Disrupting Privilege, Identity, and Meaning
A Reflective Dance of Environmental Education
Alison Neilson
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Scope
Cultural studies provides an analytical toolbox for both making sense of educational practice and extending the insights of educational professionals into their labors. In this context Transgressions: Cultural Studies and Education provides a collection of books in the domain that specify this assertion. Crafted for an audience of teachers, teacher educators, scholars and students of cultural studies and others interested in cultural studies and pedagogy, the series documents both the possibilities of and the controversies surrounding the intersection of cultural studies and education. The editors and the authors of this series do not assume that the interaction of cultural studies and education devalues other types of knowledge and analytical forms. Rather the intersection of these knowledge disciplines offers a rejuvenating, optimistic, and positive perspective on education and educational institutions. Some might describe its contribution as democratic, emancipatory, and transformative. The editors and authors maintain that cultural studies helps free educators from sterile, monolithic analyses that have for too long undermined efforts to think of educational practices by providing other words, new languages, and fresh metaphors. Operating in an interdisciplinary cosmos, Transgressions: Cultural Studies and Education is dedicated to exploring the ways cultural studies enhances the study and practice of education. With this in mind the series focuses on a non-exclusive way on popular culture as well as other dimensions of cultural studies including social theory, social justice and positionality, cultural dimensions of technological innovation, new media and media literacy, new forms of oppression emerging in an electronic hyperreality, and postcolonial global concerns.

With these concerns in mind cultural studies scholars often argue that the realm of popular culture is the most powerful educational force in contemporary culture. Indeed, in the twenty-first century this pedagogical dynamic is sweeping through the entire world. Educators, they believe, must understand these emerging realities in order to gain an important voice in the pedagogical conversation. Without an understanding of cultural pedagogy’s (education that takes place outside of formal schooling) role in the shaping of individual identity—youth identity in particular—the role educators play in the lives of their students will continue to fade. Why do so many of our students feel that life is incomprehensible and devoid of meaning? What does it mean, teachers wonder, when young people are unable to describe their moods, their affective affiliation to the society around them. Meanings provided young people by mainstream institutions often do little to help them deal with their affective complexity, their difficulty negotiating the rift between meaning and affect. School knowledge and educational expectations seem as anachronistic as a ditto machine, not that learning ways of rational thought and making sense of the world are unimportant.

But school knowledge and educational expectations often have little to offer students about making sense of the way they feel, the way their affective lives are shaped. In no way do we argue that analysis of the production of youth in an electronic mediated world demands some “touchy-feely” educational superficiality. What is needed in this context is a rigorous analysis of the interrelationship between pedagogy, popular culture, meaning making, and youth subjectivity. In an era marked by youth depression, violence, and suicide such insights become extremely important, even life saving. Pessimism about the future is the common sense of many contemporary youth with its concomitant feeling that no one can make a difference.

If affective production can be shaped to reflect these perspectives, then it can be reshaped to lay the groundwork for optimism, passionate commitment, and transformative educational and political activity. In these ways cultural studies adds a dimension to the work of education unfilled by any other sub-discipline. This is what Transgressions: Cultural Studies and Education seeks to produce—literature on these issues that makes a difference. It seeks to publish studies that help those who work with young people, those individuals involved in the disciplines that study children and youth, and young people themselves improve their lives in these bizarre times.
Disrupting Privilege, Identity, and Meaning

*A Reflective Dance of Environmental Education*

*By*

Alison Neilson
This book is dedicated to my dear friend Cynthia Joy Chataway who left us much too early. Her commitment to life and laughter keeps me dancing. I will especially smile for her on the first day of summer.
Thank you to David Selby, James Gray Donald, Donna Westicoote, Noel Gough, Janet Pivnick, Frank Francalanza, Kate McLaren for their various contributions. The Transformative Learning Centre and the overlapping group of people who make up the Centre for Arts-informed Research at OISE/UT gave me much encouragement, inspiration and helpful advice. I could not have completed this project without the help of my good friends Catherine Copelin, Leslie Peel, Heather Blomberg, Eynolah Ahmadi, Alison Li, Andrea Cooper, Pam Turner, Anne Fraser, Hong Zhu and Valerie Baron. My mother and father, Sandra and Gord, and my sister Wendy have always been my inspiration to put on a pair of dancing shoes no matter the music.

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This book could not have happened without the support of J. Gary Knowles. I owe him much for his belief in my slowly emerging vision and his willingness to help me find my way after an already long and rocky journey. This research was greatly enhanced by the advice of my supervisory committee of Daniel Schugurensky, Njoki Wane and Mark Evans, and Constance L. Russell. Finally, I am forever indebted to the people who shared their time and their sacred stories with me: Mehdi Mahdavinia, Sarah Brierley, Martin Kijazi, Chris Benjamin, Cynthia Joy Chataway, Lidia Ferreira, Eduardo Garay, Marli Alves Santos, John Vainstein, Neil Clifford, Janet Beaver, and Christine Fedirchuk. Anything that resonates as strong and good from this work is so because of their involvement.
Our movement into the twenty-first century is momentous not because it is a millennium turning point or a movement into some kind of postmodern history, nor because we are moving from an industrial age into a new information age. The period in which we are living is not simply a turning point in human history; it is a turning point in the very history of the earth itself. We are living in a period of the earth’s history that is incredibly turbulent and in an epoch in which there are violent processes of change that challenge us at every level imaginable. The pathos of the human being today is that we are totally caught up in this incredible transformation, and we have a significant responsibility for the direction it will take. What is terrifying is that we have it within our power to make life extinct on this planet. Because of the magnitude of this responsibility for the planet, all our educational ventures must finally be judged within this order of magnitude. This is the challenge for all areas of education. For education, this realization is the bottom line. When setting educational priorities, every educational endeavor must keep in mind the immense implications of our present moment. This demands an attentiveness to our present planetary situation that does not go into slumber or denial. It poses significant challenges to educators in areas heretofore unimagined. Education within the context of “transformative vision” keeps concerns for the totality of life’s context always at the forefront.

Educational endeavors that set out in the transformative visionary mode begins in a myriad of educational acts that occur in relationships among people in a vast range of learning settings. We see the erosion of dualisms between knowledge and action, mind and body, material and spirit, reason and emotion, school and community, work and learning, as people are inspired to reach beyond an instrumental consciousness into uncharted territory to confront our serious ecological crisis.

The work you are about to read by Alison Neilson is a bold and original venture into the unchartered terrain of embodied transformative education. It breaks new grounds by setting forth an arts based transformative education within the expressive art of dancing.

In this work, the author makes clear to the reader that she is working within the domain of environmental education. Within this field of identification she seeks to revive our state of being within our bodies and locates the environmental education field within relationships, ecosystems and systems of spirituality. Neilson thematically identified patterns that emerged out of the research process with the co-participants in her research study and what follow are patterns which serve in the description of the thoughts and movements of her own embodied participation in the research process. What is truly original in this work is its conceptualizing
this research process as dance. How this is accomplished is seen in the complex weave of materials in the chapters that follow. Let the reader read on.

Edmund O’Sullivan
Transformative Learning Centre
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DANCING STORIES

This inquiry conceptualizes environmental education as a practice of becoming reconnected to complex multiple perceptions and lived realities of the environment. In social dance people trace patterns as they repeat the steps of favourite dances or travel together across the floor according to the whim of the caller. Being an environmental educator is about reviving a state of being within our own bodies, being fully within relationships, ecosystems and systems of spirituality. Dancers respond to the speed of the fiddler’s bow, the buzz of the crowd and the rhythm of the music. By definition, this is a collaborative effort, which requires being receptive and responsive to what is evoked through this embeddedness. The laughter and movements of dancers and the joy and sorrow within hearts animate the flow between momentary embraces creating patterns of being.
INTRODUCTION

This work is based on a belief that knowledge is created collaboratively and therefore is subject to the privileged hierarchies of power that exist in the larger society, universities, and between and within each of us. Through careful attention to the research process, I have endeavoured to heed the calls to actively seek out and disrupt this privilege within myself. These calls came from such people as bell hooks, Robert Bullard, Linda Tuhiwai Smith, Patti Lather, Michelle Fine, the supervisory committee for the dissertation process (J. Gary Knowles, Daniel Schugurensky, Njoki Wane, Mark Evans and Constance Russell), and the co-participants in this research.

This narrative about the research journey explores the motivation to study practices of environmental education and the privilege that supports my ability to do so. It is about the process of dislodging individual privilege in environmental education research and being part of a community of practice. It is written to invite participation in reciprocal learning/teaching about and knowledge construction of environmental education as collaborative reflexive practice.

The inquiry started as a study of how environmental educators work with a critical and social justice perspective; in a way, it was to be an exploration of how I learned to become an environmental educator. My commitment to be critical about knowledge, to seek environmental justice and to be reflexive in practice compelled me to listen with great care to the other research participants and to pay attention to all my senses not just my rational thoughts. As I focused on the collaborations with research participants, and attempted to have and to understand caring and respectful approaches, I disrupted normative practices in the research journey. Disrupting research practices helped to dislodge my privilege as the primary researcher and led to the focus on the reflexive research process.

This deliberately chosen format is designed to blend together academic research and practice, as the separation between the two serves only to further unfair privileging. I ask readers to judge this work on how well it reveals and dislodges privilege throughout, and how well it evokes further reflexive disruptions and invites caring collaborations.

CAREFULLY TELLING: MY VERSION OF A COLLABORATIVE STORY

This is the product of a research journey in which a diverse group of people shared their stories, reflections and musings as we examined the development of our conscious and subconscious narratives of being environmental educators. In presenting this inquiry, I try to honour participants’ stories by constraining my interpretive control and being “up front” with my presence, thereby enabling readers to question my assertions of interpretive virtue. This stems from my desire to deconstruct my power and privilege within this inquiry, and was evoked not only by conversations with co-participants, but also by our communion, our “sensuously grounded being-to-being connection” (Bai, 2001, p. 91). I am cited as the sole author because I succumbed to institutional conventions founded on the concept that a doctoral dissertation is primarily a product of individual effort. As the sole author, I am
embedded in the research process and write this account from my perspective, thereby privileging it above all others. As a white, English-speaking, well-educated, Canadian with sufficient income or related social support, I am endowed with power through the continuing social privileging of my race, class and elite position within a global context.

