructuralist thought in relation to narrative research can lead to a form of research practice that fails adequately to recognize its basis in those very constructions of knowledge that poststructuralist thought has sought to criticize” (p. 309).

It is challenging capturing narratives of participants’ understandings of their positionings and subjectification processes that led to understandings of their own environmental subjectivity. Articulating understandings of our worldview and how it informs the ways in which our subjectivities change is complex. However that complexity comes with the territory. Butler (1990, p. 333) indicates any suggestion of stability in subjectivities is “ontologically insupportable.” Given the ever changing context in which individuals find themselves and the ways in which interactions and experiences continue to (re)shape who individuals are, people live in a position of

ongoing tension. The interplay between subjectivity and the sociocultural norms within which individuals find themselves can be at odds. Blühdorn (2011) describes a paradox where, on one hand, there is acknowledgement that there is a need to mitigate climate change and that likely radical change is needed to individuals' values, lifestyles, and social practices in order for that to happen and yet, on the other hand that there is "a profound inability and unwillingness to implement such change." While I do not suggest that participants in this research are unwilling to change or that change is always necessary, it seems that participants have, at times, felt that they are at odds with what they would really like to be able to do and what they are able to do. It does, however, seem that the principles of environmental education are consistent with offering directions for change that support more equitable and environmentally just ways of being and becoming (Hart, 2010).

### ***Challenges of Narrative Subjectivity Research***

During its existence, narrative has been discussed in a variety of ways including as a cognitive scheme (Bruner, 1987, 2002; Polkinghorne, 1988), a means of interaction (Georgakopoulou, 2006, 2007), and a reflection and creator of self and identity (Bamberg, 2008; Bamberg, De Fina & Schiffrin, 2007). But while Spector-Mersel (2011) suggests examples of the ways in which the *hows* of narrative research have seen substantial contributions, she counters that the analysis of stories seems "nonetheless to be the most underdeveloped aspect of narrative scholarship" (p. 172). She continues to suggest that an holistic approach is most appropriate and consistent with narrative at the methodological, epistemological and ontological levels (Spector-Mersel, 2011). However, simply taking a whole text

from a conversation and presenting it is one of the critiques of narrative research. Given the theoretical and epistemological framings that informed my research, and supported by Spector-Mersel (2011) and Roulston (2010b) a holistic approach that fits and is consistent with what I am trying to do. Problems arise when narratives are unthoughtfully presented and there is not groundings for the choices made in the ways participants are represented. I believe, to the best of my ability, I have been conscientious about the framings that have informed my approach and consistent with those in the ways in which I have presented the narratives of my participants. I am letting participants include what they feel is important as aspects of our conversation and that, as much as possible, contribute to an assemblage that illustrates participant environmental subjectivities and subjectification processes as environmental education researchers.

While challenging, the potential for considering what the use of identity research through narrative methodologies can contribute is great. Within the field of environmental education I have not found examples of research framed the way I have conducted my research or investigating the questions I set out to explore. I believe not only the questions my research addresses but also my approach, including theoretical and methodological framing, provide unique contributions to the field of environmental education research by drawing on concepts, theoretical and epistemological framings from outside of the field and by connecting to issues and interests within the field. I feel that my contributions to understandings of environmental subjectivities and environmental educator subjectification processes will provide insight to others as well as allow those reading the narratives to come

to understand, articulate and create consciousness about themselves and their own environmental subjectivities.

### ***Issues of Representation***

Debate that has been engaged in field of qualitative research concerns issues of representation. Representation becomes increasingly complex as we see a proliferation of onto-epistemic groundings, theoretical perspectives, methodologies and methods that qualitative researchers can choose to inform their approaches to qualitative studies (McCoy, 2012). However, representation is inherently linked to researcher choices about the ways in which research is conceptualized. Therefore, in poststructural and critical theoretical framings considerations need to be made about what counts as research and the ways in which research is represented. These approaches to research present opportunities to unsettle the foundations of discourse and the structures of academic language, of power, subjectivity and colonialism that code language within qualitative inquiry. I carefully considered issues of representing narrative research framed using poststructurally- and critically-informed concepts so that those issues could be addressed where possible. Participant assemblages were constructed thoughtfully and using legitimated methods.

The works of Richardson (1997) and Richardson and St. Pierre (2005) have influenced the ways in which the narratives of participants have been (re)presented because they take into consideration similar theoretical and methodological choices to those I have made. My interest in consciously choosing to not choose *for* participants (Frankham & Smears, 2012; Piper & Frankham, 2007) allows readers to

take in and create their own understanding for themselves and provides opportunities for the generation of new insights and troubles the taken-for-granted ways of interpreting the world. My interest in participant writings and presentations informs the ways in which I have created the participant assemblages and helps represent what could be considered as the material in the environmental subjectivities of participants and their subjectification processes (see, for example, Braidotti, 2002; Hird, 2009; Mazzei, 2013). Additionally, MacLure (2013) urges for a consideration of the multiple ways that people make ourselves intelligible to ourselves and to others.

MacLure (2013) suggests that working with what we have, and what participants share, presents possibilities for the ways in which we can come to know even considering the idea that language can present limitations for representing reality we use the tools that we have to do the best we can. I have attempted to consider as many of the uncertainties as possible and to create space for conversation and expose what otherwise might be blank or blind spots but also understanding that there are still limits to really being able to fully understand subjectivities. However, I would suggest that were I to conduct similarly structured research in the future I would consider the potential for what MacLure (2013) describes as post-foundational and post-qualitative thought and methods.

### **Environmental Subjectivities**

A question that I have been asked more than once about my doctoral research is “what did you find?” or “what did your results say?”. I argue my task has

been to help participants expose their embedded and embodied perspectives (using multiple methods – including interviews, conferences, subsequent meetings). I have presented opportunities to help participants articulate and represent their understandings of their own environmental subjectivities and processes of becoming (Masny, 2013; St. Pierre, 2013). My process alongside participants is an opportunity to challenge simplistic notions of what an environmental worldview can look like and that no two are exactly the same. No single answer about what environmental subjectivity exists but rather there are possibilities for what it *can* look like and about the processes through which individuals come to that understanding. There is an embracing of the multiplicity of perspectives that contribute to the richness and complexity of individual positionings (Massey, 2008). But while the difference and diversity could be viewed as negative, it is precisely the differences that create spaces for engagement by a variety of readers. I have come to believe that the differences reflected in participant narratives are the result of similarities in worldview but because of the multiple positionings and subjectivities of participants there is also what Savransky (2012) calls *epistemological plurality*.

Increasingly ideas about environment are returning to the world in a more tangible and material sense, rather than isolated in language as some more radical poststructuralists might purport. The idea of becoming and environmental subjectification does not simply occur in isolation but in relation with our environment; as part of what is here and not placing ourselves apart from it (Lenz Taguchi, 2010). Lenz Taguchi (2013) further describes the idea of individuals in the world being learners who are entangled with the world. Participants in my study

are, through research, constant learners and have described many different entanglements that they have experienced. The process of coming to articulate subjectivities, including environmental subjectivities, is itself a process of recognizing the entanglements in which we find ourselves and the complexity of our positionings.

### **What Does This Mean Moving Forward?**

My research questions revolve around environmental subjectivity and the subjectification process of environmental education researchers. I realize that I am looking at a very specific type of environmental subjectivity within a particular group of participants. Environmental education researchers are those who have come to position themselves in similar ways because of particular similarities in the ways in which we conceptualize environmental and educational practices. I have also chosen to use a particular conceptualization of identity informed by specific theoretical framings. Those framings have also informed the methodological and methods choices that I have made. My intent was not to generalize about environmental subjectivity among environmental education researchers but rather to allow them to represent themselves and make sense of their environmental subjectivity in relation to their multiple subjectivities and through their very unique subjectification processes. The presence of diversity within this group contributes to the richness of our self-interpretations (Rasposa, 2012) and understandings of our own environmental identities whether we are environmental education researchers or not.

I believe the narratives shared here can be meaningful in different ways for all who read them. Rasposa (2012) describes the desire that “we seek for each other the opportunity to achieve self-understanding; we ought actually to cultivate these opportunities” (p. 441). Being able to make meaning about our understandings of ourselves and our relationships with those around us I think is part of leading a meaningful life. While participant conversations often focused around environmental education and environmental education research, those points of conversation contribute to illustrations of environmental identity because of the positioning of the participants in this research. I feel my own self-understandings and ability to articulate my environmental subjectivity have changed as a result of the conversations I have had with participants. Self-understanding is “something that we achieve together in conversation, a conversation that enriches the meaning of *our* lives as much as it does for our diverse conversation partners” (Rasposa, 2012, p. 441). Therefore the kinds of conversations I have had with participants are positive ways to build community among those with similar interests and worldviews and who could be described as having similar subjectivities. I hope this research contribute to self-understanding and opening spaces for individuals to consider their own environmental subjectivities.

As environmental education researchers, the environmental subjectivity that they describe and embody will be unique and might be quite different for those who position themselves differently. Therefore it seems reasonable that future directions for research could be to adopt a similar approach but discuss ideas about environmental identity with different participant groups such as teachers who

practice environmental education, environmentalists or individuals or particular age groups or who identify with particular race, class or gender groups. It seems that the same or similar theoretical and methodological approaches could be used, with minor variations made to accommodate the differences in participant group. The assemblages created in conversation with participants from the suggested demographics might be quite different than the narratives from the participants in my research. However, for my particular interest the participant group made sense for the kind of environmental identity I was most interested in learning about. In some cases difference seems to be viewed negatively and as some kind of deficit. However, as Mazzei (2011) describes, it is possible to engage in generative and productive and which can result in the production of voice for what which is yet unheard.

All participants contributed thoughtful responses when asked what they thought was an important direction for the field to take in the future. A lot of uncertainty about what is the best direction of the field of environmental education exists. Robottom and Hart (1993) suggested at that time that there needed to be a critical approach to environmental education research so that the field could continue to move forward (see also, Hart & Nolan, 1999). They argued that something needed to change if environmental education was to evolve along with fields of educational research. However, while proposing that the critical approach was a strategy for this about which they felt very strongly, they did, upon reflection, acknowledge that it might not be *the* answer. There was uncertainty. Amidst our best attempts to make sense of research being done and understanding how that

research contributes to the success of the field there are many uncertainties. But I do not believe that means that we should be discouraged by the lack of certainty. With uncertainty comes possibility for new ways of things and doing in the field of environmental education research.

Considering, once again, the concept of identity and how it is conceptualized through poststructural and critical perspectives, what participants have described here in their narratives contributes something deeper and more meaningful than perhaps could be described through identity and subjectivity. Rather than perhaps an environmental identity or subjectivity, it seems that what I have heard and read from participants is an environmental ontology. Considering environmental ontology has led me to a rapidly emerging and broadening field of feminist materialist literature in which there are descriptions of being and becoming that seem to bring the material into what may have been described as subjectification processes. Childers (2013) articulates an ontology where “the materiality of the field, or the physical as well as the discursive, are viewed as equally constitutive forces that shape our ontological and therefore methodological engagements as constant, iterative processes” as well as “how such process itself lends itself to feminist research as endless becoming, where the boundaries of feminist research are continuously pushed and disrupted by the materiality” (p. 599). This argument seems to open up another dimension of complexity in qualitative research. As McCoy (2012) describes, feminist materialist readings have enriched poststructuralist orientations to thinking about epistemology and ontology. That is not to say that poststructuralist conceptions of subjectivity are inappropriate but

rather than I believe feminist materialist approaches, which are informed by poststructuralism and critical approaches, would contribute to the theoretical and methodological groundings for the research.

