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Against the Current: Ecological Education in a Modern World

by

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Abstract

Ecophilosophers suggest that the beliefs, values and priorities of the western world are, in large part, responsible for the degradation of the natural environment. These scholars provide a critical assessment of the assumptions which are inherent in a modern worldview, and suggest ways of being which may be more environmentally sound.

But people who are attempting to ground their lives in an ecological perspective find that they come up against many obstacles. Modern and ecological viewpoints arise from different ontological and epistemological assumptions, and as such communication across the boundaries of these two ways of being can be challenging. Since modernity forms the dominant way of understanding the world at present, ecological assumptions may be misunderstood and dismissed, causing great pain for those who understand the world through an ecological lens.

At the same time, an ecological perspective can be challenging to comprehend for those people who are steeped within modern assumptions. Viewed through the lens of modernity, ecological understandings can seem non-sensical, threatening or impractical.

Using educational encounters as the research context, this dissertation explores the challenges which arise when an ecological perspective and a modern perspective meet head on. The empirical aspect of this study involves interviews with ecologically-oriented educators and their adult students to come to better understand the challenges of ecological education in a modern world.

Preface

Study Background and Purpose

This doctoral study is designed to uncover the challenges that students and teachers face in the living out of a form of education known of as ecological education. From the perspective of study purpose, three questions then arise. Why is it important to look at the challenges of an educational approach? Why is it important to look at the challenges of ecological education in particular? Why is it important to frame this exploration within a cultural context, as in the dissertation title, *Against the Current: Ecological Education in a Modern World?*

Dismissing a form of pedagogy, without understanding the challenges inherent in it, is problematic because we never come to know whether there was potential in that pedagogical approach, nor do we understand whether the challenges could have been worked through, nor can we use this knowledge to work on developing more effective and appropriate pedagogical approaches. Embracing a form of pedagogy without understanding its challenges is even more troublesome. Treating a pedagogical approach as utopian means that the work conducted on behalf of that educational approach may potentially be undertaken in a superficial manner, and has the possibility of eventually collapsing under the weight of its unexamined problems. If, as educators, we believe that there is potential within a particular form of pedagogy (and this dissertation is based in the belief that ecological education holds much promise), then it behooves us to understand the difficulties that are held within that form of pedagogy so that the educational programs that we design and teach can take into account the challenges of that particular educational approach and so that those programs can be taken up in a manner which is conscious of and responsive to the difficulties.

In order to understand the reasons that it is important to explore the challenges of ecological education in particular, some larger context must be provided. On the broadest scale, this study is based in a concern over the state of the environment in early twenty-first century North America. As such this study is rooted in the field of environmental studies and in a long history of human attempts to understand and ameliorate the causes of

environmental degradation¹, a practice that gained force and momentum with the birth of the modern environmental movement in the early 1960s. The underlying motivation that drives this doctoral work is a desire to improve human-environment relations.

Within the field of environmental studies is the sub-discipline of environmental education that is rooted in the belief that education has a role to play in helping to improve human treatment of the natural environment. This study is rooted in this broad definition of environmental education, as education that is *for* the environment. (See Appendix A3 for a brief overview of the field of environmental education.)

At the same time, within the broad field of environmental studies is another sub-discipline, ecophilosophy, that is rooted in the belief that "solutions to the grave environmental crisis require more than mere reform of our personal and social practices.... [They] require a radical transformation in our worldview" (des Jardins, 1997, p.202). This current work finds sustenance within the literature of ecophilosophy, a field of study that has been in existence as long as the modern environmental movement and that acquired its name in 1973. (See Appendix A1 for a history of ecophilosophy and for information about the ways in which this particular study fits within the broader spectrum of ecophilosophical work.)

Finally, bringing together the sub-disciplines of environmental education and ecophilosophy is the form of education termed ecological education². In other words, ecological education is a form of education designed to improve human-environment relations and based in the belief that solutions to the environmental crisis require a radical transformation in our worldview³. (See Appendix A2 for an overview of ecological

¹See Nash (1967) for a discussion of the history of environmentalism.