During the research process, I felt encouraged “to work within a tension between a poststructural view of the world as shifting, messy, and fictional, and a desire for very real social change” (McKenzie, 2004, p. 180). Taking a poststructural approach means that identity is dynamic, relational, and can always be contested. This approach is important for disrupting stereotypes about marginalized groups of people, and for disrupting even the descriptions of race, class, gender or labels like “visible minority” and “marginalized.” Yet I am unlikely, in any lived situation, to be perceived or treated as if I am a person of colour, poor or uneducated. I am unlikely to be oppressed by historical vestiges of racism. I am unlikely to be harmed by the contemporary racism or class structures that locate toxic waste dumps in poor neighbourhoods or in communities primarily home to people of colour. I am unlikely to be directly affected by mine tailings, clear cutting of forests and other destructive resource extraction typically located near First Nations communities. I regularly enjoy the benefits of present-day class and race-based social structures that ensure clean water, safe neighbourhoods and beautiful natural parks within communities disproportionately populated by white, wealthy Canadians. Working toward social change and environmental justice requires that I recognize the lived experiences of race, class and gender, and make transparent the ways in which my socially constructed identity is privileged as “normal” and “universal.”

Social and economic class structures enable some people to escape the backbreaking labour of directly creating/gathering their own food, water, shelter and space. These same structures also allow an escape from experiencing hunger in times of famine and thirst in times of drought. This text is based on the premise that disconnections from the inner self, the whole body and the environment as created by class structures harms those who are “privileged” as well as those who are “oppressed” by class. Although the magnitude of harm may be grossly unequal, as environmental justice advocates point out, the disruption of privilege is necessary to enable collaboration for reciprocal environmental benefits, rather than supporting individual self-interest or paternalistic “rescuing” of other people.

Initially, I saw my actions as a “willful contradiction” (McKenzie, 2004). I turned my critical gaze toward my own postmodern theorizing as potentially oppressive and looked toward premodern worldviews for constructions of knowledge as caring and celebratory practice. I purposefully embraced the earth as a nurturer of life, strength and knowledge, not to be dissected through abstraction. This grounding supported me in the risky venture of looking for creative ways to live with ambiguity and complexity. Rather than a contradiction, I now understand my approach to be a purposeful dancing among premodern, modern and postmodern worldviews.

He watched the hawks as they drifted on the wind. Although their flight appeared to have no pattern, it made a certain kind of sense to the boy. It was
just that he couldn’t grasp what it meant. (The Alchemist, Coelho, 1988, p. 99)

One of the co-participants, Sarah, said about her work, “It is my responsibility to walk the walk and not just talk it.” In embracing this approach, I have tried to embody the theory that I espouse within the process of this research and through the form of this finished composition. I was originally driven to undertake this research by my concern that mainstream environmental education ignores social justice in both its content and its practice (Rixecker, 1999; Payne, 2000; Lotz-Sisitka, 2001) and by my view of the lack of guidance for engaging in critical self-reflection to enable environmental justice to be manifest in practice (Fien & Rawling, 1996). I am attempting to be critical and reflexive within this research, and offer both my stumbles and my stable strides as an example for other interested educators. Through this process, I came to realize that my initial story of transformation from an instrumental technical to a critical social environmental educator was false: a fairy tale based on dualism, shallow ideas about identity and a desire to story myself as a hero. In sharing my account of exploring a false story of transformation, I highlight how social critical environmental ethics are and are not manifest in practice. It is my hope that these contributions can help environmental education become less a privileging project and more a project serving the needs of more people and a broader sense of the environment.

Research on the narratives of environmental educators needs to deconstruct research processes to include a reflection of the power and identity of the researcher; otherwise, it will continue to support uncritical and unreflective practice. Following a reflexive and deconstructive route exposes contradictions, ambiguity and uncertainty, but multiple conflicting and shifting truths are part of a life lived. I want to normalize these within the processes of research. I present newer versions of stories as learned through the research process and older versions of stories which have a continuing influence. In operating from multiple nodes of past and present, I hope to disrupt taken-for-granted concepts around research, knowledge and education, to provoke reflection and to evoke new constructions.

Disruption and provocation may evoke confusion before new constructions can be formed. Please forgive me if this causes unwanted discomfort; some discomfort is necessary for creating space for new constructions. Throughout this research endeavour I followed a spiral path. I offer signposts along this path in case a spiral pattern is not a familiar way to travel. Heeding my signposts should help avoid confusion about the path I have laid out. Remaining vigilant about my construction of these seemingly “objective” directions may also allow a further deconstruction of the assumptions from which I operate and cannot recognize or disrupt alone. Superficially this may appear to be like any other dissertation; it contains a review of literature, a discussion of conceptual framework, an outline of my methods, and so on. I hope this appearance invites those who expect a conventional format to begin reading, and once engaged, to cast traditional expectations aside and consider the merits of this disruption. I hope the spiralling storytellings embedded
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throughout welcome those readers who would not normally read a conventional academic text but who seek holistic, human forms of communication. I ask that they consider any apparent jargon or academic structures as bridging elements potentially useful for infiltrating the hallowed halls of higher education.

Constraints on this research

Throughout this work I have experienced great moments of joy. They occurred when I listened, talked, and walked as part of community. When I was fully conscious of co-creating and collaborating in this research, the messiness, the anxiety of uncertainty, the pain of stretching beyond my limits all seemed worthwhile and joy was embedded in the critical action of self-disruption. When I allowed myself to be constrained by believing that I was alone in this creation of knowledge, I did not feel the joy. In keeping with my approach to knowledge and this research, I asked that I be allowed to invite co-participants to witness my official defence of this research doing the oral thesis examination. The refusal of my request for an exception to the official policy of the department of graduate studies at the University of Toronto remains a thorn in my side.

I sought to collaborate with a diverse group of people. The twelve co-participants and I are originally from eight different nations and have diverse experiences within a broad range of environmental education. However, we do not differ much in where we fit in social economic class structures, and we have all studied at the post secondary level. Participants with different experiences of class and who have not undertaken such formal education might have been able to evoke and contribute to this inquiry in ways not currently present.

The metaphors I used to frame this research are grounded in the experience of understanding through more than rational ways of knowing and therefore provided the opportunity to disrupt my privilege as hidden by rational knowledge. I just “knew” differently albeit I was limited in my ability to describe the knowing fully. Jane Burt (in Lotz-Sisitka & Burt, 2002) points out that researchers must accept the challenge of the difficult tasks that come with the approaches they follow and take risks in order to learn to tread the fine line of “being self-reflective as well as attempting to present the voices of participants” (p. 139). By embracing ambiguity and engaging complexity within this research with so few available tools for articulation, I have risked clouding the reader's view; but, as I do so deliberately, I borrow Peter Cole's (2002) words in reference to "any mishearings or other mis-takes" of this research:

I unreservedly blame on coyote raven and sasquatch who keep putting their paws wings beaks hands and such in the way of my ears eyes and nose as much as they could any praise for this work I disclaim personally deferring it rather to narrative chance chance operations and trickster discourse.

(p. 67) [spacing as in original]
An invitation to experience a process

Initially the goal for this research was to explore the narratives of environmental educators who hold social critical perspectives on the concept of the environment. I sought to explore my own perceived transformation from holding a strictly scientific worldview to becoming an educator with a more social critical approach. As I began working with the other people who had joined me in this journey, I started to feel the sand shifting under my feet. I became uncertain of my interpretation of my past or perceived transformed approach to environmental education. I started to question everything – what I was doing, why and how. Rather than fear this unstable terrain, I tried to listen closely to new friends and learn how to dance on this terrain with them.

Taking care to pay close attention to these discussions disrupted the research journey. I struggled to stay on the original quest, but the questions and the very act of questioning seemed to more closely resonate with a social critical approach than with seeking answers to the original questions, no matter how complex or contextual they might be. But I did not simply change the journey; that would not be a disruption, only a navigational turn. Looking back at the research process, I see that I kept trying to stay the original course while engaging in a kind of inner-directed civil disobedience of that course. Creating un/rule/iness, dis/order/liness and deconstructing this research journey is environmental education from a social critical perspective. Now as I write about this process, I invite readers to collaborate with the text and experience some of the process.

A guide to reading and judging this work

This work is a deliberate challenge to normative ways of doing environmental education and research and is not meant to be a presentation of research findings that describe a static reality as discovered by an individual researcher. I suggest that judging from a conventional perspective would be unfair to this work, as “the purpose of inquiry is not to dispel the difficulties, risks, and ambiguities of life but to live and speak from within them” (Gough, 1999, p. 414). Make meaning of this work according to its terms of reference; set your prior expectations aside and be engaged with the text. Be prepared to listen and use all your perceptions [senses] to be absorbed in that experience; listen with an open heart; let your heart lead your mind; slow down (collaborative statements from co-participants, research retreat, 12/08/03).

While reading, be prepared to feel, the sand shift under your feet – if you are used to being sure and stable in your understandings and practice, you may feel uncomfortable with what may seem a meandering or ambiguous research journey. It is important to embrace rather than avoid this discomfort. Notice when I have placed myself in complex positions of difficulty and powerlessness. How does that affect your ability to engage with the text and research process? I have tried to leave intact my uncertain attempts at following a conventional research approach of collecting and interpreting interview data.
This work is based on a belief that knowledge is created collaboratively and continuously. Through careful attention to the research process, I have tried to evoke reflexion, provoke questions and disrupt hierarchies of privilege within the process of knowledge construction. Like any process involving social or ecological systems, limits exist within this process and much has been written about the ways in which dominant forces exclude others and take up most of the space within these processes. This research endeavour experiments with ways to give up unequal allocation of space and this account invites readers to participate in this intentional sharing. When more room is made available, unfamiliarity may arise from the presence of worldviews, knowledge, and belief systems that are different than the status quo. Feelings of discomfort may seem counterintuitive to successfully making space for others; it is more usual to expect to feel good when social justice aims have been met. Therefore it is important to read this work with the specific intention to explore carefully feelings of confusion and discomfort and not immediately conclude that something is amiss with the research process or its reporting.