Annette's work introducing ideas of feminist poststructural approaches to environmental education research (see A. Gough, 1994, 1999b, 2013; Gough & Whitehouse, 2003) has been important for my understandings of how poststructuralist approaches to research can be applied in the field of environmental education research. With many influences outside of the field of environmental education research helping me construct my ideas and framings of poststructurally and critically informed conceptions of subjectivity, I have found Phillip's introduction to poststructurally and critically informed conceptions of identity *in* environmental education research important. Several participants have also illustrated the ways in which concepts, theoretical and methodological framings and methods can be applied within the field of environmental education research. I think feminist materialist approaches to research are another area in which there are useful concepts and grounding for research that could be taken up in the ways in which we conceptualize environmental education research. There is a need for theories that can accommodate for the materiality and *transcorporeal relations* (Lykke, 2010)). Examples from Barad (2003), Braidotti (2002), Childers (2013), Hird (2009), and then tracing back to feminist poststructuralists such as St. Pierre and Lather, present examples of the ways in which the material and the ontological are crucial components in understanding the ways in which individuals continually work to navigate their contexts and position themselves. Critical, poststructural and

new materialist perspectives can enrich the ways in which we consider being and becoming in relation to environmental ontologies and approaching environmental education research.

Revisiting the concepts of a poststructurally informed framework that contribute to the ways in which the whole study was organized and supported is, I think, important to do in any critical reflection process. Often theoretical positionings and framings are discussed early in the research process and discussed at the beginning of a written work but are then not discussed again which is a source of critique particularly in poststructurally informed research (Hodgson & Standish, 2009; Krøjer & Hølge-Hazelton, 2008). In a practical way I think it is important to revisit why the concept of identity as described through poststructuralist and critical theories is integral to the way in which this study was conceptualized and thus the ways in which the narratives were presented and discussed through reflection (Hodgson & Standish, 2009). Rather than consideration of the whole of one particular theory or theorist I chose to assemble a theoretical framework that had concept and elements that supported the interests and ways in which I structured and articulated my questions of interest.

Representing environmental education researchers' environmental subjectivities was more of a challenge than I initially anticipated. The complexity of the ways in which environmental subjectivities among my participants interwove and connected with their multiple subjectivities added, I believe, to the richness of their narratives and provides a context for the ways in which they articulate their understandings and make meaning for themselves. Moving forward I believe there

is value in the content of the narratives presented, the ways in which I have tried to describe the meanings I have made from the generous and thoughtfully contributed narratives of my participants and also in the process of both the co-construction of the narratives and the ways in which I have chosen not to choose (Frankham & Smears, 2012), and yet not absolve myself of responsibility, when creating assemblages and representing environmental subjectivities of my participants. Patti Lather (2016) describes a process of *becoming with*, which reflects an intra-action and rather than an omnipresent judgment being passed from the position of researcher, my voice is present in all of it because of the co-construction that was the process. I hope that readers find spaces where there are echoes between their own experiences and what they read from participants' contributions to this dissertation. In another sense, everyone on this planet is becoming with the world around them and therefore it is necessary for our relationship with, and valuing of, environments to be part of our worldview. Hermann-Wilmarth & Holbrook (2013) suggest a need to respond to our subjectivities and that by engaging in such a response there is potential for a shift in our perceptions and possibilities for becoming and change. I feel the complexity of environmental subjectivity is essential in moving towards change in individuals positionings with respect to environment and this being part of their worldview. For those within environmental education, and perhaps even more for those outside who are becoming teachers, this process of reflection on becoming with and having an environmental ontology could be part of teacher education programs.

## References

- Altheide, D. L. (2008). The evidentiary narrative: Notes towards a symbolic interactionist perspective about evidence. In N. Denzin & M. Giardina (Eds.), *Qualitative inquiry and the politics of evidence* (pp. 137-162). Walnut Creek, CA: Left Coast Press.
- Althusser, L. (1970). Ideology and ideological state apparatuses. In L. Althusser (Ed.), *Lenin and philosophy and other essays* (pp. 121-176). New York: Monthly Review Press.
- Alvesson, M. & Deetz, S. (2006). Critical theory and postmodern approaches to organizational studies. In S. Clegg, C. Hardy, T. Lawrence & W. Nord (Eds.), *The Sage handbook of organization studies* (2nd ed., pp. 255-283). London: Sage.
- Andrews, M. (2004). Counter-narratives and the power to oppose. In M. Bamberg & M. Andrews (Eds.), *Considering counter narratives: Narrating, resisting and making sense* (pp. 1-6). Amsterdam: John Benjamins.
- Anfara, V. & Mertz, N. (2006). *Theoretical frameworks in qualitative research*. Thousand Oaks, CA: Sage.
- Angus, I. & Langsdorf, L. (Eds.). (1993). *The critical turn: Rhetoric and philosophy in postmodern discourse*. Carbondale: Southern Illinois University Press.
- Ardoin, N. M. (2006). Toward an interdisciplinary understanding of place: Lessons for environmental education. *Canadian Journal of Environmental Education*, 11, 112-126.

- Ardoin, N. M. (2009). Behavior change theories and free-choice environmental learning. In J. Falk, J. Heimlich & S. Foutz (Eds.), *Free-choice learning and the environment* (pp. 57-73). Lanham, MD: AltaMira.
- Ardoin, N. M. (2014). Exploring sense of place and environmental behavior at an ecoregional scale in three sites. *Human Ecology*, *42*, 425-441.  
doi:10.1007/s10745-014-0652-x
- Atkinson, E. & DePalma, R. (2009). Un-believing the matrix: Queering consensual heteronormativity. *Gender and Education*, *21*(1), 17-29.
- Bai, H. (2009). Reanimating the universe: Environmental education and philosophical animism. In M. McKenzie, P. Hart, H. Bai & B. Jickling (Eds.), *Fields of green: Restorying culture, environment and education* (pp. 135-152). Cresskill, NJ: Hampton Press.
- Bamberg, M. (2008). Narrative analysis and identity research: A case for 'small stories'. *Theory Psychology*. Retrieved from [www.clarku.edu/~mbamberg/.../Theory%20&%20Psychology%20manuscript.doc](http://www.clarku.edu/~mbamberg/.../Theory%20&%20Psychology%20manuscript.doc)
- Bamberg, M., De Fina, A. & Schiffrin, D. (2007). Introduction to the volume. In M. Bamberg, A. De Fina & D. Schiffrin (Eds.), *Selves and identities in narrative and discourse* (pp. 1-8). Amsterdam: John Benjamins.
- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, *28*(3), 801-831.

- Barone, T. (2000). *Aesthetics, politics and educational inquiry: Essays and examples*. New York, NY: Peter Lang.
- Barone, T. (2001). Science, art and the predispositions of educational researchers. *Educational Researcher*, 30(7), 24-28.
- Beighton, C. (2013). Assessing the mess: Challenges to assemblage theory and teacher education. *International Journal of Qualitative Studies in Education*, 26(10), 1293-1308.
- Bell, A. C. & Russell, C. L. (2000). Beyond human, beyond words: Anthropocentrism, critical pedagogy and the poststructuralist turn. *Canadian Journal of Education*, 25(3), 188-203.
- Belsey, C. (2002). *Poststructuralism: A very short introduction*. Oxford, UK: Oxford University Press.
- Benhabib, S. (1995). Feminism and postmodernism: An uneasy alliance. In S. Benhabib, J. Butler, D. Cornell & N. Fraser (Eds.), *Feminist contentions: A philosophical exchange* (pp. 17-34). New York, NY: Routledge.
- Black, L. (2007). Analysing cultural models in socio-cultural discourse analysis. *International Journal of Educational Research*, 46, 20-30.
- Blatt, E. (2013). Exploring environmental identity and behavioral change in an environmental science course. *Cultural Studies of Science Education*, 8(2), 467-488.
- Blühdorn, I. (2011). The politics of unsustainability: COP15, post-ecologism and the ecological paradox. *Organization & Environment*, 24(1), 34-53.

- Bowers, C. A. (2001). *Educating for eco-justice and community*. Athens, GA: University of Georgia Press.
- Bowers, C. A. (2003). *Mindful conservation: Rethinking the ideological and educational basis of an ecologically sustainable future*. Lanham, MA: Rowman & Littlefield Publishers.
- Braidotti, R. (2002). *Metamorphoses: Towards a materialist theory of becoming*. Malden: Polity Press.
- Braidotti, R. (2010). Nomadism: Against methodological nationalism. In I. Gur-Ze'ev (Ed.). *Diasporic philosophy and counter-education*. Rotterdam, The Netherlands: Sense.
- Britzman, D. (2000). "The question of belief": Writing poststructural ethnography. In E. A. St. Pierre & W. S. Pillow (Eds.), *Working the ruins: Feminist poststructural theory and methods in education* (pp. 27-40). New York, NY: Routledge.
- Britzman, D. (2003). *Practice makes practice: A critical study of learning to teach*. Albany, NY: State University of New York Press.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1987). Life as narrative. *Social Science Research*, 54(1), 10-32.
- Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.
- Bruner, J. (2002). *Making stories: Law, literature, life*. New York, NY: Farrar, Straus and Giroux.

- Bucholtz, M. & Hall, K. (2005). Identity and interaction: A sociocultural linguistic approach. *Discourse Studies*, 7(4-5), 585-614.
- Burgess, A. (2010). The use of space-time to construct identity and context. *Ethnography and Education*, 5(1), 17-31.
- Burke, C. (2010). About looking: Vision, transformation, and the education of the eye in discourses of school renewal past and present. *British Educational Research Journal*, 36(1), 65-82.
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. New York, NY: Routledge.
- Butler, J. (1992). Contingent foundations: Feminism and the question of "postmodernism". In J. Butler & J. W. Scott (Eds.), *Feminists theorize the political* (pp. 3-21). New York, NY: Routledge.
- Butler, J. (1995). For a careful reading. In S. Benhabib, J. Butler, D. Cornell & N. Fraser (Eds.), *Feminist contentions: A philosophical exchange* (pp. 127-144). New York, NY: Routledge.
- Butler, J. (2004). *Undoing gender*. New York, NY: Routledge.
- Cahill, C. (2007). Doing research *with* young people: Participatory research and the rituals of collective work. *Children's Geographies*, 5(3), 297-312.
- Callero, P. L. (2003). The sociology of the self. *Annual Review of Sociology*, 29, 115-133.
- Cameron, D. (2001). *Working with spoken discourse*. London: Sage.
- Cameron, J. & Gibson, K. (2005). Participatory action research in a poststructuralist vein. *Geoforum*, 36(3), 315-331.