²I have adopted the term ecological education throughout this dissertation following the term used by Smith and Williams (1999) in their book, *Ecological Education in Action*. I have previously referred to this form of education as ecophilosophical education (see the study participant consent form in Appendix B1). Neither of these terms is wholly satisfying, with "ecological education" incorrectly implying the study of the field of ecology and "ecophilosophical education" being a term which obfuscates and alienates. Elsewhere this form of education has been referred to as "ecopedagogy" (Jardine, 1994) but this term is also alienating and has a less precise definition.

³The interpretation of "worldview" used in this dissertation follows Devall and Sessions (1985) which in turn is derived from Kuhn (1970). Devall and Sessions state that
a worldview... has several elements in thought and action:

education and for information about the ways in which this study fits within the broader work being done in the field.)

This particular study is undertaken for academic, pedagogical and environmental reasons. Academically, the work is rooted in a desire to add to the body of research in ecological education by addressing a current gap in the literature. Ecophilosophical literature is visionary in nature. Writing in the field provides a critique of the aspects of the modern worldview⁴ that could be seen to be environmentally problematic and provides suggestions about other ways of viewing the world and "being-in-the-world" (Merleau-Ponty, 1962, pt.3) that could be more environmentally benign. Absent from this literature, however, is an account of what it is like to actually live life through an ecophilosophical lens in twenty-first century North America.

The ecological education literature has to date been largely theoretical in nature. With the publication of *Ecological Education in Action* in 1999, the practice of ecological education appears to have developed sufficient breadth and longevity in order for a body of literature to begin to develop. To this point, however, the literature that does exist on ecological education practice is descriptive and programmatic in nature rather than critically assessing the merits or exploring the tangles of the work.

In other words, there is a gap in the ecophilosophical literature with regard to the tensions created and challenges that arise in living life through an ecophilosophical lens.

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1. There are general assumptions about reality, including man's place in Nature.
 2. There are general "rules of the game" for approaching problems which are generally agreed upon.
 3. Those who subscribe to a given worldview share a definition of the assumptions and goals of their society.
 4. There is a definite, underlying confidence among believers in the worldview that solutions to problems exist within the assumptions of the worldview.
 5. Practitioners within the worldview present arguments based on the validity of data as rationally explained by experts - be they scientific experts or experts in the philosophy and religious assumptions of the worldview. (p.42)

⁴This worldview has been termed industrial, eurocentric, positivist, western, scientific, technocratic and modern. Within this dissertation, I use the term "modern worldview" or "modernity" in keeping with the most common characterization of this worldview within the ecophilosophical literature. While there is no definitive, agreed upon interpretation of the characteristics of modernity, Bowman (1990) provides as clear and comprehensive a definition as I have encountered. He suggests that "the essential components of modern thinking are *dualism, mechanism, reductionism, materialism, determinism, individualism, anthropocentrism, and patriarchalism*" (p.7).

More to the point of this study, the literature is lacking an account of the actual living out of ecological education. My preliminary investigations in the field, both through personal teaching experience and through discussions with colleagues, indicated that there are significant challenges with ecological education from the perspectives of both students and teachers. These preliminary results led me to want to engage in a deeper investigation of the challenges of ecological education. From an academic perspective, this study aims to address the gap in the ecophilosophical and ecological education literature by exploring the lived reality of ecological education.

Pedagogically, this study aims to uncover the challenges of ecological education for both teachers and students, with an eye to improving ecological education practice. Environmentally, improving ecological education practice has the potential to improve human-environment relations. So, while this study concerns itself specifically with uncovering the challenges of ecological education, it is rooted in the long-term goals of increasing the effectiveness of ecological education and improving environmental sustainability⁵.