The strength of the evidence, the validity of the data, the rigour of methods and the communicability of these so-called facts can be used to judge research reports that aim to discover knowledge as if separate from the processes of its creation. What then of work that aims to disrupt such concepts of knowledge? Noel Gough (1993) suggests we explore the moral purposes, harmful effects and limitations of research. Ardra Cole and Gary Knowles (2001) provide more specific criteria for judging life history research: intentionality, research presence, methodological commitment, holistic quality, communicability, aesthetic form and knowledge claims. Members of the University of Quebec at Montreal (UQAM) Centre for Environmental Education Research value similar criteria and list integrity, honesty really happened and acknowledging the inherent and externally imposed limits of the research as a way to be transparent. Ethics are essential, as are self-reflection within the practice of research, iterative synthesis of research accounts, collaborative self-evaluation, questioning of the dominant discourse and internal coherence among philosophical assumptions underpinning the research (Robottom & Sauve, 2003).

Judging this work according to those collective criteria involves asking three types of questions around the process, communication and implications of this research endeavour. Does the research process live up to the ethics and principles I set out to follow? Does the form of this book also meet these espoused ethics and principles? What are the implications of the actions taken within this work? This third more central question needs to be evaluated over time and includes review of provoked actions taken by readers of this work. Have I further privileged myself or have I left room for others? Do I take up an inequitable amount of space or do my words act as limits thereby not speaking for, but leaving space for, other people? Does this text disrupt your commonplace assumptions and taken-for-granted beliefs about environmental education and research? Where I have left my own
assumptions uninterrogated, do you feel forgiveness toward me? Is there joy in the reading (Barone, 1997)? Does it resonate with you (Cole & McIntyre, 2001)?

OVERVIEW OF RESEARCH PATTERNS

I constructed this document following a series of patterns that emerged during the research process. The original pattern was based on a vision as seen and described by Jan Beaver, one of the research co-participants. These patterns describe both my thoughts and the movements of my body as a researcher. Therefore, they are also the genesis of conceptualizing this inquiry as a dance.

Pattern One invites the reader to consider the context of the inquiry through three stories of history. The first story, *A history of an environmental educator*, is a personal narrative of motivation and mobility. Although all history is told from a present construction of the past, I attempted to present my story, as I knew it, prior to engaging in this research. The second story, *A history of environmental education*, follows the development of policies and practices of environmental education as a contemporary phenomenon largely defined by formal school systems, government documents, and closely aligned with the study of science. I keep to this narrow perception of environmental education in this section since this is how I principally viewed environmental education during the period of my personal history presented in the previous section. In the third story, *A history of environmental education research*, I start to expand the concept of environmental education by focusing on researchers who challenge narrow and non-critical approaches to both education and research. I followed their lead in moving toward research that explores the “how” as being as important as the “what” of inquiry.

Pattern Two explores the ethics and principles of the research journey. I initiated this inquiry with a desire to abide by my espoused environmental ethics; I sought to follow a person-centred, peer collaborative, embodied knowing approach through the use of reflexive, arts-informed, narrative inquiry. Respecting these principles led me to create a research presentation based on a vision of spirals and circles that deconstructs my stories of environmental education, this research, and normative practices of environmental education.

Pattern Three offers an opportunity to deliberately consider how well I acted from my espoused theories about environmental education during this research journey. I put forward my narrative of recruitment and collaborative inquiry with twelve participants in direct juxtaposition with my exposition of critical environmental theory. The split page invites, but does not demand that the reader read these two pieces concurrently.

Pattern Four focuses on the co-participants’ and my narratives. Three sections based on the categories of identity, environment and education organize the themes constructed from individual stories and group discussions. I present these stories out of respect for the wisdom proffered and shared intimacy amongst co-participants, rather than an adherence to a normalized concept of “findings.”
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Pattern Five reflects on the hidden stories and previously unexplored assumptions around race, class, privilege and marginalization operating within the research process.

Finally, Pattern Six explores creative models for accepting the complexity and ambiguity that arise out of respecting and dancing within the creative tensions of environmental education. It suggests that being an environmental educator is about reviving a state of being within our own bodies, being fully within relationships, ecosystems, and systems of spirituality.
THREE HISTORIES

Pattern One sets the context of the research process along a spiralling but simplified path of history: First, a personal narrative of motivation and mobility; then, a chronology of policies and practices of environmental education as a mainstream contemporary phenomenon; and finally, an examination of environmental education research as it develops critical and reflexive approaches.
Growing up in an upwardly mobile, white, working-class family, I learned that anything could be achieved through hard work. However, I did not have to work that hard myself. The only thing that kept me from achieving my goals seemed to be reaching for convention. My success appeared to be dependent on taking chances, 'jumping off cliffs' into the unknown, rather than staying in safe places or being pushed into something I feared. I also learned to enjoy the bush as a safe and happy vacation place for picking blueberries, hiking and catching glimpses of fox, deer, hawks and chickadees. Walking through the long grass in the fields near my home, I was mesmerized by the insects, birds, groundhogs and other small animals who let me get close. They seemed to let me get closer than they let other people. I felt that they knew I wanted to communicate with them and protect them.

One of my clearest early childhood memories was watching the movie Born Free (Radin, Jaffe & Hill, 1966) and identifying with the main character’s struggle to protect the lion Elsa and her cubs. I regularly pretended to be a wildlife biologist working on the Serengeti Plains, in the jungles of South America, or on the polar ice. I dreamed of clasping the talons of a peregrine falcon as I placed a band on her leg. But my dreams and my reality were far apart. Everyone I knew drove trucks, built houses or worked in factories; they did not save lions or go to Africa. As I got older and went to high school, I brushed aside my earlier dreams as a fanciful game to be left behind.

I excelled in high school, especially in science, so I entered a natural science program in university with the vague idea of applying to medical school or some other “real” career. I had no idea that courses or university programs existed that could lead to a “Born Free” job as a wildlife biologist. Suddenly I found that school was not so easy; I failed chemistry and calculus, two of my five full-year courses and I just barely passed physics. In my daze of experiencing failure for the first time and my struggle to get off the university’s probation list, I stumbled across an ecology course in my second year. I knew instantly that I had to find a program of study that would allow me to follow my dreams. Once I made that decision, I had little trouble convincing university administrators to allow me to transfer into a double major even though my grades remained low. I knew very little about the potential courses I would eventually take and had no idea what jobs existed in this field. It was as if I looked out over a cliff and, sensing that my dreams lay ahead, I jumped into the open sky. I took courses and summer jobs that connected me with wildlife and people who worked in wildlife management and conservation. My undergraduate degree in biology and environmental studies led to studying bat ecology and conservation in graduate school.

I initially believed that I had to discover all the facts about wildlife to solve conservation problems, but I soon realized that science was not enough. Although I was thrilled to work with wolves, bats, snakes, and other regularly maligned wildlife, I concluded that the problem for their conservation was that people did not know the existing facts about these animals or they held misconceptions which impassioned them to destroy these “vermin”, “nuisances” and “pests.” As an
ecologist, I was used to thinking about whole systems, complexity and the dynamic nature of scientific knowledge but I did not doubt the primacy of the knowledge or the value of seeking it. I regularly dispelled myths through non-formal education as The Bat-Lady of Chautauqua (my informal title gained during my field work for my Masters degree undertaken at the Chautauqua Institute, Chautauqua, New York) spending as much time teaching about bats and my research as collecting data, and then through subsequent teaching stints at various museums, nature centres and parks. Working for the Ontario Ministry of Natural Resources (OMNR), I regularly met with hunters, trappers, zookeepers, staff from humane societies and animal rights activists to discuss the management of captive wildlife. Reaching policy agreements between these disparate groups further supported my belief that answers, no matter how difficult the quest, could ultimately be found.

When I moved from the policy branch to the district office to work as a teacher educator, I underwent an informal apprenticeship with other biologists who worked as educators. My work varied but I regularly facilitated environmental education workshops for the programs ProjectWild (Western Regional Environmental Education Council [WREE], 1992), FishWays (OMNR, 1991), Focus on Forests (OMNR, 1989) and Focus on Fire (OMNR & Ontario Forestry Association, 1998). In these education sessions, which I always co-facilitated with a teacher, we encouraged discussion amongst teacher participants regarding how to incorporate and modify these activities for their specific teaching contexts. My role was to focus on the environmental part of the facilitating, while the teacher focused on the how-to-teach part. Having worked with hundreds of educators, I learned much about environmental curriculum, classroom teaching and non-formal environmental education programs throughout Ontario.

My subsequent lay-off with a substantial "retirement" package allowed me to take what I then considered "universal" environmental curriculum and teaching/facilitation methods to Ecuador, Zimbabwe and South Africa. I had had experience doing community education in Toronto; I had also recently finished courses in Spanish, cross-cultural studies and techniques in adult education. I felt that I was immensely qualified to work with teachers in these countries. While overseas, most of my environmental education workshops involved using my modifications of materials to fit the local culture and conditions. For instance, I revamped Oh Deer!, a ProjectWild (WREE, 1992) game in which students act as deer and deer habitat to learn about the dynamic balance of ecosystems, to become Oh Condor!, a Spanish language version for Ecuador, and to become Oh Elephant! in Zimbabwe with some words translated into Shona. In both countries, I worked with local conservation and education organizations that supplied the local details.

As part of my volunteer work in South Africa, I took on the role of liaison between the Transvaal Museum of Natural History in Pretoria and a community project in Soshanguve, a former Black township area. The Tswaing Crater Museum is run by community participation, so I was introduced at a planning meeting and the community was asked how they would like to make use of me. The Transvaal Museum agreed to donate display cases and specimens to help create temporary environmental displays for the Tswaing Crater Museum. The community planning
committee requested that I work with the youth committee so that they could help create the displays, thereby incorporating local voices and learning possible job skills during the process.

I had hoped to facilitate the process in a way that the youth committee and I would explore the concept of museum displays and work toward creating something that reflected not only local concepts of the environment but also an educational display form that reflected local needs. The traditional museum displays of natural history museums seemed old and unappealing to me. But here is where I hit a snag. The concepts of museum and natural history were firmly defined and unchallenged in both the musty halls of the great institution in Pretoria and in the minds of the people of Soshanguve who during Apartheid had been mostly deprived of the educational enrichment of museums. Asking someone to “think outside the box”, or even to design a new box, is particularly difficult when they have only ever had very limited access to the inside of the box. This was particularly a challenge when working with youth. Environmental justice is a well-known concept in environmental discussions in South Africa; it is impossible to look at environmental problems and not see how Apartheid and related poverty are connected to these problems. Creating museum displays for the people in Soshanguve served justice in that it provided educational resources that were previously denied to these people. Helping people learn about their local environment could help them protect the environment as well as gain direct “environmental” benefits themselves such as clean water. So, who was I to question that?