- Castree, N. (1997). Nature, economy, and the cultural politics of theory: The “war against the seals” in the Bering Sea, 1870-1911. *Geoforum*, 28(1), 1-20.
- Castree, N. (2005). *Nature*. London: Routledge.
- Chawla, L. (2001). Significant life experiences revisited once again. *Environmental Education Research*, 7(4), 451-461.
- Cherryholmes, C. (1988). *Power and criticism: Poststructural investigations in education*. New York, NY: Teachers College Press.
- Cherryholmes, C. (1994). Pragmatism, poststructuralism and socially useful theorizing. *Curriculum Inquiry*, 24(2), 193-213.
- Childers, S. (2012). Against simplicity, against ethics: Analytics of disruption as quasi-methodology. *Qualitative Inquiry*, 18(9), 752-761.
- Childers, S. (2013). The materiality of fieldwork: An ontology of feminist becoming. *International Journal of Qualitative Studies in Education*, 26(5), 599-609.
- Clandinin, D. J. & Connelly, M. (1999). *Shaping a professional identity: Stories of educational practice*. New York, NY: Teachers College Press.
- Clandinin, D. J. & Connelly, M. (2000). *Narrative inquiry: Experience and story in qualitative research*. Thousand Oaks, CA: Sage.
- Clark, C. (2010). Synergy of the commons: Co-facilitated learning and collective action. In R. Stevenson & J. Dillon (Eds.), *Engaging environmental education: Learning, culture and agency* (pp. 77-98). Rotterdam, The Netherlands: Sense.
- Clark, C. (forthcoming). Environmental learning and community collective action. In J. Dillon, C. Russell & M. Breunig (Eds.), *Environmental education - a reader*. New York, NY: Peter Lang.

- Clegg, S. (2008). Femininities/masculinities and a sense self: Thinking gendered academic identities and the intellectual self. *Gender and Education*, 20(3), 209-221.
- Collins, P. H. (2000). *Black feminist thought: Knowledge, consciousness and the politics of empowerment* (2nd ed.). New York, NY: Routledge.
- Connelly, F. M. (1996). Teachers' professional knowledge landscapes: Teacher stories. Stories of teachers. School stories. Stories of schools. *Educational Researcher*, 25(3), 24-30.
- Connelly, F. M. & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2-14.
- Cortazzi, M. (1993). *Narrative analysis*. London: Falmer.
- Court, M. (2005). Negotiating and reconstructing gendered leadership discourses. In J. Collard & C. Reynolds (Eds.), *Leadership, gender & culture in education: Male and female perspectives* (pp. 3-17). New York, NY: Open University Press.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: Sage.
- Czarniawska, B. (2004). *Narratives in social science research*. London: Sage.
- Davies, B. (1989). *Frog and snails and feminist tales*. North Sydney, Australia: Allen & Unwin.
- Davies, B. (1997). The subject of post-structuralism: A reply to Alison Jones. *Gender and Education*, 9(3), 271-283.
- Davies, B. (2000a). Eclipsing the constitutive power of discourse: The writing of Janette Turner Hospital. In E. A. St. Pierre & W. S. Pillow (Eds.), *Working the*

- ruins: Feminist poststructural theory and methods in education*. New York, NY: Routledge.
- Davies, B. (2000b). *(In)scribing body/landscape relations*. Walnut Creek, CA: Altamira Press.
- Davies, B. (2003a). Positioning the subject in body/landscape relations. In R. Harré & F. Moghaddam (Eds.), *The self and others: Positioning individuals and groups in personal, political, and cultural contexts* (pp. 279-296). Westport, CT: Praeger.
- Davies, B. (2003b). *Shards of glass: Children reading and writing beyond gendered identities*. Cresskill, NJ: Hampton Press, Inc.
- Davies, B. (2013). A feminist poststructural approach to environmental education research. In R. B. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 480-486). New York, NY: Routledge.
- Davies, B. & Gannon, S. (2006). The practices of collective biography. In B. Davies & S. Gannon (Eds.), *Doing collective biography* (pp. 1-15). Maidenhead, UK: Open University Press.
- Davies, B. & Harré, R. (1990). Positioning: The discursive production of selves. *Journal for the Theory of Social Behaviour*, 20(1), 43-63.
- Davies, B. & Whitehouse, H. (1997). Men on the boundaries: Landscapes and seascapes. *Journal of Gender Studies*, 6(3), 237-254.
- Deleuze, G. & Guattari, F. (2004). *A thousand plateaus*. London: Continuum.
- Denzin, N. K. (1992). *Symbolic interactionism and cultural studies: The politics of interpretation*. Cambridge, MA: Blackwell Publishers.

- Denzin, N. K. (2001). The reflective interview and a performative social science. *Qualitative Research*, 1(1), 23-46.
- Denzin, N. K. & Lincoln, Y. S. (2003). *The landscape of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Derrida, J. (1982). Signature, event, context. In J. Derrida (Ed.), *Margins of philosophy* (A. Bass Trans.) (pp. 307-330). Chicago: University of Chicago Press.
- Dillabough, J. (2009). Extended review essay - history and the making of young people and the late modern youth researcher: Time, narrative and change. *Discourse: Studies in the Cultural Politics of Education*, 30(2), 213-229.
- Dillon, J., Kelsey, E. & Duque-Aristizábal, A. M. (1999). Identity and culture: Theorising emergent environmentalism. *Environmental Education Research*, 5(4), 395-405.
- Dillow, C. (2009). Growing up: A journey toward theoretical understanding. *Qualitative Inquiry*, 15(8), 1338-1351.
- Doucet, A., & Mauthner, N. S. (2008). What can be known and how? Narrated subjects and the listening guide. *Qualitative Research*, 8(3), 399-409.
- Dowling, R. (2010). Geographies of identity: Climate change, governmentality and activism. *Progress in Human Geography*, 34(4), 488-495.
- Dunn, K. (2000). Interviewing. In I. Hay (Ed.), *Qualitative methods in human geography* (pp. 50-82). Oxford, UK: Oxford University Press.
- Dunn, R. (1997). Self, identity and difference: Mead and the poststructuralists. *Sociology Quarterly*, 38, 687-705.

- Dunn, R. (1998). *Identity crises: A social critique of modernity*. Minneapolis, MN: University of Minnesota Press.
- Eisner, E. (1997). The promise and perils of alternative forms of data representation. *Educational Researcher*, 26(6), 4-9.
- Elbaz, F. (1990). Knowledge and discourse: The evolution of research on teacher thinking. In C. Day, M. Pope & P. Denicolo (Eds.), *Insights into teachers' thinking and practice* (pp. 15-42). Bristol, PA: Falmer Press.
- Elliot, A. (2001). *Concepts of the self*. Cambridge, UK: Polity.
- Elliott, J. (2006). *Using narrative in social research*. London: Sage.
- Farquhar, S. (2012). Narrative identity and early childhood education. *Educational Philosophy and Theory*, 44(3), 289-301.
- Fawcett, L., Bell, A. C. & Russell, C. L. (2002). Guiding our environmental praxis: Teaching and learning for social and environmental justice. In W. L. Filho (Ed.), *Teaching sustainability at universities* (pp. 223-238). Frankfurt, Germany: Peter Lang.
- Fendler, L. & Popkewitz, T. S. (1993). (Re)constituting critical traditions. *Educational Researcher*, 22(6), 24-26.
- Ferfolja, T. (2007). Teacher negotiation of sexual subjectivities. *Gender and Education*, 19(5), 569-586.
- Fien, J. (1993). *Education for the environment: Critical curriculum theorising and environmental education*. Geelong, Victoria, Australia: Deakin University Press.

- Flax, J. (1990). Postmodernism and gender relations in feminist theory. In L. J. Nicholson (Ed.), *Feminism/postmodernism* (pp. 39-62). New York, NY: Routledge.
- Flax, J. (1993). *Disputed subjects: Essays on psychoanalysis, politics and philosophy*. New York, NY: Routledge.
- Foucault, M. (1970). *The order of things: An archaeology of the human sciences*. New York, NY: Vintage Books.
- Foucault, M. (1972). *The archaeology of knowledge and the discourse of language* (A. M. S. Smith Trans.). New York, NY: Pantheon Books.
- Foucault, M. (1979). *Discipline and punish*. New York, NY: Vintage Books.
- Foucault, M. (1980). Truth and power. In C. Gordon (Ed.), *Power/knowledge: Selected interviews and other writings 1972-1977* (A. Fontana, P. Pasquino Trans.) (pp. 107-133). New York, NY: Pantheon Books.
- Foucault, M. (1984). What is enlightenment? In P. Rabinow (Ed.), *The Foucault reader* (C. Porter Trans.) (pp. 32-50). New York, NY: Pantheon Books.
- Foucault, M. (1988). *The care of the self*. New York, NY: Vintage Books.
- Frankham, J. & Smears, E. (2012). Choosing not choosing: The indirections of ethnography and educational research. *Discourse: Studies in the Cultural Politics of Education*, 33(3), 361-375.
- Fraser, N. (1997). *Justice interruptus: Critical reflections on the 'postsocialist' condition*. New York, NY: Routledge.
- Freeman, M. (2006). Life "on holiday": In defense of big stories. *Narrative Inquiry*, 16(1), 131-138.

- Frentz, T. S. & Hocker, J. L. (2010). Layered reflections on a written story through real-time conversation. *Qualitative Inquiry*, 16(8), 621-629.
- Gavey, N. (1997). Feminist poststructuralism and discourse analysis. In M. Gergen & S. Davis (Eds.), *Toward a new psychology of gender: A reader* (pp. 49-64). New York, NY: Routledge.
- Georgakopoulou, A. (2006). Thinking big with small stories in narrative and identity analysis. *Narrative Inquiry*, 16(1), 122-130.
- Georgakopoulou, A. (2007). *Small stories, interaction and identities*. Amsterdam: John Benjamins.
- Giroux, H. (1992). *Border crossing: Cultural workers and the politics of education*. New York, NY: Routledge.
- Gonzalez-Gaudiano, E. (2001). Complexity in environmental education. *Education Philosophy and Theory*, 33(2), 153-166.
- Gough, A. (1994). *Fathoming the fathers in environmental education: A feminist poststructuralist analysis* (Unpublished doctoral dissertation). Deakin University, Geelong, Victoria, Australia.
- Gough, A. (1999a). Kids don't like wearing the same jeans as their mums and dads: So whose 'life' should be in significant life experiences research? *Environmental Education Research*, 5(4), 383-394.
- Gough, A. (1999b). Recognizing women in environmental education pedagogy and research: Towards an ecofeminist poststructuralist perspective. *Environmental Education Research*, 5(2), 143-161.

- Gough, A. (2002). Mutualism: A different agenda for environmental and science education. *International Journal of Science Education*, 24(11), 1201-1215.
- Gough, A. (2008). Towards more effective learning for sustainability: Reconceptualising science education. *Transnational Curriculum Inquiry*, 5(1), 32-50.
- Gough, A. (2011). The Australian-ness of curriculum jigsaws: Where does environmental education fit? *Australian Journal of Environmental Education*, 27(1), 1-16.
- Gough, A. (2013). The emergence of environmental education research: A "history" of the field. In R. B. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 13-22). New York, NY: Routledge.
- Gough, A. & Whitehouse, H. (2003). The "nature" of environmental education research from a feminist poststructuralist standpoint. *Canadian Journal of Environmental Education*, 8, 31-43.
- Gough, N. (1993). Narrative inquiry and critical pragmatism: Liberating research in environmental education. In R. Mrazek (Ed.), *Alternative paradigms in environmental education research* (pp. 175-197). Troy, OH: North American Association for Environmental Education.
- Gough, N. (1994). Regarding nature in new times: Reconceptualising studies of science and environment. *Annual Conference of the Australian Association for Research in Education*, Newcastle, NSW.