In this study, I have framed the difficulties of ecological education within a larger cultural context. Why is it not possible to simply keep the line of inquiry within the classroom, rather than speaking to larger issues of culture? The challenges that arise for students and teachers are culturally-specific. That is, ecological education would not provide challenges or, at least, would provide different and I would speculate far fewer challenges, if the education was taking place within an indigenous culture. In this case, there would be great kinship between the ecological and the native approaches to education, as can be seen in Cajete (1994) and Graveline (1998).

The majority of difficulties that students and teachers experience with ecological education arise out of the very different way in which ecophilosophy and modernity view

⁵Throughout this dissertation, I use the term "sustainability" to mean the possibility of the continuance of life. That is, if an action improves environmental sustainability, it increases the long-term likelihood of the maintenance of life on earth. Later in the dissertation, I use this term in a similar fashion but with a more metaphoric twist. That is, education which is sustainable also increases the possibility of the continuance of life, but in this case, "life" does not only refer to physical survival but to living with dignity, compassion, integrity and a sense of self worth.

the world. Challenges arise due to difficulties in comprehending a foreign worldview and in actualizing ways of being-in-the-world without structural supports in place for this way of being. Wounds arise due to attempts to live out a way of viewing the world that is "not being reflected in the culture at large" (Ray & Anderson, 2000, p.39). That is, when we speak of the challenges of ecological education, the vast majority of the time, we are speaking of the challenges of two cultures (ecophilosophy and modernity) rubbing up against each other. This study, then, aims to uncover the challenges for both teachers and students when engaging in a form of education that is based in a worldview that is different from the worldview of the surrounding culture, that is, engaging in ecological education in a modern world.

Unique Challenges of Study

This clash in cultures creates a unique challenge in undertaking this study. While an ecological worldview⁶ has diverse roots and is shared by people from a variety of traditions⁷, it is still a minority perspective within western culture. In a recent study, Ray

⁶Interpretations of an ecological worldview vary widely. (See Bowers, 1993b, pp.167-8; Devall & Sessions, 1985, p.69; Drengson, 1996, p.3; Naess, 1989, p.29; Sale, 1991, p.50; Skolimowski, 1981, p.30). The perspective used in this dissertation most closely parallels the Batesonian worldview as set out by Berman (1981). Bateson suggests that:

1. Fact and value [are] inseparable.
2. Nature is revealed in our relations with it, and phenomena can be known only in context.
3. Unconscious mind is primary; goal is wisdom, beauty, grace.
4. Descriptions are a mixture of the abstract and the concrete: quality takes precedence over quantity.
5. Mind/body, subject/object, are each two aspects of the same process.
6. Circuitry (single variables in the system cannot be maximized); we cannot in principle know more than a fraction of reality.
7. Logic is both/and (dialectical); the heart has precise algorithms.
8. Holism:
 - (a) Process, form, relationship are primary.
 - (b) Wholes have properties that parts do not have.
 - (c) Living systems, or Minds, are not reducible to their components; nature is alive.

(p.238)

⁷Devall and Sessions (1985) suggest that deep ecology (an influential form of ecophilosophy) finds its roots in

the perennial philosophy, the pastoral/naturalist literary tradition, the science of ecology, the "new physics", some Christian sources, feminism, the philosophies of primal (or native) peoples, and some Eastern spiritual traditions. The writings of Martin Heidegger, Gary Snyder, Robinson

and Anderson (2000) suggested that 26% of the American population (and we can assume similar statistics for Canada) align themselves with values that could be termed ecological (p.4)⁸. Using this statistic as a guide, it can be assumed that approximately three out of four people in any given group will *not* be so aligned.

The subject matter of this study, therefore, finds its roots in a worldview that will be foreign to many people within western culture. This reality has formed the basis for many of the decisions that have been made within this study. In particular, the foreign derivation of this work has effected the method of interviewing participants, the structure of the dissertation, the style of writing in Section I of this dissertation and, to a lesser extent, the manner of reporting the study results in Section II of the dissertation. Each of these challenges will be taken up in detail in the appropriate section below.