It just felt too easy a fix, a superficial change that did not change anything important. I struggled with this issue, not knowing where to look, until I heard a presentation about knowledge and power by Rob O’Donoghue (1997) at the Environmental Educators Association of Southern Africa conference later that year. He interrupted me during the discussion period to question the construction of my question about his presentation. Every time I said the words “other people”, he interrupted and asked why I was speaking of “others.” I was confused, but the confusion that I felt seemed more significant than merely not understanding what was just said. The feeling shook me – was I to question how I think or spoke? I sensed that I was stepping between different worldviews or paradigms, but it was like fog; I could not see where I was going, or where I had come from. Shortly afterwards, I returned to Canada and started graduate studies in education. I had questions about environmental education and my practice. What could I not see? What were my assumptions? What was I missing?

Since I had not learned how to do environmental education through formal schooling, I figured that learning more about the field would be helpful. I had hoped that learning about the history of environmental education might lead to some answers or instructions on how to educate to save the environment while also empowering other people.
A HISTORY OF ENVIRONMENTAL EDUCATION

I use the word “A” in the above title to indicate that this history, like all history, is constructed. It is based on my reading of English-language texts that describe events under the label “environmental education” which, for the most part ignores the people and events that have not used that label. Nearly all accounts of the historical development of environmental education have a brief prelude to the official beginning in the 1960s with the focus on the activity around international organizations (see Palmer, 1998; Vinke, 1992; Carlsson & Mkandla, 1999). Nowhere did I find accounts that started from indigenous, Asian, African, or any southern perspective, or one that recognized local or non-formal education as the starting point of environmental education. Although Gregory Cajete (2001) describes specific educational practices of historical indigenous peoples in ways that could fit into many definitions of environmental education, he rejects claims of “indigenous people…as the spiritual leaders of the environmental movement…[as]…more symbolic than actual” and suggests that “most environmental education is still primarily a reaction to the shortcomings of mainstream Western education” (p. 637).

In her history of environmental education, Joy Palmer (1998) suggests that this movement began with Thoreau (1837-1862), although she mentions Rousseau, Humboldt, Haeckel, Froebel, Dewey and Montessori as important pre-environmental movement thinkers. She suggests that Sir Patrick Geddes (1854-1933) was the first person in the United Kingdom (UK) to make a link between the quality of the environment and the quality of education, and points out that by the 1940s the School of Nature Study Union was offering rural studies that eventually evolved into environmental studies (Palmer, 1998). Thomas Pritchard first used the term "Environmental Education" at a meeting of the International Union for the Conservation of Nature (IUCN) in 1948 (Palmer, 1998); however, the main impetus for the practice of environmental education sprang from the growing awareness in the 1960s of the hazards of environmental damage (A. Gough, 1997). Many people look toward international agreements and government agencies for the official history of environmental education. Palmer (1998) lists the key events often cited in histories of environmental education (Table 1).

The developing practice of environmental education in schools has been for teachers to begin by teaching about the environment (usually in a classroom setting). They may then progress to teaching both about and in the environment by going outdoors to investigate environments through such activities as data collection. They may also progress to teaching for the environment by working with students on local environmental action projects. (p. 99)
She goes on to indicate, however, "many writers have recognized that environmental education is not achieving its overall aims, let alone its ecopolitical action aims" (A. Gough, 1997, p. 100).

Andrew Brookes (2002) “draw[s] attention to some shortcomings of approaches to environmental education that globalizes ideas developed in particular North American or European environments” (p. 73), specifically pointing to the localized and important differences within the land (the environment) of Australia compared to North America and Europe. Public environmental education that targets particular communities “tend to involve one-way communication campaigns” in a “top-down transmissive methodology” (Bélanger, 2003, pp. 83-84).

Isabel Orellana and Stéphane Fauteux (2000) trace the history of environmental education in response to Knapp’s (1998) question of whether the 1997 Thessalonika Conference marked the beginning of the end of environmental education. They suggest that this was already beginning in the mid 1980s, as economic concerns pushed environmental education into education for sustainable development and education for a sustainable future. Paul Bélanger (2003) also

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**Table 1 – Key Events in the Development of Environmental Education**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>1948</td>
<td>IUCN Conference, Paris, “Environmental Education” coined</td>
</tr>
<tr>
<td>1968</td>
<td>UNESCO Biosphere Conference, Paris, France</td>
</tr>
<tr>
<td>1970</td>
<td>IUCN meeting, Nevada, USA, Definition of Environmental Education First Earth Day</td>
</tr>
<tr>
<td>1972</td>
<td>UN Conference on the Human Environment, Stockholm, Sweden</td>
</tr>
<tr>
<td>1975</td>
<td>Founding of UNEP and IEEP</td>
</tr>
<tr>
<td>1977</td>
<td>UNESCO First Inter-governmental Conference on Environmental Education, Tbilisi, USSR</td>
</tr>
<tr>
<td>1980</td>
<td>UNESCO/UNEP Education Congress on Environmental Education and Training, Moscow</td>
</tr>
<tr>
<td>1987</td>
<td>World Conservation Strategy (IUCN, UNEP, WWF)</td>
</tr>
<tr>
<td>1991</td>
<td>UNESCO/UNEP Education Congress on Environmental Education and Training, Moscow</td>
</tr>
<tr>
<td>2007</td>
<td>An international conference to assess the implementation of the Thessalonika direction</td>
</tr>
</tbody>
</table>

Source: modified from Palmer, 1998
states that “environmental education initiatives have been hampered by severe financial constraints on formal schooling imposed by the structural adjustment policies of the World Bank and the International Monetary Fund during the 1980s and the 1990s” (p. 83).

In their brief synopsis of environmental education in Ontario, the non-governmental organization Environmental Education Ontario (EEON) points out that environmental education became part of the public school curriculum in the 1970s. Governmental and non-governmental organizations, museums, parks, zoos and nature centres initiated many non-formal environmental education programs during this time as well, helping to create a flourishing of environmental and outdoor education that lasted until the late 1980s. At that point, budget cuts, “back to the basics” and curricular changes caused the closing of many outdoor education centres and reduced environmental education in Ontario classrooms (EEON, no date). Tom Puk and Dustin Behm (2003), looking at the effects of the 2000 removal of environmental science from the Ontario curriculum, found that Grade 9/10 and Grade 11/12 teachers in Ontario spent very little time teaching ecological concepts. In protest at the cutting of environmental education from the Ontario school system, Joe Sheridan (2002) called for a massive walkout on conventional practice. In reference to the above change in formal curriculum, however, David Selby mused over whether there really had been environmental education in the schools in the first place (personal communications, January 16, 2002).

Formal environmental education practice in Canada has been spotty. The Council of Ministers of Education (2000, as cited in EEON, no date) found that “apart from some support in Manitoba and New Brunswick, environmental and sustainability education was not a priority in provincial education policies.” Emily Lin (2002), in a survey covering the period between 1979 and 1996, found that “the number of Canadian teacher preparation institutions offering environmental courses to pre-service teachers has remained generally low and the level of priority granted nominal” (p. 199).

Setting out these events and policies helps establish the context for this research and illuminates some of the stories that construct how I see the world, an important part of this research. However, exploring past environmental education research allowed me to delve into history thematically and in much greater depth than this chronology. Discovering past research, uncovering its epistemology and ontology and listening to the calls from other researchers for greater reflexivity in research has led directly to how I present this work.

A HISTORY OF ENVIRONMENTAL EDUCATION RESEARCH

My review of environmental education research follows a plot of “norming”, “storming”, and “performing” based on Ian Robottom’s (2002) conference address to environmental educators. He suggested that until the 1980s research in environmental education had been in a process of norming. This involved asking questions of how to change behaviour to be more environmentally friendly using unreflective and primarily quantitative scientific methods (see Marcinkowski,
During the early 1990s, he characterizes the period as storming, in which there was a great deal of methodological debate over qualitative versus quantitative research (see Robottom & Hart, 1995). He now claims that we are in a period of performing, in which we can explore our attempts at reflective research practices in a grounded way.

**Norming**

Meta-analyses of environmental education research indicate that many psychologists and environmental educators believe that educational interventions will improve environmental behaviours (Robottom, 1991; Zelezny, 1999; Hart, 2003). That is, they believe that “knowledge is a prerequisite for both attitude and behavior” (Hart & Nolan, 1999 cited in Hart, 2003, p.140) and the research has been causal-comparative “within the narrow frame of discrete variables manipulated statistically” (p. 140). As well, this type of research is often based on simplified and reified concepts of identity and environment (Payne, 2000). Hines, Hungerford and Tomera (1986-1987, cited in Zelezny, 1999) point to a further problem with these studies, namely, that many rely on self-reported measures of behaviour. The language used in these studies, such as “responsible”, points to definite ideas of “correct” morality. The tested students are likely giving the researcher answers that the researcher overtly or covertly tells the students she/he wants. At best, these studies test how clearly the researchers communicated the “morally right” answers, but fail to shed light on the much more complex question of whether behaviour has been changed.

As other researchers have also pointed out, both environmental educators and researchers have largely resisted the notion that knowledge is socially constructed (A. Gough, 1997; N. Gough, 1994; Payne, 2000;Rixecker, 1999). My earlier education work dispelling myths about wildlife is typical of much environmental education:

> [It] came to be seen as an applied science…our rationality came to be of the technocratic kind, marked by a dominant and almost blind faith in the capacities and qualities of science…to deal effectively and efficiently with a range of problems. (Robottom, 1991, p. 20)

In addition, Julian Agyeman (2003) and others (Bullard, 1994; Lewis & James, 1995; Marouli, 2002) claim that “early research was framed in terms of the ‘under-participation’ of people of colour, which led to the development of ethnocentric and methodologically problematic ‘marginality’ and ‘ethnicity’ theories” (Agyeman, 2003, p. 80). These theories and epistemological worldviews limit the usefulness of much of the existing environmental education research for the poststructural journey I have undertaken. However, I believe that this research informs the practice of many environmental educators.

I now continue my review to understand how and why people become environmentalists and environmental educators. The emergence of this research interest corresponds with the period of great debates over methodology that Ian
Robottom (2002) describes as storming. These debates centred on quantitative versus qualitative research, with the issue of knowledge construction playing an important role. I have embedded a discussion of knowledge construction and identity in my review of the storming period to also direct attention to my reasons for presenting this research story as part of the performing period.