- Gough, N. (1999). Rethinking the subject: (De)constructing human agency in environmental education research. *Environmental Education Research*, 5(1), 35-48.
- Gough, N. (2001). Ignorance in environmental education research. *American Educational Research Association Symposium "Making Sense of Research in Environmental Education"*, Seattle, WA, USA.
- Greenwood, D. A. (2010). Nature, empire, and paradox in environmental education. *Canadian Journal of Environmental Education*, 13, 9-24.
- Greenwood, D. A. & McKenzie, M. (2009). Context, experience and the socioecological: Inquiries into practice. *Canadian Journal of Environmental Education*, 14, 5-14.
- Grimson, A. (2010). Culture and identity: Two different notions. *Social Identities*, 16(1), 61-77.
- Grosz, E. (2005). *Time travels: Feminism, nature, power*. Durham, NC: Duke University Press.
- Grushka, K. (2009). Meaning and identities: A visual performative pedagogy for socio-cultural learning. *The Curriculum Journal*, 20(3), 237-251.
- Gubrium, J. F. & Holstein, J. A. (2009). *Analyzing narrative reality*. Thousand Oaks, CA: Sage.
- Habermas, J. (1971). *Knowledge and human interests* (J. J. Shapiro Trans.). Boston: Beacon.
- Hall, S. (1996). Who needs 'identity'? In S. Hall & P. Du Gay (Eds.), *Questions of cultural identity* (pp. 1-17). London: Sage.

- Harding, S. (1986). *The science question in feminism*. Ithaca, NY: Cornell University Press.
- Hart, P. (2002). Narrative, knowing and emerging methodologies in environmental education research: Issues of quality. *Canadian Journal of Environmental Education*, 7(2), 140-165.
- Hart, P. (2003). *Teachers' thinking in environmental education: Consciousness and responsibility*. New York, NY: Peter Lang.
- Hart, P. (2010). No longer a "little added frill": The transformative potential of environmental education for educational change. *Teacher Education Quarterly*, Fall, 1-22.
- Hart, P. (2013). Preconceptions and positionings: Can we see ourselves within our own terrain? In R. B. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 507-511). New York, NY: Routledge.
- Hart, P. & Nolan, K. (1999). A critical analysis of research in environmental education. *Studies in Science Education*, 34, 1-69.
- Heimlich, J. E. & Ardoin, N. M. (2008). Understanding behavior to understand behavior change: A literature review. *Environmental Education Research*, 14(3), 205-214.
- Henriques, J., Hollway, W., Urwin, C., Venn, C. & Walkerdine, V. (1998). *Changing the subject: Psychology, social regulation and subjectivity* (2nd ed.). London: Routledge.

- Hermann-Wilmarth, J. & Holbrook, T. (2013). Precarious identities: Violent disruptions and the (re)constructions of self. *Frontiers*, 34(1), 2-24.
- Higgins, J., Nairn, K. & Sligo, J. (2009). Alternative ways of expressing and reading identity. *Ethnography and Education*, 4(1), 83-99.
- Hinchman, L. P. & Hinchman, S. K. (1997). *Memory, identity, community: The idea of narrative in the human sciences*. Albany, NY: State University of New York Press.
- Hines, J., Hungerford, H. & Tomera, A. (1986/87). Analysis and synthesis of research on responsible environmental behaviour: A meta-analysis. *The Journal of Environmental Education*, 18(2), 1-8.
- Hird, M. J. (2009). Feminist engagements with matter. *Feminist Studies*, 35(2), 329-345.
- Hodgson, N. & Standish, P. (2009). Uses and misuses of poststructuralism in educational research. *International Journal of Research & Method in Education*, 32(3), 309-326.
- Hollway, W. (1983). Heterosexual sex: Power and desire for the other. In S. Cartledge & J. Ryan (Eds.), *Sex and love: New thoughts on old contradictions* (pp. 124-140). London: Women's Press.
- Holstein, J. A. & Gubrium, J. F. (2000). *The self we live by: Narrative identity in a postmodern world*. New York, NY: Oxford University Press.
- Hughes, G. (2010). Identity and belonging in social learning groups: The importance of distinguishing social, operational and knowledge-related identity congruence. *British Educational Research Journal*, 36(1), 47-63.

- Hungerford, H. R. & Volk, T. L. (1990). Changing learner behaviour through environmental education. *The Journal of Environmental Education*, 21(3), 8-21.
- Hursh, D., Henderson, J. & Greenwood, D. (2015). Environmental education in a neoliberal climate. (Journal Special Issue). *Environmental Education Research*, 21(3).
- Hutchison, D. (1998). *Growing up green: Education for ecological renewal*. New York, NY: Teachers College Press.
- Jackson, A. Y. & Mazzei, L. A. (2012). *Thinking with theory in qualitative research: Viewing data across multiple perspectives*. New York: Routledge.
- Jackson, W. (1994). *Becoming native to this place*. Lexington, KY: The University Press of Kentucky.
- Kemmis, S. & McTaggart, R. (2005). Participatory action research: Communicative action in the public sphere. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 559-603). Thousand Oaks, CA: Sage.
- Kempton, W., Boster, J. S. & Hartley, J. A. (1995). Environmental values. In W. Kempton, J. Boster & J. Hartley (Eds.), *Environmental values in American culture* (pp. 87-116). Cambridge, MA: MIT Press.
- Kiesinger, C. E. (1998). Portrait of an anorexic life. In A. Banks, & S. Banks (Eds.), *Fiction and social research: By ice or fire* (pp. 115-136). London: Sage.
- Kincheloe, J. L. & McLaren, P. (2000). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 279-313). Thousand Oaks, CA: Sage.
- Koro-Ljungberg, M. & Mazzei, L. (2012). Problematizing methodological simplicity in

- qualitative research: Editors' introduction. *Qualitative Inquiry*, 18(9), 728-731.
- Krøjer, J. & Hølge-Hazelton, B. (2008). Poethical: Breaking ground for reconstruction. *International Journal of Qualitative Studies in Education*, 21(1), 27-33.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.
- Kvale, S. (1999). The psychoanalytic interview as qualitative research. *Qualitative Inquiry*, 5(1), 87-113.
- Kvale, S. (2006). Dominance through interviews and dialogues. *Qualitative Inquiry*, 12(3), 480-500.
- Kyburz-Graber, R. (2013). Socio-ecological approaches to environmental education and research: A paradigmatic response to behavioral change orientations. In R. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 23-32). New York, NY: Routledge.
- Labov, W. (1972). *Language in the inner city: Studies in the Black English vernacular*. Philadelphia, PA: University of Pennsylvania Press.
- Labov, W. (2006). Narrative preconstruction. *Narrative Inquiry*, 16(1), 37-45.
- Labov, W. & Waletzky, J. (1967). Narrative analysis: Oral versions of personal experience. In J. Helm (Ed.), *Essays on the verbal and visual arts* (pp. 12-44). Seattle, WA: University of Washington Press.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.

- Laessoe, J. & Ohman, J. (2010). Learning as democratic action and communication: Framing Danish and Swedish environmental and sustainability education. *Environmental Education Research*, 16(1), 1-8.
- Lapping, C. (2008). The ethics of interpretation: The signifying chain from field to analysis. *Discourse: Studies in the Cultural Politics of Education*, 29(1), 69-83.
- Lather, P. (1990). Reinscribing otherwise: The play of values in the practices of the human sciences. In E. Guba (Ed.), *The paradigm dialogue* (pp. 315-332). Newbury Park, CA: Sage.
- Lather, P. (1991). *Getting smart: Feminist research and pedagogy with/in the postmodern*. London: Routledge.
- Lather, P. (1993). Fertile obsession: Validity after poststructuralism. *Sociology Quarterly*, 34(4), 673-693.
- Lather, P. (1996). Troubling clarity: The politics of accessible language. *Harvard Educational Review*, 66(3), 525-545.
- Lather, P. (2008). (Post)feminist methodology. In N. Denzin & M. Giardina (Eds.), *Qualitative inquiry and the politics of evidence* (pp. 182-217). Walnut Creek, CA: Left Coast Press.
- Lather, P. (2016). Top ten+ list: (Re)thinking ontology in (post)qualitative research. *Cultural Studies <-> Critical Methodologies*, 16(2), 125-131.
- Lawler, S. (2002). Narrative in social research. In T. May (Ed.), *Qualitative research in action* (pp. 242-258). London: Sage.
- Lawrence-Lightfoot, S. & Hoffmann Davis, J. (1997). *The art and science of portraiture*. San Francisco, CA: Jossey-Bass.

- Lenz Taguchi, H. (2008). An "Ethics of resistance" challenges taken-for-granted ideas in Swedish early childhood education. *International Journal of Educational Research*, 47, 270-282.
- Lenz Taguchi, H. (2010). *Going beyond the theory/practice divide in early childhood education*. London: Routledge.
- Lenz Taguchi, H. (2013). Images of thinking in feminist materialisms: Ontological divergences and the production of researcher subjectivities. *International Journal of Qualitative Studies in Education*, 26(6), 706-716.
- Lindsay, G., Kell, L., Ouellette, J. & Westall, H. (2010). Using 'I' in scholarly writing: How does reflecting on experience matter? *Reflective Practice*, 11(3), 271-283.
- Lodge, D. (1990). Narration with words. In H. Barlow, C. Blakemore & M. Weston-Smith (Eds.), *Images and understanding* (pp. 141-153). Cambridge, UK: Cambridge University Press.
- Longhurst, R. (2003). Placing subjectivities - introduction. In K. Anderson, M. Domosh, S. Pile & N. Thrift (Eds.), *Handbook of cultural geography* (pp. 283-289). London: Sage.
- Lovell, T. (2003). Resisting with authority: Historical specificity, agency and performative self. *Theory, Culture & Society*, 20(1), 1-17.
- Lowan, G. (2011). *Navigating the wilderness between us: Exploring ecological métissage as an emerging vision for environmental education in Canada* (Unpublished doctoral dissertation). University of Calgary, Calgary, Canada.