The overarching implication of conducting research that takes place within a foreign worldview is that this work has necessarily become a study within a study. That is, as I stated above, the primary purpose of this study is to describe the challenges that arise for educators and students in the living out of ecological education. The foreign worldview, however, has required a secondary purpose of this work. In order to understand the challenges that arise when taking part in ecological education in a modern world, this study aims to take the reader inside an ecological perspective and to show what the world looks like through that lens.

Study Design

In attempting to understand the challenges of ecological education, I chose to conduct interviews with ecologically-oriented educators and their adult students⁹. I was endeavouring to speak with people who were on both sides of the ecological / modern

Jeffers, John Muir, and David Brower have also contributed greatly to the deep ecology perspective. (p.80)

⁸Ray and Anderson use the term "cultural creatives" to identify this segment of the population. This group has many attributes which will be discussed throughout this study as belonging to an ecological worldview.

⁹Other research approaches which were considered are discussed in Appendix B3.

cultural divide. I anticipated that the ecological educators would be able to represent the challenges that arose from the perspective of a person aligned with an ecological worldview and the students would be able to speak of the challenges that arose for a person aligned with a modern worldview who was encountering an ecological perspective for the first time.

i) Participant Selection

The educators were chosen for this study through the use of purposeful sampling (Schumacher & McMillan, 1993, pp.378-83). I sought educators who lived within the world of ecological education, who saw the world through an ecological lens, and who could therefore speak knowledgeably and with a depth of experience about the challenges that were evoked by living and teaching ecologically in western culture. I used two criteria for choosing these educators. First, I was seeking educators who understood the world ecologically. Second, I was interested in educators who experienced a sense of dissonance or found obstacles with teaching from this perspective and were able to articulate these concerns.

Regardless of their educational context or their course content, all of the instructors selected shared an ecological worldview (though they wouldn't necessarily label it as such), grounded their teaching practice in the understandings of that worldview, and shared an ability to articulate the tensions that such a worldview caused for their teaching. In selecting these educators, I turned to people with whom I had already had the kinds of conversations about teaching practice that I hoped would occur as part of the research study.

Selecting the student participants was somewhat more challenging. I wanted to talk to students who had been exposed to an ecological approach to teaching, who had found difficulties or conflicts with this approach, and who were willing and able to articulate their experiences. If I simply put a request for participation out to classes, and had students self-select, then I was not likely to gain the participation of those students who felt the most tension with ecological approaches. If, on the other hand, I asked teachers to select

students whom they felt might meet my selection criteria, the danger existed that the students would not feel the freedom to refuse or would participate out of a sense of obligation to their teacher.

I ended up using a combination of these two approaches. I placed a call for participation out to classes of three of the participating teachers. The students then self-selected. The other two teachers suggested suitable students to interview but these students had taken courses that were already completed so that fear of reprisal for non-participation was not an issue.

I did find the students in this study to be more receptive to an ecological perspective than the typical student whom I had encountered in my own teaching practice. I suspect that, in part, this openness was due to self-selection: those students who were hostile towards ecological approaches simply didn't agree to participate. But I also wondered whether I had misread the "average" student's response. That is, had I magnified the sense of "otherness" in my own mind because when it did arise, it was bounded by such an uncomfortable and unpleasant type of interaction?

Or, on the other hand, had I correctly identified the conflicts that were emerging in the classroom between an ecological perspective and a modern perspective, but are these conflicts not as prevalent in a one on one situation? That is, in a classroom, I am perceived as an authority figure with all of the mixed emotions that such a role evokes for students and myself. In an interview situation, there is still an awareness that I am the "teacher" and now I am also the "researcher". Yet at the same time, the students and I could speak more as human beings who share very real desires and struggles in the world. There is a commonality that is more easily tapped in a one on one interaction.

In any case, the students whom I interviewed were articulate, candid and insightful. Despite their receptivity to ecological approaches, they were able to point out places of tension that were evoked by ecological education. At times these tensions were framed as "I like the ideas in theory, but the application is difficult". Sometimes they were framed as "I find the ideas appealing but my classmates didn't". Sometimes the difficulties were stated in the same way in which the instructors spoke of their struggles: as the conflicts with self and society that living life through an ecophilosophical lens engenders.