**Storming**

In the 1980s, a growing body of qualitative research on environmental sensitivity gained attention (e.g., Tanner, 1980; Peterson, 1982; Palmer, 1993). These studies found that people who have environmental jobs report similar “Significant Life Experience” (SLE) as influential in their decision to become environmentalists. Experiences such as camping, hiking, canoeing, owning pets, encounters with wildlife and other pleasant outdoor activities appear on their list. Joy Palmer (1993) suggests also that there are significant stages of life in which people develop their attitudes toward the environment. Louise Chawla (1998), in reviewing this work, discussed methodological irregularities in the studies, but did not comment on the lack of critical analysis or deconstruction regarding SLE. This research, and Louise Chawla's (1998) discussion of it, garnered much interest and criticism. Philip Payne (2000) is very critical of the concept of SLE, pointing out that

unchallenged subjectivities about attitudes, beliefs, values and so on may only partially capture the embodied complexities of identifying for and with a self, others and the environment. In the complexity of being human, identities are increasingly uncertain, fluid and often destabilized. (p. 70)

Annette Gough (1999) also critiqued this work “as remaining blind to gendered subjectivities” (cited in Gough & Whitehouse, 2003, p. 34).

Justin Dillon, Elin Kelsey and Ana Maria Duque-Aristizabal (1999) suggest using identity theory as an appropriate conceptual framework for research focused on environmentalism. This theory, they point out, broadens the exploration of self by including social identity as “develop[ing] from an internalisation of the images, albeit stereotyped, of the groups to which one does and does not belong” (Head, 1997, cited by Dillon et al., 1999, p. 404). With reference to the SLE research, they question the extent to which research respondents can identify influences and important experiences, “especially when perhaps quite subtle, and both transient and in the distant past” (Dillon et al., 1999, p. 401).

Mitchell Thomashow (1995) takes a more comprehensive approach to identity and shares rich detail of his work with university students and their exploration of ecological identity. He discusses how to become a reflective environmentalist by exploring the ideas of both political and ecological identity. Thomashow’s own self-reflection throughout his book offers an important element missing from the SLE work. However, Thomashow fails to deconstruct concepts of knowledge, power and identity, limiting the critical and transformative effect of his work. For instance, in his campsite narrative (pp.123-124), it appears as if he is about to deconstruct his power and privilege when he acknowledges a degree of truth in his
neighbour’s stereotyped description of him, but he does not proceed beyond the recognition that he is acting from his moral centre. Nowhere does he discuss privilege or connect with the ideas of environmental justice. Peter McLaren (1993) expands on this type of absence as a way to create further power and privilege.

Narratives form a cultural contract between individuals, groups, and our social universe…we need to be able to read critically the narratives that are already reading us…. Every claim to selfhood implies a narrative that recognizes temporal and ethical aspects of human knowing. It implies a politically, historically, and ethically meaningful succession of events…but we also sanction certain narratives and discount others for ideological and political reasons. To a large extent, our narrative identities determine our social action as agents of history and the constraints we place on the identities of others. (p. 203)

Noel Gough (1990) suggests that a lack of criticism of human’s stories about the earth has contributed to the “global environmental crisis” and “the power arrangements through which some people assume cultural leadership and become, as it were, ‘cultivators’” (p. 14). He challenges power relationships by pointing to research that “recognizes that children as young as five can take up multiple (and contradictory) positions within environmental discourses” (1999, n.p). Recent work (Bell, 2001, cited in Bell, 2003) has taken more of a self-reflective narrative approach, identifying the researcher as a storyteller. Anne Bell quotes Paul Hart (2002) in pointing out that “narrative researchers…[are]…storytellers seeking meanings that may help us cope with our circumstances” (p. 108). She then probes her role as a researcher but not the role of the stories in creating the circumstances with which the participants must cope. Peter Corcoran (1999) writes about working with university students to help them explore their environmental autobiographies. He states that, “issues of social justice are integrally connected to issues of ecological literacy” (Corcoran, 1999, p. 179) in his description of working with his students. However, beyond a brief mention of gender, he does not make any other mention of justice, privilege, oppression or any of the tensions that I would expect to arise from the reflections of the students in his classes. Philip Payne (2000) suggests that “forceful insights into how personal identities are formed, destabilized, re-sought, contradicted or maintained ‘for the environment’” (p. 69) are vital to ensure appropriate and successful environmental education.

Lloyd Fraser (2001) sought these types of insights as he focused his research on how a group of people who self-identified as working “for the common good” learned to do just that. Personal change takes place within the “inner self” and therefore is important for understanding the formation of commitment to the common good. He also found that “the values learned in childhood at home and within their closest circles - their extended family, friends, school, church, and community contacts - provided a strong foundation which in many cases endured throughout their lives” (Fraser, 2001, p. 201). Fraser (2001) looked at the relative importance of various sources of news and information. Reading was important for shaping the participants’ commitment to global issues. However, he limited his
inquiry to rational knowledge, not including embodied knowledge or experience and action as a source of knowledge and commitment. By not questioning the construction of the concept of “common good”, his research fails to address issues of power and knowledge. George Sefa Dei (1996) points out

[S]tructural functionalism, as a sociological theoretical perspective, focuses on a description of the structures and functions of society and its institutions, rather than an explication of the origins and implications of cultural differences and similarities. Human society is viewed as a biological organism with interrelated and interdependent parts which are integrated to form a harmonious whole. Dominant institutions of society are rarely interrogated as sites of power contestation and social contradictions. (p. 45)

To address issues of power and knowledge, Fraser could have asked: Who is in “the common”? Who determines what is "good"? "Good" for whom?

In order to comprehend the nature of the debates occurring during the storming period of environmental education research, especially around the SLE research, I explored ideas around knowledge and identity construction and I include a discussion in this review before I move on to the performing period of research.

Knowledge and identity construction

Peter Berger and Thomas Luckmann (1966) suggest that humans come to know the world initially by experiencing it as real: "[A]s part of the process of primary socialization, children internalize the world of their parents as the world…as a result, there is a strong tendency to incorporate the knowledge gained through secondary socialization in a way that complements, rather than contradicts, the knowledge gained through primary socialization" (p. 142). In this way, identities are intrinsically linked to our construction of knowledge. Conversely, the knowledge constructed in social relations affects identity construction. Peter McLaren (1993) describes identity “as the product of discursive formations and social practices located in material interests, identities are located in historically continuous and pragmatically dispersed networks of social power. Stuart Hall (1987: 46) notes, ‘every identity is placed, positioned, in a culture, a language, a history’” (p. 211).

Colby and Damon (1992, cited in Fraser, 2001) suggest that there are two forces, “cumulative continuity” and “interactional continuity,” that create stability in peoples’ lives and in their concept of reality. Cumulative continuity refers to the tendency to create or choose realities that fit into our existing concepts of reality, while interactional continuity refers to choosing social interactions with people who share these same concepts and therefore reinforce the concepts further.

Although some researchers (Childers & Ferris, 1984; Helms, 1992) have created frameworks to describe a common process of identity formation, their use of categories and stages of development assume linearity and essentialism. Chris Haywood and Máirtín Mac an Ghaill (1997) also find simplistic concepts of identity problematic; they point out that "having a singular 'identity' is inadequate,
because social situations produce varied subjective positions that may be occupied. In its philosophical sense, identity as a form of identification of essential being is inappropriate” (p. 267).

Barbara Heron (1999), in her work with white female development workers, identifies the common “need to define a core self and a sense of identity of who that self is in the world and in relation to others” (p. 40), which an essentialist notion of human nature presumes to be ideally noncontradictory (Britzman, 1991, cited in Heron, 1999). She points out that difference is fundamental to identity formation and is based on imperial relations (citing Said, 1993) and race (citing Goldberg, 1993), which are transmitted through popular literature (citing Ridley, 1983) and other stories, myths and imagery, and are “exceedingly difficult to dislodge” (citing Meyer, 1994) because "we forget the conditions of our own constitution; we take them for granted as normal, natural (Walkerdine, 1990, p.5)” (Heron 1999, p. 40-41). Heron (1999) suggests that poststructuralist notions of subjectivity can help us, "invent, invert, and break old structures and patterns and discourses and thus speak/write into existence other ways of being (Davies, 1994, p. xvii)” (p. 39).

Three levels of identity construction

I am interested in the stories that environmental educators tell about identity and knowledge. Because of the potential volume and complexity of stories and the over-reliance on unquestioned individualism, I find it useful to conceptualize identity at three levels: the inner and outer self as an individual; identity in community and in relation; and identity as a quantum element of the universe, a both/and manifestation of the self and environment. Similarly, David Selby (2001) describes the “radical interconnectedness” of "the discrete self, the relational self, and the dancing self” (p. 8).

Other researchers whose concern I share for the environment and social justice have been exploring multiple levels of identity as well. Chet Bowers (1995) recognizes the importance of the inner self by making reference to Confucius’ thinking, pointing out that the inner and outer environments are intrinsically linked and that concern for “the fate of the environment, cannot be separated from self-understanding” (p. 62). Noel Gough (1994) points out that people exist in relation and environmental educators need to recognize a “multi-storied residence” in which “we refuse to privilege any ‘one true story’ so that [learners] can rehearse the consequences of living these stories, and of living with other stories, in a sustainable (or at least noncatastrophic) way” (p. 210). “According to new physics and new ecology,” writes David Selby (2001), all of us, including the rocks and the wind, “are momentarily configurations of energy, local perturbations in a total energy field or holomovement. We emerge out into the explicate, become manifest, only to resubmerge into the implicate order of being (which at one level of presence we never left)” (p. 5). Exploring this level of identity requires an acceptance of complexity and a willingness to deal with difficult questions such as:
“Where entities resemble ripples on a pond…is the ripple now lapping the shore the same ripple made by the passing boat?” (Marshall & Zohar, 1997).

Performing: Knowing through doing

I now move from the discussion of knowledge and identity construction toward how these ideas are incorporated into research on environmental educators within the period Ian Robottom (2002) characterizes as “performing.” Poststructural notions of the aims of research, namely to disrupt and promote questioning rather than seek answers, provide a framework for exploring attempts at reflexive research practice.