- Lowan-Trudeau, G. (2012). Methodological Métissage: An interpretive Indigenous approach to environmental education research. *Canadian Journal of Environmental Education, 17*, 113-130.
- Lowan-Trudeau, G. (2013). *Exploring activism as pedagogy within Indigenous ecological movements*. Baltimore, MD: Presentation at the North American Association for Environmental Education Research Symposium.
- Lowan-Trudeau, G. (2013). Indigenous environmental education research in North America: A brief review. In R. Stevenson, M. Brody, J. Dillon & A. Wals (Eds.), *International handbook of research on environmental education* (pp. 404-408). New York: Routledge.
- Lowan-Trudeau, G. (2015). *Gateway to resistance? A critical examination of Indigenous and allied ecological activism in Canada*. Chicago, IL: Presentation at the Environmental Education SIG, American Educational Research Association Annual Conference.
- Luke, C., & Luke, A. (1995). Just naming: Educational discourses and the politics of identity. In W. T. Pink & G. W. Noblit (Eds.), *Continuity and contradiction: The futures of the sociology of education* (pp. 357-380). Cresskill, NJ: Hampton Press, Inc.
- Lundegård, I. & Wickman, P. (2009). Identity transformation in education for sustainable development: A question of location. *Scandinavian Journal of Educational Research, 53*(5), 461-479.
- Lykke, N. (2010). The timeliness of post-constructionism. *NORA - Nordic Journal of Feminist and Gender Research, 18*(2), 131-136.

- Lysgaard, J. (2012). *The educational desires of Danish and Korean environmental NGOs* (Unpublished doctoral dissertation). Aarhus University, Copenhagen, Denmark.
- MacLure, M. (2003). *Discourse in educational and social research*. Buckingham, UK: Open University Press.
- MacLure, M. (2013). Researching without representation? Language and materiality in post-qualitative methodology. *International Journal of Qualitative Studies in Education*, 26(6), 658-667.
- Marcus, G. E. & Saka, E. (2006). Assemblage. *Theory, Culture & Society*, 23(2-3), 101-106.
- Masny, D. (2013). Cartographies of becoming in education: Theory and praxis. In D. Masny, (Ed.). *Cartographies of becoming in education: A Deleuze-Guattari perspective* (pp. 3-16). Rotterdam, The Netherlands: Sense.
- Massey, D. (2008). Responsibilities over distance. In J. Kenway & J. Fahey (Eds.). *Globalizing the research imagination* (pp. 73-85). London: Routledge.
- Mazzei, L. (2011). Desiring silence: Gender, race and pedagogy in education. *British Educational Research Journal*, 37(4), 657-669.
- Mazzei, L. (2013). Materialist mappings of knowing in being: Researchers constituted in the production of knowledge. *Gender and Education*, 25(6), 776-785.
- Mazzei, L. A. & McCoy, K. (2010). Thinking with Deleuze in qualitative research. *International Journal of Qualitative Studies in Education*, 23(5), 503-509.

- McCoy, K. (2012). Towards a methodology of encounters: Opening to complexity in qualitative research. *Qualitative Inquiry, 18*(9), 762-772.
- McKenzie, M. (2004). The "willful contradiction" of poststructural socio-ecological education. *Canadian Journal of Environmental Education, 9*, 177-190.
- McKenzie, M. (2005). The 'post-post period' and environmental education research. *Environmental Education Research, 11*(4), 401-412.
- McKenzie, M., Hart, P., Bai, H. & Jickling, B. (Eds.). (2009). *Fields of green: Restorying culture, environment and education*. Cresskill, NJ: Hampton Press, Inc.
- McKerrow, R. E. (1993). Critical rhetoric and the possibility of the subject. In I. Angus & L. Langsdorf (Eds.), *The critical turn* (pp. 51-67). Carbondale, IL: Southern Illinois University Press.
- McLeod, J. (2009). Youth studies, comparative inquiry, and the local/global problematic. *Review of Education, Pedagogy, and Cultural Studies, 31*, 270-292.
- McLeod, J. & Yates, L. (2006). *Making modern lives: Subjectivity, schooling and social change*. Albany, NY: State University of New York Press.
- Miller, P., & Rose, N. (2008). *Governing the present*. Cambridge, UK: Polity.
- Mills, J. (2001). Self-construction through conversation and narrative in interviews. *Educational Review, 53*(3), 285-301.
- Mills, S. (1997). *Discourse*. London: Routledge.
- Mishler, E. G. (1986). *Research interviewing: Context and narrative*. Cambridge, MA: Harvard University Press.
- Morris, M. & Wright, H. K. (2009). Transnationalism and cultural studies. *Cultural Studies, 23*(5-6), 689-693.

- Nairn, K. & Higgins, J. (2007). New Zealand's neo-liberal generation: Tracing discourses of economic (ir)rationality. *International Journal of Qualitative Studies in Education*, 22(3), 261-281.
- Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education*. New York: Teachers College Press.
- Notenboom, R. (2010). *Flatlanders: The struggle to change* (Unpublished masters' thesis). University of Regina, Regina, Canada.
- O'Loughlin, M. (1998). Paying attention to bodies in education: Theoretical resources and practical suggestions. *Educational Philosophy and Theory*, 30(3), 275-297.
- Orr, D. (2004). *Earth in mind: On education, environment, and the human prospect*. Washington, DC: Island Press.
- Palmer, J. A. (1998). *Environmental education in the 21st century: Theory, practice, progress and promise*. New York, NY: Routledge.
- Paulus, T., Woodside, M. & Ziegler, M. (2010). "I tell you, it's a journey, isn't it?": Understanding collaborative meaning making in qualitative research. *Qualitative Inquiry*, 16(10), 852-862.
- Payne, P. G. (1997). Embodiment and environmental education. *Environmental Education Research*, 3(2), 133-153.
- Payne, P. G. (1999a). Postmodern challenges for modern horizons: Education 'for being for the environment'. *Environmental Education Research*, 5(1), 5-34.
- Payne, P. G. (1999b). The significance of experience in SLE research. *Environmental Education Research*, 5(4), 365-381.

- Payne, P. G. (2001). Identity and environmental education. *Environmental Education Research*, 7(1), 67-88.
- Payne, P. G. (2003). Postphenomenological enquiry and living the environmental condition. *Canadian Journal of Environmental Education*, 8(Spring), 173-194.
- Payne, P. G. (2005a). Families, homes and environmental education. *Australian Journal of Environmental Education*, 21, 81-96.
- Payne, P. G. (2005b). Lifeworld and textualism: Reassembling the researcher/ed and 'others'. *Environmental Education Research*, 11(4), 413-431.
- Payne, P. G. (2005c). 'Ways of doing", learning, teaching and researching. *Canadian Journal of Environmental Education*, 10(Spring), 1-17.
- Payne, P. G. (2006a). Environmental education and curriculum theory. *The Journal of Environmental Education*, 37(2), 25-35.
- Payne, P. G. (2006b). The technics of environmental education. *Environmental Education Research*, 12(3-4), 487-502.
- Payne, P. G. (2009). Postmodern oikos. In M. McKenzie, P. Hart, H. Bai & B. Jickling (Eds.), *Fields of green: Restorying culture, environment and education* (pp. 209-222). Cresskill, NJ: Hampton Press, Inc.
- Payne, P. G. (2010a). Remarkable-tracking, experiential education of the ecological imagination. *Environmental Education Research*, 16(3), 295-310.
- Payne, P. G. (2010b). The globally great moral challenge: Ecocentric democracy, values, morals and meaning. *Environmental Education Research*, 16(1), 153-171.
- Payne, P. G. (2013). (Un)timely ecophenomenological framings of environmental education research. In R. B. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.),

*International handbook of research on environmental education* (pp. 424-437).

New York, NY: Routledge.

Payne, P. G. (forthcoming). Slow ecopedagogy, democracy emplaced and environmental education curriculum theory. In J. Dillon, C. Russell & M. Breunig (Eds.), *Environmental education - a reader*. New York, NY: Peter Lang.

Pearce, C., Kidd, D., Patterson, R. & Hanley, U. (2012). The politics of becoming ... Making time ... *Qualitative Inquiry*, 18(5), 418-426.

Peters, M. (1999). (Posts-) modernism and structuralism: Affinities and theoretical innovations. *Sociological Research Online*, 4(3). Available online at <http://www.socresonline.org.uk>

Peters, M., & Lankshear, C. (1996). Postmodern counternarratives. In H. Giroux, C. Lankshear, P. McLaren & M. Peters (Eds.), *Counternarratives: Cultural studies and critical pedagogies in postmodern spaces* (pp.1-40). New York, NY: Routledge.

Petersen, E. B. (2008). The conduct of concern: Exclusionary discursive practices and subject position in academia. *Educational Philosophy and Theory*, 40(3), 394-406.

Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *Qualitative Studies in Education*, 16(2), 175-196.

Piper, H. & Frankham, J. (2007). Seeing voices and hearing pictures: Image as discourse and the framing of image-based research. *Discourse: Studies in the Cultural Politics of Education*, 28(3), 373-387.

- Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences*. Albany, NY: State University of New York Press.
- Polkinghorne, D. E. (1995). Narrative configuration in qualitative research. In A. Hatch & R. Wisniewski (Eds.), *Life history and narrative* (pp. 5-24). London: Falmer.
- Posch, P., Kyburz-Graber, R., Hart, P. & Robottom, I. (2006). *Approaching reflective practice in teacher education - learning from case studies of environmental education*. Bern: Peter Lang.
- Potter, J. & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. London: Sage.
- Probyn, E. (2003). The spatial imperative of subjectivity. In K. Anderson, M. Domosh, S. Pile & N. Thrift (Eds.), *Handbook of cultural geography* (pp. 290-299). London: Sage.
- Quinlan, K. M. (1999). Commonalities and controversy in context: A study of academic historians' educational beliefs. *Teaching and Teacher Education*, 15, 447-463.
- Rasposa, M. (2012). Troubled diversities, multiple identities and the relevance of Royce: What makes a community worth caring about? *Educational Philosophy and Theory*, 44(4), 432-443.
- Reid, A. (1980). The essence of environmental education. *Australian Association for Environmental Education Newsletter*, 1, 3-6.

- Reid, A. & Payne, P. G. (2011). Producing knowledge and (de)constructing identities: A critical commentary on environmental education and its research. *British Journal of Sociology of Education*, 32(1), 155-165.
- Richardson, L. (1995). Narrative and sociology. In J. Van Maanen (Ed.), *Representation in ethnography* (pp. 198-221). Thousand Oaks, CA: Sage.
- Richardson, L. (1997). Skirting and pleated text: De-disciplining an academic life. *Qualitative Inquiry*, 3(3), 295-303.
- Richardson, L. (1999). Feathers in our CAP. *Journal of Contemporary Ethnography*, 28(6), 660-668.
- Richardson, L. & St. Pierre, E. A. (2005). Writing: A method of inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 959-978). Thousand Oaks, CA: Sage.
- Rickinson, M. (1999). *The teaching and learning of environmental issues through geography: A classroom-based investigation* (Unpublished doctoral dissertation). St. Anne's College, Trinity, UK.
- Rickinson, M. (2001). Learners and learning in environmental education: A critical review of the evidence. *Environmental Education Research*, 7(3), 207-319.
- Rickinson, M. (2006). Researching and understanding environmental learning: Hopes for the next 10 years. *Environmental Education Research*, 12(3-4), 445-457.
- Rickinson, M., Aspinall, C., Clark, A., Dawson, L., McLeod, S., Poulton, P., . . . Sargent, J. (2003). *Connecting research and practice: Education for sustainable development*. (Professional User Review). Southwell: BERA.