Initially, I briefly considered interviewing the young students of the teachers who taught in the school system. I quickly realized, however, that this undertaking would require a different research design and would not necessarily provide access to the types of ideas that I was seeking to untangle. The different perspective offered by teachers who teach in the school system gave a more well-rounded analysis of the tensions between ecological perspectives and modern perspectives in the classroom. Understanding their students' perspectives, however, will require another research study.

I interviewed seven educators¹⁰. Three of these teachers taught in the public school system, two at the junior high level, and one at the elementary level. As mentioned above, there are no student interviews associated with these educators. Four of the educators taught adult students. (The fifth adult educator mentioned above is myself. While my experiences are not included in the interview data, my students were among the student participants interviewed.) One of these educators taught a general interest course in a non-formal setting. The rest of the adult educators taught in a formal university setting. One of the adult educators taught an optional credit course to undergraduate education students; one taught a required credit course to graduate education students; and one taught a required non-credit course to education students in a certificate program. One of the students in this final course was not enrolled in the certificate program but rather was taking this one course as an elective continuing education course. My own students came from two different courses in two different faculties both at the undergraduate level. The education course was a required credit course and the environmental philosophy course was an optional non-credit course. Four of the instructors interviewed were female and three were male. They ranged in age from mid-thirties to mid-fifties.

I interviewed twenty students. One student withdrew from the study, leaving nineteen interview transcripts that were included with the student data. Four of the students were enrolled in an education certificate program; four of the students were enrolled in an education undergraduate program; two of the students were enrolled in an education graduate program; one student was taking an elective continuing education course for

¹⁰Pseudonyms are used for study participants throughout this dissertation.

professional development purposes; five students were enrolled in a recreational yoga course in a non-formal setting and three students were enrolled in an elective course in environmental philosophy at the undergraduate level. Eleven of the students were female and eight were male. They ranged in age from early twenties to late sixties.

ii) Interview Protocol

The interviews were conducted at a mutually agreed upon place: at a participant's place of work or home, in a university classroom or in my own home. Choosing a place that would have a casual atmosphere where participants would feel comfortable and at ease, while respecting their privacy, was essential in order to provide a conducive atmosphere for the types of conversations that I was hoping would occur.

The instructors were asked to schedule three hours of their time and the students were asked to plan on one hour of time for the interview. The three hour time period was based on past experience with conversations of this nature. That is, generally when a dialogue on ecophilosophical ideas got rolling and colleagues and I found ourselves drawn into the topic, the discussion would continue for two to three hours before either the conversation began to dwindle or we would "come to", noticing the passage of time and becoming aware of other obligations that waited.

The selection of a one hour time period for students was based on conjecture and consideration. I anticipated that the conversations wouldn't have a momentum of their own in the same way that the instructor conversations would, both because the students and I didn't know each other, and because we didn't share common ground that we wished to explore. Going into the interviews, I also perceived that the students were "giving up" their time for me, whereas the instructors were "sharing" their time with me. That is, I hoped and suspected that the instructor conversations would be mutually beneficial and pleasurable, whereas the students were, I felt, doing me a favour. As such, I wanted to honour their needs and keep their time commitment to a minimum.

I had, in the back of my mind, three questions that I was seeking to explore in the instructor interviews:

1. What are your past experiences or beliefs that have led you to engaging in ecophilosophically-oriented work?
2. How do you define ecological education?
3. What are the challenges that have arisen for you in teaching through an ecophilosophical lens?

For the students, I had one question in mind:

1. What are the challenges that you experienced in taking part in ecological education?

Before each interview, however, I wrote down a list of questions that were specific to the person whom I was about to interview and to their educational context.