Paul Hart (2003), in his research on teachers’ thinking in environmental education, claims that “to help classroom teachers, parents, and others see into the thinking that drives current environment-related school practices…[and] asks the reader to rethink…[and] question taken-for-granted assumptions of the dominant socioeconomic, scientific worldview” (p. xiii). I feel that his attempt is limited by insufficient attention to deconstructing the research process, underlying assumptions and the storying of identities of participants and researchers. How does the identity of the researchers affect whom they considered potential research participants? Whose thinking therefore is not included? Schools have been criticized as working against the environment (Chapman, 2004); does ignoring this critique not continue to support dominant socio-economic worldviews? Although Hart hesitated to disrupt further than he did, I appreciate the importance of his work as a gentle introduction to poststructural research as something useful to classroom teachers.

The 2003 edition of the Canadian Journal of Environmental Education focuses on a much stronger critique of the status quo in environmental education research. It highlights the work of researchers who are experimenting with the research process and form as a way to challenge mainstream assumptions and engage with different issues of representation in environmental education (see Bell, 2003; Gough & Gough et al, 2003; Gough & Whitehouse, 2003; Newbery, 2003; Payne, 2003). Self-reflection within the methods and form seem vital to these critiques. For instance, Philip Payne (2003) explains that we need to deal with both “constructionism” and the “embodied relations of these socially constructed experiences” (p. 169) “to reveal what is actually experienced by human actors and believed (conceived, constructed) to be environmentally significant” (p. 183). In his description of driving to work, listening to the radio, and trekking with his daughter to Peru, he describes how he experiences enigmatic time, mobilized places and fluid spaces although he lives by conventional linear measurements of time, place and space (Payne, 2003). I easily resonate with the experiences of being in the present at the same time as being emotionally embodied in the 1970s while listening to a favourite “old” song. How often do I accept common descriptions or assumptions about other aspects of lived experiences that I know are different or more complex than described, but I lack the opportunity or language to express myself more fully?
Janet Pivnick had to work hard to convince her thesis committee to accept her non-conventional form (personal communication, April 4, 2004). She explained her motives for being self-reflexive in her work:

First, I wanted to honour the integrity of the work and listen to its call...out of a sense of care for the work itself. Second, I wished to be guided by the topic out of a sense of personal obligation and integrity. That is, I wanted to “walk the talk” of ecological living. Third, I wanted to take on the academic challenge of determining whether there was a way of living ecologically within the world of research itself. (Pivnick, 2001, p. xvi)

I, too, sought an approach to "achieve some resonance between research process, topic and writing style" (Pivnick, 2001, p. xvi). Marcia McKenzie (2004), in expanding on the idea of “willful contradiction” (citing Lather, 1991), sums up what I have attempted to do, namely, “to work within a tension between a poststructural view of the world as shifting, messy, and fictional, and a desire for very real social change” (p. 180). To do this, I engaged in deconstruction of the research process, the research questions and the presentation form, while I also attempted to follow the principles I had set out which are based on so-called radical environmental ethics (Booth, 2000) which I discuss in more detail in the under story of Pattern Three. To successfully navigate the tensions evoked in taking on such a task, I engaged creativity and artful methods.

SYNOPSIS OF PATTERN ONE

In these three related accounts of history, the context is set for a story of an individual moving across class and international boundaries trying to save the environment. Technical and instrumental approaches highlight the early part of the quest, which mimics the formal international approach to environmental education that assumes students need to acquire an ecological perspective in order to behave in an environmental friendly manner. The review of environmental education research follows a progression from norming the practice by measuring the amount of behaviour change after education, to a process of storming the field with contestations between qualitative and quantitative research. The story ends with an examination of reflexive practice and performance of research.
ETHICS, PRINCIPLES AND STRUCTURE

Pattern Two charts out a complex research design of environmental ethics and principles surrounding the research process, and describes how dance and a vision of spirals and circles inspired the structure of this book.
PRINCIPLES OF THIS RESEARCH

When I began the research process I used the words “social” and “critical” but I left them intentionally undefined so as to embrace participants with a broad sense of what these words might mean to them in relation to environmental education. I characterize my work as coming from a social critical perspective because I strive to incorporate concerns of justice, social and political structures, gender, race and the nature of knowledge.

These concerns are also central to five theories of environmental ethics (deep ecology, ecofeminism, environmental justice, social ecology, and bioregionalism), all of which challenge the purpose of education, its content, values and worldview and explore and critique sources of knowledge (Booth, 2000). These philosophies promote complex multidimensional meanings, quality of life and responsible community and ecological self. Wellington, Greenbaum and Cragg (1997) also point out that they contain explicitly cosmological and political elements. They overlap in places and it would likely require an entire book to delve into a comprehensive discussion of any one of these, which is not my present goal. I employ these philosophies as part of the conceptual framework underlying my research decisions and I explore these ethics in more depth in Pattern Three. The very brief descriptions I offer here are a mere taste of the ethics, not statements of definition or essence, and some of the concerns expressed under the label of one ethic are shared by others of these so called “radical ethics” (Booth, 2000). Deep ecology in particular promotes connectedness and spirituality of all life (Snyder, 1998) while still honouring the intellect in “a joyful and empowering awareness of spirit” (Traina, 1995, p. 7). Ecofeminism and environmental justice focus on “a systemic analysis of domination” (Lahar, 1991, p. 29) and explore the disproportionately distributed environmental benefits and damages along race, gender and socio-economic lines (Bullard, 1993). Social ecology delves into the relationship between the social and the ecological in areas of ontology, epistemology, ethics and politics (Clark, 1998).

In order to explore my earlier claim that I follow these environmental ethics within my practice, I chose to engage in this research following what Patti Lather calls “research as praxis” (1986), which means that I incorporate these ethics into the research design and execution. As a co-participant in this research, I explored my experiences, influences and stories of self, environment and education along with those of the other participants. In addition, by studying how I did this research, I also directly explored my environmental education practice, as research and education are so closely linked. Teaching, learning and research are often merged together in my practice, which I describe as facilitation of learning and/or community action with other adult environmental educators. By outlining the link between ethics and my research approach, I invite the reader to gauge the influence of these ethics in this research and, by extension, in my environmental education practice. I set out to follow these principles within the research process: Person-centred rather than theory-centred; peer collaboration rather than individual directed; and embodied knowing rather than primarily rational knowing.
Person-centred approach

I focused on narratives of lived experiences and lived understandings of theory. I included discussions of theory to illuminate the surroundings within which narratives are lived. Theory and individual narratives, I believe, inform each other in a state of “creative tension” (Barndt, 2003) ripe with possibilities for creating knowledge for social and environmental justice rather than being in opposition to each other as some have presented (cf., Clandinin & Connelly, 2000). Rather than dismiss theory which “purports to deliver truths that are the same for all people in all times and at all places” (Blomberg, 2003, p. 180), I chose to see theory as a distillation of many truths that have been researched/explored by a community of people over time. Dominant forces within research practices will privilege the experience of some people over that of others within the community, and hence theory will be closer to some people’s truths than to others, but nevertheless the theory springs from personal experience. I could use “Theory” to differentiate this collectively articulated meaning of personal experiences from the theory that each of us creates and lives from our own experience, but I do not think that it is so easy to differentiate the two.

Exploration of environmental “Theory,” theory that participants and I studied from books or in school, was important to research participants as well; we discussed theory while exploring our personal experiences and stories. Primarily, however, we focused our discussions on our personal rather than our theoretical knowledge. In some parts of this work, the theory is intertwined with discussions of experience, and in other places, it is presented as a companion discussion, in parallel with personal narrative. I made a deliberate decision not to start with written theory as I felt that following a contrived linear path starting with the theoretical would continue the imperialism that I am trying to resist in my work as an educator. Had I refused to acknowledge the influence of various learned theories on personal knowledge, however, I would be ignoring other important contributions to this work. Theory and personal experience were both on stage, but I have shone the spotlight on personal experience.
Peer collaborative approach

My family, friends and colleagues have been vital to my learning experiences. Whenever possible, I team-teach, co-facilitate or work in community; so I sought collaboration in this research as well. In designing a research approach I looked toward participatory inquiry approaches (Reason, 1998) for direction. However, I was conscious of Fischer’s (1997) critique that, “liberal modernist assumptions are at the heart of how race and representation structure the discourse of participatory research” (p. 8) and that this discourse is “rooted in a positivist paradigm that relies upon dichotomies of knowledge and subjectivities” (p. 61). I was concerned that I, too, might be following a liberal agenda, so I tried to “heed the advice of Lila Watson, an Australian Aboriginal educator and activist, who is reported as saying, ‘If you've come to help me you're wasting your time. But, if you've come because your liberation is bound up with mine, then let's work together’” (Wadsworth 1991, as cited in N. Gough, 2000, p.116). Heeding her advice meant that I invited participants to take on co-researcher roles and co-design the research to meet their goals, and I did this research within a community of which I am part. I sought to include participants whom I may not previously have recognized as being active within “the environmental education community” or whom I considered marginalized due to historical events and my place relative to them within real and perceived hierarchies of power. My challenge was to include them without labelling and treating them as such (marginalized and other) which would continue to give privilege to my perception and any oppression it helps create. I hoped that
my invitation to collaborate would also set the stage for inclusion and respectfulness within this research, as well as enable co-participants to openly reflect on their involvement and the usefulness of this research to them.

As I write about collaborative knowledge construction, I feel that I must make mention of other people I see as research collaborators. Important collaboration has occurred with people I have not yet met in person. Noel Gough’s email correspondence with me was important in my exploration of poststructuralism and narrative inquiry. Janet Pivnick also offered support by email on challenging the traditional academic structure and successfully graduating. I sought her out after reading about her approach to environmental education research.