- Rickinson, M., Clark, A., McLeod, S., Poulton, P. & Sargent, J. (2004). What on earth has research got to do with me? *Teacher Development*, 8(2-3), 201-220.
- Rickinson, M. & Robinson, L. (1999). Environmental education research in the classroom: A shared methodological reflection by the teacher and the researcher. *Environmental Education Research*, 5(1), 77-93.
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. London: Sage.
- Robottom, I. (Ed.). (1987). *Environmental education: Practice and possibility*. Geelong, Victoria, Australia: Deakin University Press.
- Robottom, I. & Hart, P. (1993). *Research in environmental education: Engaging the debate*. Geelong, Victoria, Australia: Deakin University Press.
- Roth, W. -M. (2007). The ethico-moral nature of identity: Prolegomena to the development of third-generation Cultural-Historical Activity Theory. *International Journal of Educational Research*, 46, 83-93.
- Roulston, K. (2010a). *Reflecting interviewing: A guide to theory and practice*. Los Angeles: Sage.
- Roulston, K. (2010b). Considering quality in qualitative interviewing. *Qualitative Research*, 10(2), 199-228.
- Russell, B. (2004). *History of western philosophy*. London: Routledge.
- Russell, C. (1999). Problematizing nature experience in environmental education. *Journal of Experiential Education*, 22(3), 123-128.
- Russell, C. (2005). Whoever does not write is written: The role of nature in post-post approaches to environmental education. *Environmental Education Research*, 11(4), 433-443.

- Russell, C. & Bell, A. (1996). A politicized ethic of care: Environmental education from an ecofeminist perspective. In K. Warren (Ed.), *Women's voices in experiential education* (pp. 172-181). Dubuque, IA: Kendall/Hunt.
- Russell, C., & Fawcett, L. (2013). Moving margins in environmental education research. In R. B. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 369-374). New York, NY: Routledge.
- Russell, C., Sarick, T. & Kennelly, J. (2002). Queering environmental education. *Canadian Journal of Environmental Education*, 7(1), 54-66.
- Savransky, M. (2012). Worlds in the making: Social sciences and the ontopolitics of knowledge. *Postcolonial Studies*, 15(3), 351-368.
- Scheurich, J. J. (1995). A postmodernist critique of research interviewing. *International Journal of Qualitative Studies in Education*, 8(3), 239-252.
- Scheurich, J. J. (1997). A postmodernist critique of research interviewing. *Research method in the postmodern* (pp. 61-79). London: Falmer.
- Scott, W. & Gough, S. (2003). *Sustainable development and learning: Framing the issues*. London: RoutledgeFalmer.
- Sermijn, J., Devlieger, P. & Loots, G. (2008). The narrative construction of the self: Selfhood as a rhizomatic story. *Qualitative Inquiry*, 14(4), 632-650.
- Shome, R. (2009). Post-colonial reflections on the 'internationalization' of cultural studies. *Cultural Studies*, 23(5-6), 694-719.
- Smith, G. (1992). *Education and the environment: Learning to live with limits*. Albany, NY: State University of New York Press.

- Smith, S. (1996). Uncovering key aspects of experience: The use of in-depth interviews in a study of women returners to education. In E. Lyon & J. Busfield (Eds.), *Methodological imaginations* (pp. 58-74). Basingstoke, UK: Macmillan.
- Somers, M. R. (1994). The narrative constitution of identity: A relational and network approach. *Theory and Society*, 23, 605-649.
- Somers, M. R. & Gibson, G. (1994). Reclaiming the epistemological "other": Narrative and the social constitution of identity. In C. Calhoun (Ed.), *Social theory and the politics of identity* (pp. 37-99). Cambridge, MA: Blackwell.
- Spector-Mersel, G. (2011). Mechanisms of selection in claiming narrative identities: A model for interpreting narratives. *Qualitative Inquiry*, 17(2), 172-185.
- Spivak, G. C. (1993). *Outside in the teaching machine*. New York, NY: Routledge.
- St. Pierre, E. A. (1995). *Arts of existence: The construction of subjectivity in older white southern women* (Unpublished doctoral dissertation). The Ohio State University, Columbus, OH.
- St. Pierre, E. A. (1997). Methodology in the fold and the irruption of transgressive data. *Qualitative Studies in Education*, 10(2), 175-189.
- St. Pierre, E. A. (2000a). The call for intelligibility in postmodern educational research. *Educational Research*, 29(5), 25-28.
- St. Pierre, E. A. (2000b). Poststructural feminism in education. *International Journal of Qualitative Studies in Education*, 13(5), 477-515.
- St. Pierre, E. A. (2011). Post qualitative research: The critique and the coming after. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (4th ed., pp. 611-625). Los Angeles, CA: Sage.

- St. Pierre, E. A. (2013). The posts continue: Becoming. *International Journal of Qualitative Studies in Education*, 26(6), 646-657.
- St. Pierre, E. A. & Jackson, A. Y. (2014). Qualitative data analysis after coding. *Qualitative Inquiry*, 20(6), 715-719.
- St. Pierre, E. A. & Pillow, W. S. (2000). Inquiry among the ruins. In E. A. St. Pierre & W. S. Pillow (Eds.), *Working the ruins: Feminist poststructural theory and methods in education* (pp. 1-24). New York, NY: Routledge.
- Stapleton, S. R. (2015). Environmental identity development through social interactions, action and recognition. *Journal of Environmental Education*, 46(2), 94-113.
- Sterling, S. & Scott, W. (2008). Higher education and ESD in England: A critical commentary on recent initiatives. *Environmental Education Research*, 14(4), 386-398.
- Stevenson, R. B. (1987). Schooling and environmental education: Contradictions in purpose and practice. In I. Robottom (Ed.), *Environmental education: Practice and possibility* (pp. 69-82). Geelong, Victoria, AU: Deakin University Press.
- Stevenson, R. B. (2007). Schooling and environmental/sustainability education: From discourses of policy and practice to discourses of professional learning. *Environmental Education Research*, 13(2), 265-285.
- Stevenson, R. B. & Dillon, J. (2010). *Engaging environmental education: Learning, culture and agency*. Rotterdam, The Netherlands: Sense Publishers.
- Sund, P. & Lysgaard, J. (2013). Reclaim "education" in environment and sustainability education research. *Sustainability*, 5(1) doi:10.3390/su50x000x

- Taylor, C. (1989). *Sources of the self*. Cambridge, UK: Cambridge University Press.
- Thrift, N. (1996). *Spatial formations*. London: Sage.
- Timmerman, N. (2013). *Coherence, consistency, contradiction: Portraits of postsecondary educators seeking ecological integrity* (Unpublished doctoral dissertation). University of British Columbia, Vancouver, BC.
- United Nations. (1987). *Report of the world commission of environment and development: Our common future*. Retrieved from <http://www.un-documents.net/wced-ocf.htm>.
- United Nations. (1992). *Agenda 21*. Retrieved from <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>.
- Walkerdine, V. (1990). *Schoolgirl fictions*. London: Verso.
- Walkerdine, V. (2003). Reclassifying upward mobility: Femininity and the neo-liberal subject. *Gender and Education*, 15(3), 237-248.
- Walkerdine, V. Lucey, H., & Melody, J. (2002). Subjectivity and qualitative method. In T. May (Ed.), *Qualitative research in action* (pp. 189-196). London: Sage.
- Wals, A. E. J., Stevenson, R. B., Brody, M. & Dillon, J. (2013). Tentative directions for environmental education research in uncertain times. In R. B. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 524-548). New York, NY: Routledge.
- Watson, C. (2007). 'Small stories' and the doing of professional identities in learning. *Narrative Inquiry*, 8(3), 371-389.
- Watson, C. (2008). Tensions and aporias in the narrative construction of lives. *Qualitative Research*, 8(3), 333-337.

- Watson, C. (2012). Analysing narrative: The narrative construction of identity. In S. Delamont (Ed.), *Handbook of qualitative research in education* (pp. 460-473). London: Edward Elgar.
- Weedon, C. (1987). *Feminist practice and poststructuralist theory*. Cambridge, MA: Basil Blackwell.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. New York, NY: Cambridge University Press.
- Wetherell, M. (1999). Discourse analysis. In C. Davidson & M. Tolich (Eds.), *Social science research in New Zealand: Many paths to understanding*. Auckland, New Zealand: Longman.
- Wetherell, M. & Potter, J. (1992). *Mapping the language of racism: Discourse and the legitimation of exploitation*. New York, NY: Columbia University Press.
- Wetherell, M., Taylor, S. & Yates, S. J. (2001). *Discourse theory and practice*. London: Sage.
- Wheeler, K. (1975). The genesis of environmental education. In G. C. Martin, & K. Wheeler (Eds.), *Insights into environmental education* (pp. 2-19). Edinburgh, UK: Oliver Boyd.
- White, H. (1996). Commentary. *History of the Human Sciences*, 9(4), 123-138.
- Witz, K. G., Lee, H. & Huang, W. (2010). Consciousness in the study of human life and experience: "Higher aspects" and their nature. *Qualitative Inquiry*, 16(5), 397-409.

- Wolgemuth, J. R. & Donohue, R. (2006). Toward an inquiry of discomfort: Guiding transformation in "emancipatory" narrative research. *Qualitative Inquiry*, 12(5), 1022-1039.
- Wright, T. (2007). Higher education for sustainability: Developing a comprehensive research agenda. *Journal of Education for Sustainable Development*, 1(1), 101-106.
- Zipin, L. (1998). Looking for sentient life in discursive practices: The question of human agency in critical theories and school research. In T. Popkewitz & M. Brennan (Eds.), *Foucault's challenge: Discourse, knowledge and power in education* (pp. 316-347). New York, NY: Teacher's College Press.

## Appendix A – Understandings of Critical Theory

Kincheloe & McLaren (2000, p. 291) suggest that this set of points is not meant to generate a sense of false unity among critical theorists but provides a way in which to examine how critical theorists both attempt to use their work as a form of social or cultural criticism and who accept certain basic assumptions:

- that all thought is fundamentally mediated by power relations that are social and historically constituted;
- that facts can never be isolated from the domain of values or removed from some form of ideological inscription;
- that the relationship between concept and object and between signifier and signified is never stable or fixed and is often mediated by the social relations of capitalist production and consumption;
- that language is central to the formation of subjectivity (conscious and unconscious awareness);
- that certain groups in any society are privileged over others and, although the reasons for this privileging may vary widely, the oppression that characterizes contemporary societies is most forcefully reproduced when subordinates accept their social status as natural, necessary or inevitable;
- that oppression has many faces and that focusing on only one at the expense of others (e.g. class oppression vs. racism) often elides the interconnections among them;
- that mainstream research practices are generally, although most often unwittingly, implicated in the reproduction of systems of class, race, and gender oppression)

## Appendix B – From Belgrade and Tbilisi

*The Belgrade Charter* (workshop in 1975): An international formulated policy statement for the environmental education movement. (Robottom, 1987, p. 88)

1. Environmental education should consider the environment in its totality – natural and man-made, ecological, political, economic, technological, social, legislative, cultural and aesthetic.
2. Environmental education should be a continuous life-long process, both in-school and out-of-school.
3. Environmental education should be interdisciplinary in its approach.
4. Environmental education should emphasize active participation in preventing and solving environmental problems.
5. Environmental education should examine major environmental issues from a world point of view, while paying due regard to regional differences.
6. Environmental education should focus on current and future environmental situations.
7. Environmental education should examine all development and growth from an environmental perspective.
8. Environmental education should promote the value and necessity of local, national and international cooperation in the solution of environmental problems.