At the beginning of the interview, along with going over procedural matters, I gave a brief synopsis of the study purpose discussing my interest in the topic and the participant's role in the study. This introduction provided an opportunity to clarify questions for those participants who were not quite certain of the study purpose and provided a framework for discussion for those people who were well versed in the field and very familiar with my intent.

As I became more skilled at succinctly and clearly describing the study purpose, I found these couple of minutes of discussion to be invaluable. They were an opportunity for me to speak from the heart about my passions and my concerns. This genuine sharing seemed to put the participants at ease and set the tone for the rest of the discussion. Often participants got drawn in to the ideas that I was putting forth and the interview immediately took on a life of its own. In these cases, I actually needed to rein the conversation in so that all procedural and ethical considerations were agreed to before I turned on the tape recorder.

If a topic had not already emerged through our introductory conversation, I began the conversation with one question, typically quite a general question, from my question list. With the student participants, the interviews, at least at first, were somewhat of a fishing expedition. These conversations were one place where the unique challenge of this study, based as it was in a foreign worldview, had to be taken into account. That is, the students and I didn't share a common frame of reference or a common understanding of what an ecological worldview might look like. As students had not necessarily encountered

the terms "ecological worldview" or "ecophilosophy" or "ecological education" before, I also couldn't rely on a shared vocabulary.

I knew that I wanted to understand student challenges with ecological education, but I didn't know where those challenges lay, if they existed at all, or how to get to a place where I could uncover them. I started the conversation, therefore, with very general questions about the reasons that the student had taken the course in question, their response when they looked over the course outline, and general initial reactions to the course. Usually these early questions provided a non-threatening introduction that helped the participants to begin to open up and provided me with a couple of entry points that I could probe further to deepen the discussion.

For both the instructors and the students, after the initial questions, I took my direction more from comments that the participants made than from my list of questions. This approach was a very important characteristic of the interviews in helping me to obtain rich data. I proceeded in this way for three reasons. First, while I knew the general territory of the information that I was trying to obtain, I did not know specifically where the knots arose for any one person. I needed participants to lead me to their areas of concern and that could only happen if I followed their lead. Second, I knew from experience that the ideas that I was trying to explore were multi-layered, difficult to articulate and often lay more in the realm of vague intuitions than concrete, pre-considered responses. Arriving at the depth of conversation that I hoped for and intended required time, gentle probing, circling away from and back to ideas. A linear format of questioning could actually cut off insights because, for the most part, the information that I was seeking could not be pre-packaged or neatly laid out on an intellectual level but rather required time for pondering to allow a gentle, organic emergence. Third, it was very important to me to honour the integrity of the participants by treating them with the respect that all beings deserve. Linear forms of questioning can come across as intrusive, treating the participants as data sources rather than human beings.

The conversations continued until they ran out of steam, or there were other pressing time commitments. The responses that emerged from the interviews were analyzed in a manner that is described in detail in Appendix B2.

iii) Researcher Stance

While the above procedures outline the decisions that were made with regard to research design, they beg the question: "what guided the decision-making process?". My major concern in every aspect of this study was to be guided by the topic rather than imposing a predetermined approach onto the topic. This focus was important to me for several reasons. First, I wanted to honour the integrity of the work and listen to its call in much the same way as ecophilosophy was suggesting we honour the integrity of the world, 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. In doing so, I hoped to achieve some resonance between research process, topic and writing style. My attempts at being guided by the topic in making research decisions resulted in the "ecological method" that is discussed in detail in Chapter Three.

Study Limitations and Boundaries

The desire to follow the demands of a topic does produce its own set of challenges. When work is guided by a topic rather than a disciplinary foundation, then the fields of inquiry on which it draws are many and varied. That is, when attempting to understand a topic in the way in which it occurs in the world, the topic is found in a truly integrated state, with threads leading in many directions. A researcher can't follow all of these directions and still maintain focus. I had to acknowledge, therefore, that although this work draws on the fields of psychology, sociology, anthropology and theology, to name a few, the strands that I would follow belonged to ecophilosophy and ecological education¹¹.