If all that we do in the study of human-environment relations is share ideas about how to live well on the earth, then a researcher’s relationship with the literature is of a different nature than most academic research. Rather than viewing the literature as sources to cite, writers become community members to invite into the discussion. (Pivnick, 2001, p. xxvii)

Embodied knowing approach

Noel Gough (1993) mentions the embodiedness of knowledge when he suggests that much environmental education embodies the very dysfunctions they oppose. Much environmental education relies heavily on rational knowledge. Acquiring greater environmental knowledge of the rational kind does not necessarily change personal behaviour (Robottom, 1991) so I believe that focusing only on the rational knowledge of environmental educators would not shed much light on practice; the link between theory and practice is obscure for any social movement (Vandanabeele & Wildemeersch, 1998, cited in St.Clair, 2003). Furthermore, Vandana Shiva (2000) suggests that rational knowledge is dominant in the mainstream and this dominance is a form of and arises from colonialism. This led me to seek a research approach that moved beyond dealing strictly with rational knowledge. Rather than simply explore rational meanings of experience, I wanted to know how it makes us feel or how it affects our breathing or singing or dancing or motivation to act in earth nurturing ways (Lipsett, 2001). Damelin (2002) quotes Heshusius (1996), who pointed out that

[W]e have learned to separate embodied from disembodied ways of knowing and have given epistemological precedence to the second. The significance of interior knowing has been severed. We have become detached from what we know, including ourselves. Western thought has liquidated all other ways of knowing: intuition, imagination, feelings, spiritual knowing, knowing through connecting, participating, identification, knowledge that the body holds. (p. 5)

Lisa Lipsett (2001) claims that "many believe that we need to move beyond the deconstruction of post-modernism, a place of survive and critique (O’Sullivan, 1999), and instead embrace transformation (Spretnak, 1991) or constructive post-
modernism (Griffin, 1988) characterized by creative vision based on multiple ways of knowing that ultimately fuel sustainable action” (p. 5).

I looked toward breaking the structures that privilege the strictly rational over embodied ways of knowing. Since rational ways of knowing and doing research are privileged within society, I deliberately included research activities that would use and uncover embodied ways of knowing. I assumed that, without my specific encouragement, participants would offer rational arguments; therefore, embodied ways may have been edged out of the research process had I not made this effort. However, it also seems to me that creating a dualism between rational and experiential knowledge is not useful or very descriptive of how we construct knowledge and live our storied lives. The concept of embodied knowledge incorporates all types of knowledge understood and communicated by all rational and non-rational means. Figure 1 is a representation of a person-centred, peer collaborative and embodied knowing approach that is in stark contrast to an individual approach which separates mind from body (Figure 2).

These approaches set the stage for developing my methodology following reflexive inquiry and deconstruction, narrative and arts-informed inquiry.
Figure 1 - Person-centred collaborative research design inspired by Putamayo CD cover, artist Nicola Heindl.
Reflexive inquiry and deconstruction

Conducting this research has led me to agree wholeheartedly with Cole and Knowles’ (2001) assertion:

We research who we are. We express and represent elements of ourselves in every research situation. The questions we ask, the observations we make, the emotions we feel, the impressions we form, and the hunches we follow all reflect some part of who we are as person and researcher. (p. 89)
As an environmental educator I have long struggled with my tendency toward self-righteousness; as I developed an understanding of how racism and colonialism are manifest in environmental education, I felt that I had progressed toward a more superior position and closer to a universal truth. However, I started to feel uneasy with my overconfidence. Does simply knowing that I am part of the white majority and being aware of a few mechanisms of racism change my continuing privilege based on my whiteness? Is there a single “truth” and a correct way to teach or is it always contextual and therefore never static? I realized that I must work toward continually revealing “the structure of a discourse…and to identify what each story disregards, marginalizes, suppresses and/or treats as unimportant” (N. Gough, 2000).

Linda Tuhiwai Smith (1999), in writing about research and Indigenous peoples, cites Ellsworth (1989) when pointing to “the failure of critical theory to deliver emancipation for oppressed groups” (p. 166). Smith also points out that critical theorists themselves have failed to recognize their own oppressive practices and feminists have called for critical self-awareness and reflexivity in research; she continues her discussion showing that feminist scholarship can also lack self-awareness in that “organic and indigenous approaches to research” are significantly absent from the so-called emancipatory paradigm of ‘postpositivism’ (1999, citing Lather, 1991).

As I proceeded in the beginning stages of researching with the co-participants, I attempted to be reflexive myself and to ask “the most risky questions about our traditions, about our institutions, about our way of teaching and so on” (Derrida in interview with Olsen, 1992, cited in Faulconer, 1998). I eventually realized that I was unable to reveal my own biases. Stone-Mediatore (2003) points to the inevitability of failure when we try to deal with our own biases by simply imaging other standpoints. She quotes Benhabib (1992) who suggests that “the critic must engage with ‘concrete others’ in order to genuinely test his own view…[which] requires much practical work – traveling, learning language and listening attentively to other peoples’ stories (Stone-Mediatore, 2003, pg 74-75). Once I shared my initial reflexive attempts with co-participants and listened to their challenges to my continuing lack of critical self-awareness around my privilege, I could start the difficult but more meaningful critical reflexive discussions.

This juncture in the research directed my actions away from what is commonly a stage of analysis and findings, to a review and disruption of my research journey. Had I not taken that change in step I would have been acting in ways that Hester (in Hester & Cheney, 2001) suggests have been historically puzzling to Indigenous people, namely, asserting the truth of my ideas but acting in ways that do not correspond to these truths. I found it difficult to cease working toward discovering/creating the findings of this research and instead focus on a deconstruction of the research (including my attempts at “findings”). Every uncovering I made of earlier unexplored assumptions and forgettenss urged me to explore the assumptions and include what I had forgotten. Once I realized that I would always have unexplored assumptions and forgettings and that this research on doing environmental education from a social critical perspective had organically
emerged as a journey of disrupting normative environmental education research practices, I stopped trying to follow those normative practices. Being reflexive in this research journey meant that deconstruction – a spiral “act of remembering, wonder and praise, and in that to a remembering relation to what we have forgotten rather than to the description of what we have forgotten” (Faulconer, 1998, para. 28) – would lead to a piece of work which itself would provoke a search for what it had overlooked.

Taking this approach has helped me unearth a tapestry of questions, paradoxes and possible meanings that come out of being so embedded in this reflexive study. Like Pivnick (2001), “I wanted to take on the academic challenge of determining whether there was a way of living ecologically within the world of research itself [and]…. achieve some resonance between research process, topic and writing style” (p. xvi). I also listened to the words of dian marino (1997) who wrote about the importance of exploring our mistakes if we want to encourage learning, creativity and inclusion. Rather than write only about the “fixed” mistakes, and keep silent about the “unfixable” ones, I have endeavoured to expose my uncertainty, contradictions and mistakes as a way to resist instrumental technical approaches to this research and environmental education. Refusing to follow the commonly understood pattern of research and stopping to question and re-question the underlying assumptions of concepts and actions is not a linear and rational project. I chose to use creative methods so that I could more easily accept and present unknowability, complexity and ambiguity.

**Arts-informed inquiry**

An exploration of our ways of knowing through collaborative investigations may help tease out our overt motives from the covert influences that affect our education and research practices and may be identified and communicated best through various forms of art, rather than through standard academic prose.

Emerging from the productive fusions and tensions among qualitative inquiry and the fine arts, arts-informed research infuses elements, processes and forms of the arts with the expansive possibilities of scholarly work...arts-informed research is more than a method, an approach, a procedure; arts-informed inquiry is a means to redefine form and representation and recreate new understandings of process, spirit, purpose subjectivities, emotions, responsiveness, and the ethical dimensions of inquiry. Arts-informed inquiry is rooted in passion, provocation and pragmatics. (Cole, Nielsen, Knowles & Luciani, 2004, p. vi-vii)

I came to this research already committed to using arts-informed inquiry; I did not know exactly what that would end up meaning but I believed in my imagination (Cole & Knowles, 2001b). I had already hurled myself into it. My gut told me that this was the right decision even though my head did not fully understand to what I was committing. In an earlier course, I had explored my metaphors of learning and came to realize that “jumping off cliffs” was how I have
traveled through school and indeed through life. I jumped, *body and spirit*, without great fear. I was very pleased that co-participants trusted me and were eager to jump with me. Because I clearly stated that my use of arts-informed methods “was a bit of an experiment” and that I sought their involvement in designing and carrying out arts-informed inquiry activities for the group research retreat, the co-participants shared their feelings about these methods as well as offered advice and suggestions based on their experiences using similar methods in research and teaching. Other researchers have chosen arts-informed approaches for similar reasons:

The importance of looking carefully at drawing and discussions as a tool for participatory research is grounded in my experience of a paradox, which is that for critical yet creative participation we need tools that are both simple and complex: *simple* so that they are not intimidating, rather, they are like shovels and rakes, useable with minimal expertise; *complex* so they can help us make *whole* pictures – making relationships visible when there are many obscure systems interacting with each other. The pictures cannot have either too little detail so that people get lost, or too much detail so that people are “stunned”, immobilized. This paradox operates as a challenge. (marino, 1997, p. 72)

Although it is not possible to “think” only with our rational mind, much of our schooling and academic culture attempts to keep our bodies from getting in the way. Arts-informed methods help to bring our bodies consciously back into our knowing by using activities that our minds cannot grasp in a linear, rational fashion. Once we accept that our bodily responses to music, visual art, dance, theatre, and stories, are valid ways of knowing, we may find complex meanings that we can express more fully and move beyond mere linear discourse in our research:

Thinking visually was found to be complementary to verbal thinking and not the antithesis of it. Visual models could clarify very abstract materials. As well, “Our bodies react to mental images in ways similar to how they react to images from the external world...The same neurological pathways are excited by imagined running as by actual running.” (Samuels & Samuels, 1975 as cited in marino, 1997, p. 71)

Pablo Picasso is reported to have commented: “Every child is an artist. The problem is how to remain an artist once he grows up” (www.quotationspage.com/quote/27094.html). Moon Joyce (2003) points out societies that identify some individuals as “singers” only can do so because most members of that society are non-singers. Long have I struggled with a seemingly necessary choice to make between charting my life linearly by my rational intellect or in a meandering fashion by my creative intellect. Jickling (2002) identified this same difficulty;

Yet, for those of us who have walked solidly on the ground of rationalist traditions, it can be one thing to have an inkling about storied possibilities –
as mirrors, relationships, nuanced experience, and lived lives – it is another thing to stand on the fertile earth of story. (p. 5)

Cajete (1994) suggests that “art allows us to symbolize knowledge, understanding, and feeling through image, thus making it possible to transcend a finite time and culture” (p. 40). Besides using art to represent embodied and complex ideas, I used arts-informed methods for the process of creating data. Specifically, I used images to discover and explore ideas of identity, environment and education and for digging below our consciously held ideas to uncover hidden or “forbidden” ideas (those ideas that directly contradict the stereotyped image of an environmentalist). I embraced arts-informed methods and principles for this research with the recognition that I might stumble in this quest, along with participants who also might find this challenging, but secure in the knowledge that together we could remember how to sing, dance and draw.