*The Tbilisi Recommendations*: The following set of statements is based upon the Tbilisi Report Recommendation 2. (Palmer, 1998, p. 10 and 11)

Environmental Education:

1. is a lifelong process
2. is inter-disciplinary and holistic in nature and application
3. is an approach to education as whole, rather than a subject
4. concerns the inter-relationship and interconnectedness between human and natural systems
5. views the environment in its entirety including social, political, economic, technological, moral, aesthetic and spiritual aspects
6. recognises that energy and material resources both present and limit possibilities
7. encourages participation in the learning experience
8. emphasizes active responsibility
9. uses a broad range of teaching and learning techniques, with stress on practical activities and first hand experience
10. is concerned with local to global dimensions, and past/present/future dimensions
11. should be enhanced and supported by the organisation and structure of the learning situation and institution as a whole
12. encourages the development of sensitivity, awareness, understanding, critical thinking and problem solving skills
13. encourages the clarification of values and the development of values sensitive to the environment
14. is concerned with building an environmental ethic

## Appendix C – DSP vs. NEP

Fien (1993) describes the contrasting views and beliefs of the Dominant Social Paradigms and the New Environmental Paradigms.

<b>Dominant Social Paradigm</b>	<b>New Environmental Paradigm</b>
1. Low valuation on nature - use of nature to produce goods - human domination over nature - economic growth over environmental protection	1. High valuation on nature - nature for its own sake; worshipful love of nature - holistic relationship between humans and nature - environmental protection over economic growth
2. Restricted compassion for those near and dear - exploitation of other species for human needs - lack of concern for other people - concern for this generation only	2. Generalized compassion toward - other species - other peoples - other generations
3. Risk acceptable to maximize wealth - science and technology a great boon to humans - swift development of nuclear power - emphasis on hard technology - de-emphasis on regulation; use of the market; individual responsibility for risk	3. Careful planning to avoid risk - science and technology not always good - halt to further development of nuclear power - development and use of soft technology - government regulations to protect nature and humans
4. No limits to growth - no resource shortages - no problem with population - production and consumption	4. Limits to growth - resource shortages - increased needs of an exploding population - conservation
5. Present society satisfactory - no serious damage to nature by humans - hierarchy and efficiency - emphasis on market - competition - complex and fast lifestyles - emphasis on jobs for economic needs	5. Completely new society needed - serious damage by humans to nature and themselves - openness and participation - emphasis on public goods - cooperation - simple lifestyles - emphasis on worker satisfaction
6. Current politics satisfactory - determination by experts - emphasis on market control - opposition to direct action; use of normal channels - left-right party axis; argument over ownership of means of production	6. New politics needed - consultation and participation - emphasis on foresight and planning - willingness to use direct action - new party structure along a new axis

## Appendix D



OFFICE FOR RESEARCH, INNOVATION AND PARTNERSHIP  
M E M O R A N D U M

DATE: November 22, 2012

TO: Catherine Hart

FROM: Dr. Larena Hoeber  
Chair, Research Ethics Board

Re: **Exploring the Subjectification Process in Environmental Education: How Environmental Educators Come to Construct Their Environmental Identity (File # 29S1213)**

Please be advised that the University of Regina Research Ethics Board has reviewed your proposal and found it to be:

1. APPROVED AS SUBMITTED. Only applicants with this designation have ethical approval to proceed with their research as described in their applications. For research lasting more than one year (Section 1F). **ETHICAL APPROVAL MUST BE RENEWED BY SUBMITTING A BRIEF STATUS REPORT EVERY TWELVE MONTHS.** Approval will be revoked unless a satisfactory status report is received. Any substantive changes in methodology or instrumentation must also be approved prior to their implementation.
2. ACCEPTABLE SUBJECT TO MINOR CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB.\*\* Do not submit a new application. Once changes are deemed acceptable, ethical approval will be granted.
3. ACCEPTABLE SUBJECT TO CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB.\*\* Do not submit a new application. Once changes are deemed acceptable, ethical approval will be granted.
4. UNACCEPTABLE AS SUBMITTED. The proposal requires substantial additions or redesign. Please contact the Chair of the REB for advice on how the project proposal might be revised.

  
\_\_\_\_\_  
Dr. Larena Hoeber

cc: Dr. Warren Wessel - Education

\*\* supplementary memo should be forwarded to the Chair of the Research Ethics Board at the Office for Research, Innovation and Partnership (Research and Innovation Centre, Room 109) or by e-mail to [research.ethics@uregina.ca](mailto:research.ethics@uregina.ca)

Phone: (306) 585-4775

## Appendix E – Email Invitation to Participants

Hi [*insert name of potential participant*],

I'm writing to inquire about whether or not you might be interested in participating in my doctoral research. The title of my project is "Exploring the Subjectification Process in Environmental Education: How Environmental Educators Come to Construct Their Environmental Identity". My main interest in this research is looking at *How do post-secondary environmental education researchers come to construct their environmental identities*. Being an environmental educator I thought if you were willing you would be a wonderful participant.

I have attached a copy of the consent form and interview frame/guiding questions so that you can see the kinds of things I would like to discuss as what participating might mean in terms of commitment and ethical considerations. Participation would involve two or three approximately 30 to 45 minute conversations via web media (Skype, FaceTime) or by phone. From the guiding questions you will see that we would discuss ideas about your perspective on environmental education and environmental education research, your positioning in the field of environmental education, significant life experiences that contributed to your positioning, your professional influences and practices and some critical reflection and deeper meaning exploration. I have identified some papers/chapters that you have written and I believe might contribute to our discussions [*list will be specific to the individual*]. If you have any papers that you would like to suggest that might contribute to our discussion I would be happy to read them and include them in our conversation should you agree to participate.

Ideally I hope that, should you choose to participate, the discussions we have would be more like conversations between two people with a passionate interest in environmental education. While I very much hope that you will be willing and able to participate please do not feel any obligation. I hope to begin discussion soon and understand that this timeframe may not be feasible.

If you are willing, please have a look at the attached interview frame and consent form and consider participating in my research. If you have any questions please feel free to contact me at this email address. You may also contact my supervisor Dr. Warren Wessel ([Warren.Wessel@uregina.ca](mailto:Warren.Wessel@uregina.ca)).

Please let me know at your earliest convenience whether or not participating in my research would be something you might consider.

Catherine Hart, Ph.D. Candidate  
Faculty of Education, University of Regina  
[Catherine.Hart@uregina.ca](mailto:Catherine.Hart@uregina.ca)

## Appendix F – Participant Consent Form



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### *Participant Consent Form*

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**Project Title:** Exploring the Subjectification Process in Environmental Education: How Environmental Educators Come to Construct their Environmental Identity

**Researcher(s):** Catherine Hart, Ph.D. Candidate  
Faculty of Education, University of Regina  
3737 Wascana Parkway  
Regina, SK S4V 0A2  
[Catherine.Hart@uregina.ca](mailto:Catherine.Hart@uregina.ca)

**Supervisor:** Dr. Warren Wessel  
Faculty of Education, University of Regina  
1-306-585-4555  
[Warren.Wessel@uregina.ca](mailto:Warren.Wessel@uregina.ca)

**Purpose(s) and Objective(s) of the Research:**

- Two main questions will guide this exploration of the subjectification process:
  - How have post secondary environmental educators come to construct their environmental identity across the time and space of their lives? and
  - How is this ‘identity’ manifest in their current discursive thought and evidenced in their writing and performative pedagogical practice as they work to continually (re)position themselves within the academy?
- My interest is in having you share, through conversations (and potentially written contributions), your ideas about how you came to position yourself as an environmental educator and develop your environmental identity

**Procedures:**

- I ask that you participate in two or three conversations of 30 to 45 minutes in duration which will be audio recorded
- The conversations will take place using communication technology most convenient for you (Skype, FaceTime)
- During the conversations I will ask you to describe your experiences as an environmental educator as well as how it is that you came to position yourself in this way (including autobiographical components, significant life experiences, past and current practices that you feel reflect your environmental identity both in your personal and professional life, sharing of any materials that you feel help you share

your journey to your current environmental identity and how you view your current positioning as an environmental educator and researcher)

- Following our conversations you will be invited to review the transcripts from our discussions to verify their accuracy. You will be able to correct errors, delete sections which you do not want included and add comments to any part of the transcript. After your review of the transcripts we can also have an addition discussion to review any changes if you wish.
- Please feel free to ask any questions regarding the procedures and goals of the study or your role at any time before or during the research process.

**Potential Risks:** The risks of participating in my project are minimal. I intend our conversations to be like two people involved in the world environmental education having a friendly discussion together.

**Confidentiality:**

- Since I will likely be using directly quoted sections from the transcripts of our discussion I will use pseudonyms to protect your identity and the identity of any person of any person you refer to in the course of our discussion. I will be the only person who will know the connection between the pseudonym and the person who contributed that material
- If, once you have read the transcript, you feel that you would like all or any portion of what you have contributed to be directly associate with you by name you may elect to do so by indicating this in the review of your transcripts and verified by your signature on the transcript release form
- Any information you share with me will remain within the bounds of our research relationship. If I share this form or our interview transcripts with anyone outside our research relationship (e.g. my supervisor), I will first remove any information that could personally identify you
- **Storage of Data:**
  - All electronic files will be stored on my password protected computer
  - Any and all printed materials will be stored in a locked filing cabinet
  - Once the electronic and printed materials are no longer needed they will be deleted or destroyed by confidential means

**Right to Withdraw:**

- Your participation is voluntary and you may answer only those questions that you are comfortable with. It is important that you not feel obligated to participate for any reason and you should participate because my research is of interest to you. You may refuse to participate in my project without having to give a reason and doing so will not result in any negative consequences including current or future services provided to you by myself or the University of Regina
- You may decline to answer questions with which you are not comfortable responding
- You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort. You may withdraw until you decide to sign the transcript release form

- Should you wish to withdraw, you must simply inform me that you no longer wish to participate in my research and you can indicate whether any of what you have contributed can be used or if you wish your contributions to be deleted/destroyed

**Follow up:**

In addition to being provided with the transcripts from our conversations I would be pleased to share a final electronic copy of my finalized and defended dissertation.

**Questions or Concerns:**

- Contact the researcher(s) using the information at the top of page 1
- This project has been approved on ethical grounds by the UofR Research Ethics Board on (insert date). Any questions regarding your rights as a participant may be addressed to the committee at (306-585-4775 or [research.ethics@uregina.ca](mailto:research.ethics@uregina.ca)). Out of town participants may call collect.

**SIGNED CONSENT**

Your signature below indicates that you have read and understand the description provided.

I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

<i>Name of Participant</i>	<i>Signature</i>	<i>Date</i>
<i>Researcher's Signature</i>	<i>Date</i>	

*Please keep a copy of this form for yourself and a return a signed copy to me.*

## Appendix G – Interview Guiding Questions

The type of interview I intend to conduct is a conversation style interview where the participant will lead the conversation and I will interact in the construction of the narrative (see, for example: Hesse-Biber & Leavy, 2011; Kvale, 1996; Kvale & Brinkmann, 2009; Mishler, 1986; Roulston, 2010; Rubin & Rubin, 2005). Since the interview will be participant centered the guiding questions and language will vary from one participant to another. I intend the interview framework to serve as a guide rather than a rigid structure for the conversations and will allow participants to lead the discussion so they may address what they feel are important components while the framework can help keep the conversation more or less directed.

Guiding questions will relate to topics such as:

### (1) *Perspectives*

- What are your perspectives in relation to environmental education and environmental education research?
- Can you describe where you think those perspectives may have come from?
- How do you think you came to have those perspectives in environment, environmental education and environmental education research?
- How have your perspectives in environmental education and environmental education research manifest in your life and career?

### (2) *Environmental Identity*

- How do you think you came to feel that environment was important to you?
- How have you come to establish your interest?
- Can you talk about what led you to your current positioning in terms of environment or about your environmental/ecological identity?
- How have you come to be where you are in relation to environment, environmental education and environmental education research?
- Where did these environmentally sensitive tendencies come from?
- How do you identify yourself in relation to environment?

### (3) *Significant Life Experience – Relating to Environment*

- Can you talk about any significant experiences, events that you feel influence/changed/shaped your views/values about the environment?
- Can you talk to me about certain experiences in your life that were important in establishing yourself as an academic?
- In childhood
- In adolescence
- In undergraduate or graduate studies
- In young faculty members
- In adulthood – personal or professional life

(4) *Professional Life as an Environmental Education Researcher*

- What do you think it is about you that has led you to where you are as an environmental education researcher?
- What are your values and worldview that have helped you to persist in this field?
- Have you encountered places/spaces of tension within the academy as an environmental education researcher? How did you address this?
- Who has influenced you as an academic (e.g. who you read, reference, who you refer others to)? How?

(5) *Critical Reflections and Deeper Meanings*

- Are there particular people within the field of environmental education researcher that you identify with? Prefer to associate with? Collaborate with?
- Are there certain types of papers, books, presentations, projects that you want to undertake?
- Is there a particular contribution you would like to make or be recognized for in the field?

**References:**

Hesse-Biber, S. N. & Leavy, P. (2011). *The practice of qualitative research*. (2<sup>nd</sup> ed.),

Los Angeles: Sage.

Kvale, S. (1996). *InterViews: An introduction to qualitative interviewing*. Thousand

Oaks, CA: Sage.

Kvale, S. & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative*

*research interviewing*. Thousand Oaks, CA: Sage.

Mishler, E. (1986). *Research interviewing: Context and narrative*. Cambridge, MA:

Harvard University Press.

Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative*

*Research*, 10(2), 199-228.

Rubin, H. J. & Rubin, I. S. *Qualitative interviewing: The art of hearing data* (2<sup>nd</sup> ed.).

Thousand Oaks, CA: Sage.

## Appendix H – Participants’ Contributed Works

I invited participants, in addition to our conversations, to share particular publications or presentations they felt were important, reflected an embodiment of their environmental subjectivity as an environmental education researcher or are of significance.

### Nicole Ardoin

Ardoin, N. (2006). Toward an interdisciplinary understanding of place: Lessons for environmental education. *Canadian Journal of Environmental Education*, 11, 112–126.

Ardoin, N. (2009). Behavior change theories and free-choice environmental learning. In J. Falk, J. Heimlich & S. Foutz (Eds.), *Free-choice learning and the environment* (pp. 57–73). Lanham, MD: AltaMira.

Heimlich, J. & Ardoin, N. (2008). Understanding behavior to understand behavior change: A literature review. *Environmental Education Research*, 14(3), 215–237.

Ardoin, N. (2014). Exploring sense of place and environmental behavior at an ecoregional scale in three sites. *Human Ecology*. DOI: 10.1007/s10745-014-9652-x

### Charlotte Clark

Clark, C. (2010). Synergy of the commons: Co-facilitated learning and collective action. In R. Stevenson & J. Dillon (Eds.), *Engaging environmental education: Learning, culture and agency* (pp. 77–98). Rotterdam, The Netherlands: Sense.

Clark, C. (forthcoming). Environmental learning and community collective action. In J. Dillon, C. Russell & M. Breunig (Eds.), *Environmental education – a reader*. New York: Peter Lang.

### Annette Gough

Gough, A. (1999). Recognizing women in environmental education pedagogy and research: Toward an ecofeminist poststructuralist perspective. *Environmental Education Research*, 5(2), 143–161.

Gough, A. (1999). Kids don’t like wearing the same jeans as their mums and dads: So whose ‘life’ should be in significant life experiences research? *Environmental Education Research*, 5(4), 383–394.

Gough, A. (2002). Mutualism: A different agenda for environmental and science education. *International Journal of Science Education*, 24(11), 1201–1215.

Gough, A. (2008). Towards more effective learning for sustainability: Reconceptualising science education. *Transnational Curriculum Inquiry*, 5(1), 32–48.

Gough, A. (2011). The Australian-ness of curriculum jigsaws: Where does environmental education fit? *Australian Journal of Environmental Education*, 27(1), 1–14.

### **Regula Kyburz-Graber**

Posch, P., Kyburz-Graber, R., Hart, P. & Robottom, I. (Eds.). (2006). *Approaching reflective practice in teacher education – Learning from case studies of environmental education*. Bern: Peter Lang.

Kyburz-Graber, R. (2013). Socioecological approaches to environmental education and research: A paradigmatic response to behavioral change orientations. In R. Stevenson, M. Brody, J. Dillon, & A. E. J. Wals (Eds.), *International handbook of research on environmental education*. New York: Routledge for the American Educational Research Association.

### **Greg Lowan-Trudeau**

Lowan-Trudeau, G. (2012). Methodological Métissage: An interpretive Indigenous approach to environmental education research. *Canadian Journal of Environmental Education*, 17, 113-130.

Lowan-Trudeau, G. (2013). Indigenous environmental education research in North America: A brief review. In R. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 404-408). New York: Routledge for the American Educational Research Association.

Lowan, G. (2011). *Navigating the wilderness between us: Exploring ecological Métissage as an emerging vision for environmental education in Canada*. Unpublished doctoral dissertation, University of Calgary.

Lowan-Trudeau, G. (2013, October). *Exploring activism as pedagogy within Indigenous ecological movements*. Presentation at the North American Association for Environmental Education Research Symposium, Baltimore, MD.

Lowan-Trudeau, G. (2015, April). *Gateway to resistance? A critical examination of Indigenous and allied ecological activism in Canada*. Paper presented to the Environmental Education SIG of the 2015 American Educational Research Association's (AERA) annual conference, Chicago, IL.

### **Jonas Lysgaard**

Lysgaard, J. (2012). *The educational desires of Danish and Korean environmental NGOs*. Unpublished doctoral dissertation, Aarhus University, Copenhagen, Denmark.

Sund, P. & Lysgaard, J. (2013). Reclaim “education” in environment and sustainability education research. *Sustainability*, 5(1). DOI:10.3390/su50x000x

### **Phillip Payne**

- Payne, P. (1997). Embodiment and environmental education. *Environmental Education Research*, 3(2), 133–153.
- Payne, P. (1999). Postmodern challenges and modern horizons: Education 'for being for the environment.' *Environmental Education Research*, 5(1), 5–34.
- Payne, P. (1999). The significance of experience in SLE research. *Environmental Education Research*, 5(4), 365–381.
- Payne, P. (2000). Identity and environmental education. *Environmental Education Research*, 7(1), 67–88.
- Payne, P. (2003). Postphenomenological enquiry and living the environmental condition. *Canadian Journal of Environmental Education*, 8, 173–194.
- Payne, P. (2003). The technics of environmental education. *Environmental Education Research*, 12(3-4), 487–502.
- Payne, P. (2005). Lifeworld and textualism: Reassembling the researcher/ed and 'others.' *Environmental Education Research*, 11(4), 413–431.
- Payne, P. (2005). "Ways of doing," learning, teaching and researching. *Canadian Journal of Environmental Education*, 10, 1–18.
- Payne, P. (2006). Environmental education and curriculum theory. *Journal of Environmental Education*, 37(2), 25–35.
- Payne, P. (2010). Remarkable-tracking, experiential education of the ecological imagination. *Environmental Education Research*, 16(3), 295–310.
- Payne, P. (forthcoming). Slow ecopedagogy, democracy emplaced and environmental education curriculum theory. In J. Dillon, C. Russell & M. Breunig (Eds.), *Environmental education – a reader*. New York: Peter Lang.

### **Mark Rickinson**

- Rickinson, M. (1999). The teaching and learning of environmental issues through geography: A classroom-based investigation. Ph.D. Thesis, St. Anne's College, Trinity.
- Rickinson, M. & Robinson, L. (1999). Environmental education research in the classroom: A shared methodological reflection by the teacher and the researcher. *Environmental Education Research*, 5(1), 77–93.
- Rickinson, M. (2001). Learners and learning in environmental education: A critical review of evidence. *Environmental Education Research*, 7(3), 207–320.
- Rickinson, M., et al. (2004). What on earth has research got to do with me? *Teacher Development*, 8(2&3), 201–220.

Rickinson, M. (2006). Researching and understanding environmental learning: Hopes for the next 10 years. *Environmental Education Research*, 12(3-4), 445–457.

Rickinson, M., et al. (2003). *Connecting research and practice: Education for sustainable development: A professional user review of UK research undertaken for the British Educational Research Association, General Teaching Council (England) and the National Foundation for Educational Research*. UK: BERA/GTC/NFER.

### **Connie Russell**

Russell, C. (1999). Problematizing nature experience in environmental education: The interrelationship of experience and story. *Journal of Experiential Education*, 22(3), 123–128, 137.

Bell, A. & Russell, C. (2000). Beyond human, beyond words: Anthropocentrism, critical pedagogy and the poststructural turn. *Canadian Journal of Education*, 25(3), 188–203.

Russell, C., Sarick, T. & Kennelly, J. (2002). Queering environmental education. *Canadian Journal of Environmental Education*, 7(1), 54–66.

Russell, C. & Fawcett, L. (2013). Moving margins in environmental education. In R. B. Stevenson, M. Brody, J. Dillon & A. E. J. Wals (Eds.), *International handbook of research on environmental education* (pp. 365–374). New York: Routledge.

Russell, C. (2005). 'Whoever does not write is written': The role of 'nature' in post-post approaches to environmental education research. *Environmental Education Research*, 11(4), 433–443.

Russell, C. (2006). Working across and with methodological difference in environmental education research. *Environmental Education Research*, 12(3-4), 403–412.

Fawcett, L., Bell, A. & Russell, C. (2002). Guiding our environmental praxis: Teaching for social and environmental justice. In W. Leal Filho (Ed.), *Teaching sustainability at universities: Towards curriculum greening* (pp. 223–228). New York: Peter Lang.

Russell, C. & Bell, A. (1996). A politicized ethic of care: Environmental education from an ecofeminist perspective. In K. Warren (Ed.), *Women's voices in experiential education* (pp. 172–181). Dubuque, Iowa: Kendall/Hunt.