**Narrative inquiry**

I chose to engage in narrative inquiry for two reasons. First I wanted to respect the wisdom, knowledge and skills of the co-participants by sharing their stories in their voices and the meanings that the stories hold for them. Working with stories, images and metaphors meant that I had these to present unaltered, albeit my part in creating spaces for some narratives instead of others and in choosing which words/metaphors/images to include significantly affects how the reader may see these people and their stories. I feel very honoured that co-participants freely shared their stories and chose to be identified by their real names. I feel that this recognizes the significance of co-participants’ contributions. However, I have not attempted to create portraits of these people nor should the reader understand any part of this work to represent the co-participants themselves. My second reason for choosing narrative inquiry is because

environmental problems...are produced, reproduced and intensified by the ways in which people in modern industrialised societies experience and interact with the world – by the ways in which we live our 'storied lives'. To conceive of research in environmental education in terms of narrative inquiry is, therefore, to seek solutions to our problems where our problems lie. (N. Gough, 1993)

I started the research process from the narratives of the twelve co-participants and myself. We followed flows of conversations on how our stories revealed meaning to us about our environmental education practices. Looking for the metaphors, images and other narrative elements that constitute our stories allowed for glimpses of our inner selves and an understanding of our own “personal practical knowledge” (Clandinin, 1986). This type of knowledge also “expresses itself practically, in action.... It is the source of a teacher’s implicit theories, and it is observable in the teacher’s classroom practice” (DO-AS-a-Team, 2001).
Finding a form for presentation

Although I had articulated and followed clear principles for undertaking this inquiry from the beginning of proposing this research, I was unsure how to present the work when I started writing. My journals were filled with notes, I had many illustrations and my head was swimming with a mosaic of images, yet I struggled with finding the guiding form for reporting this work. I became concerned that my initial analysis, which focused on my own illustrations, was not acknowledging the full contribution of co-participants. I tried to ensure that I was including the ideas from the participants by constructing “results” through coding transcripts and collating all their words into themes. I then continued with this linear process to create an outline that followed a conventional academic structure with sections on background literature, conceptual framework, methods, participants, results, and discussion. I was familiar with this convention, yet I was uneasy and unable to actually follow this outline as I had just constructed it. Without knowing exactly why, I knew that following this outline would betray the participants and our collaboration.

Conundrums that engage and perturb only the intellect are relatively easy to resolve, deny, or dismiss, as a result, seldom provoke any substantive or lasting revision of our life practices. Not so for conundrums that engage and perturb not only the intellect but also the viscera. When the body speaks its fear of uncertainty – stepped-up pulse, knotted stomach, sweaty palms, dry mouth – it’s almost impossible for us not to heed even if we don’t understand the significance. The body doesn’t lie. (A. Neilsen, 2001, p. 286)

A vision of spirals and circles

It was not until I presented my developing work and struggles with linearity to colleagues at an arts-in-progress seminar that I became conscious of the limitations of the normative academic approach and why I could not follow it. They asked why I was giving such privilege to linear uses of text over art and could I not find a form from within the illustrations that either participants or I had created. The results that emerged from a linear interpretation of the text were important; however, they were only part of the story. I needed to view the process and illustrations as equally important, especially in their untranslated form. As Rosie McLaren (2001) reminds,

whenever we retell our visual stories we are not in the text in the same embodied way. We focus on the content and miss the subtleties and exquisite qualities of emotion and feeling. (p. 69)

During the visualization part of her interview, Jan drew a colourful spiral surrounded with circles (Figure 3). She imagined this symbol as she meditated on feeling happy, safe and connected to the world, and she described this as
representing how she sees her learning journey through life and within a community.

This spiral is like my journey, I was by the flowing water (that’s the blue in the picture) and that’s the road I’m on. I’m traveling through this time and moving out, but I’m progressing. I’m in a place where I am moving forward with my life and this whole, these circles, the whole idea of overlapping circles and things, it was like I was feeling that connection with the past and with my family. All those overlapping circles of things that contributed to feeling safe and happy, are ancestors and family and friends. There were six circles, and they were overlapping. The six circles in my picture represent how we each create our sphere of influence separate from others yet overlapping others so that we form this web of interconnected spheres of influence. We have no idea most of the time how our interactions with one person can ripple out into many other overlapping circles. I am also very keen on sacred geometry and the flower of life symbol is based on the number six and consists of overlapping circles.
The yellow is the sunlight. The sun is a big contributor to feeling good, because if I feel the sun then I tend to feel good. I see in symbols, so colours are important there, as well, this red relates to my aboriginal ancestry and the strength of that has been a big foundation for my happiness and well being. (Jan, interview, 09/07/03 & email, 01/10/03)

This image describes the process of my research well; the spiral represents my research journey and the surrounding circles concurrently represent the influences
of the twelve co-participants, collaborations with additional people and theory (Figure 4).

Each participant in this research could be imagined as central in this figure as well: spiralling along their own narrative path influenced by their interactions with me, eleven other participants and theory. My position within the centre of this symbol symbolizes the perspective of this particular telling of this research story; it is not meant to present my perspective as truer or more important than that of any of the other participants.

Indeed, they are the truth from the teller’s vantage point at a particular time of the inquiry. Yet that truth may change as the inquiry progresses in a re-telling of the story, especially if various actors are consulted (Conle 1999). The story may be interpreted quite differently by someone who understands the story differently, especially if that someone came from a different culture. Things may seem obvious in one socio-cultural environment, but not in another. A narrator may not easily recognize to what extent his or her story is shaped by the people and the surrounding milieu. With even greater difficulty may a narrator recognize that what seems so real at the time of telling is not simply given, but has grown in a personal-cultural context. (Conle, 2000, p.57)

As my journey of inquiry unfolded in a spiral path, I keep brushing against the surrounding circles, revisiting issues and questions raised by co-participants, sometimes having learned enough to see them in a new light, sometimes finally ready to tackle them, and other times still not ready for them. Cajete (1994) writes in detail about the importance of concentric and overlapping circles throughout cultures around the world as a symbol of wholeness, an awareness of Nature, to connote a process and to show how knowledge grows.
The telling of a myth begins with a simple version for children, then moves to a slightly more complicated version for adolescents, to a deeper version for initiates, and to a still deeper version for the fully mature. (Cajete, 1994, p. 122)

By using this symbol, I seek wholeness, an awareness of Nature and a highlighting of the process of this inquiry.

Spiralling back on myself

Once I recognized the resonance between Jan’s spiral image and my research process, I became conscious of my previously subconscious journey of resistance. By listening to my “gut”, my embodied knowledge, I had turned away from a linear path of inquiry; by listening to flowing waters, I had turned away from the simple “rules” of conventional research; and by listening to a community of educators who shared their stories with me, I had turned away from researcher as individual. This journey of disruption was more powerful than my initial research quest but the two mingled and morphed into each other in my actions and my words. Therefore, I have structured this work to invite readers to experience the process both consciously and subconsciously. I have been experimental in the structure. Not all experiments produce immediately “successful” outcomes, but I believe it important to take risks since varied structures are necessary to enable engagement with diverse worldviews (Baskwill, 2001; Blomberg, 2003).

I have tried to provide navigational directions to help readers from getting irrecoverably lost in the quagmire, respecting Elliot Eisner’s (1997) caution to researchers who use creative inquiry. I share Eisner’s concern about losing readers who become too confused; however, I believe that conventional research confuses and excludes people who would otherwise feel comfortable in my swirl of spirals. As well, I feel cautious about imposing too much mapping of the terrain, as finding one’s way after feeling lost can be a powerful experience, disrupting previously unexplored assumptions. In telling my stories, I seek not to have readers accept them as “the truth”, but rather to provoke reflection and disruption of stories and practices that oppress.

Although this text is not as straightforward as a conventional research document, many of the same elements are present. For instance, a literature review, conceptual framework, findings and discussion are threaded throughout. It is, however, the process of deconstruction, not specific findings, that I have highlighted as I disrupt normative practices of environmental education research. Theory is mixed in at various places according to its underlying presence. I believe that we often ignore assumptions and unarticulated lived theories when we artificially separate theory from our practice of research. I also return repeatedly to certain theoretical and practical issues as my spiralling research journey kept returning, for example, to questions of power and privilege, and racism and colonialism.

As I retell the story of this research process, my words change to accommodate changing perspectives, complexity and ambiguity. Although I sometimes refer to
“interviews”, or “meditative visualizations”, or “individual interviews”, I engaged in only one recorded one-on-one session with each participant. As a group, we met once over a day and a half, but within that time, we engaged in various small group and large group discussions.

I occasionally use the term “poststructural” in the text (see Agger, 1991 for an overview of critical thinking, poststructuralism and postmodernism). The ethics, principles and structure of this work can be described as following a poststructural approach. However, poststructuralism as a concept is rooted in a long history of discourse in sociology and philosophy amongst other disciplines, is continually being reworked and contested, and as I have written in Pattern Six is constructed in a world where multiple perspectives, including pre-modern, modern and postmodern, influence our thoughts and actions. Fully defining the term poststructuralism would be a long and complex task and not necessary in this work. Nevertheless, making explicit my reasons for understanding this work as poststructural helps make a bridge to specialized academic language and allows the reader more information from which to judge this book.

Aspects of this research that treat identity as dynamic, relational, and always contested, and therefore overtly poststructural, are manifest in various ways: People enter the text in conversation and in relation, rather than stand as static portraits I present; descriptors, such as race, class, gender and so forth, are employed when they arise within narratives and in context rather than as definitive statements about any participant; I return periodically to issues around race, class, gender and other aspects of critical theory about identity, and complexity and uncertainty are left intact rather than simplified.

SYNOPSIS OF PATTERN TWO

Deep ecology, ecofeminism, social ecology and environmental justice question the purpose of education, critique sources of knowledge, promote complexity, and contain explicitly cosmological and political elements. These environmental ethics aroused an interest in exploring environmental education practice. They led to a specific research approach, namely, person-centred, peer collaborative, and embodied knowing and the use of reflexive, arts-informed and narrative inquiry. The research presentation arose from a vision of spirals and circles that deconstructed the research process and the privilege embedded and embodied within.