¹¹The ecological / modern tension is taken up by writers in a variety of fields who focus on issues which are specific to their discipline. See Hillman & Ventura (1992) and Roszak (1992) for the field of psychology; Drengson (1983) and Skolimowski (1981, 1994) for philosophy; Berry (1988) and Fox (1994) for theology; Capra (1982) for physics; Barlow (1997) and Wilber (1998) for the philosophy of science; Mander & Goldsmith (1996) and Smith (2000) for economic discussions, and Norberg-Hodge (1991) for studies of indigenous populations. Writers such as Berman (1981) and Harman (1988) provide a more broad-based historical and cultural discussion of these tensions.

Beyond decisions about disciplinary boundaries, a researcher needs to carve out the boundaries of inquiry that will be pursued. For example, I would have liked to explore in more depth the process of cultural change, theories on intercultural communication, supporting forms of pedagogy such as transformative, spiritual, holistic and indigenous education and the ties of the ecological method to phenomenology, hermeneutics and action research. While I spent some time pursuing each of these lines of inquiry, in order to maintain focus on the study at hand, these topics had to be put aside for later research.

Most significant of the boundary delineations was the decision to take the worldview of ecophilosophy at face value and to not engage in a critique of this perspective. Whether an ecological approach to teaching and living is actually more environmentally benign, whether living life in such a way is desirable even if it is shown to be more environmentally benign, the costs and benefits and inconsistencies of living in such a way and the multiple interpretations of both ecophilosophy and environmental problems are all important conversations to have. Similarly, the ecophilosophical critique of modernity is far from problem free, and is deserving of attention. Modern thinking has brought many benefits and many difficulties that can be viewed from a variety of perspectives¹².

I have chosen not to engage in an analysis of these multiple interpretations for the following reason. Whether one agrees or disagrees with ecophilosophy, and whether one agrees or disagrees with modernity, the challenges that have arisen at the encounter point of these two ways of thinking, still arrive. The important task of this work is to understand the challenges from the perspective of the students and the teachers. For example, Ray and Anderson (2000) suggest that "from within the Modern worldview, it is almost impossible to encounter another culture sympathetically and on its own terms" (p.70). This dominant nature of modernity causes pain for ecologically-oriented people. (See Chapter Four.) The intent of this study is not to question the legitimacy of this sense of woundedness but rather to try to empathetically understand the pain. Similarly, students who expect a linear structure and predefined goals in their educational process, become frustrated, resentful and

¹²See Wilber (1998) for a discussion of the "dignity and disaster" of modernity.

angry when they come up against the meandering, seemingly directionless nature of ecological education. (See Chapter Five.) The intent of this study is not to call their desire for structure into question nor to question the legitimacy of their anger. Rather, the point is to understand that for people raised within a modern culture, these particular challenges are evoked by ecological education.

This intent of accepting at face value the challenges of encounter between ecophilosophy and modernity does not preclude the sort of critique suggested above. Yet, as with the other lines of inquiry that had to be abandoned in order to maintain study focus, this argumentation has had to be postponed for later research studies.

Finally, the work is bounded by decisions regarding study population. In the case of this study, I chose to limit my selection of study participants on a geographic basis to the province of Alberta. As a province with a long-term conservative government, a reliance on and strong ties to the oil industry, a history of connection to the land through ranching and a population that tends to take pride and pleasure in the outdoor environment, this particular group of study participants may differ in their allegiances to an environmental ethic or to a global economy from populations with different economic, political and environmental realities.

Furthermore, the specific participants who were interviewed are all white, middle class, able-bodied and well educated Canadian citizens. They occupy places of relative privilege within society and, at least superficially, do not represent marginalized populations. These demographic characteristics may influence their openness to ecological perspectives as well as their leisure time to engage in philosophical questioning.

Finally, the group of educators are all between the ages of 35 and 55 and therefore reached the age of majority in the 1960s and 1970s. They came of age, therefore, at a time of great social consciousness when cultural norms were being actively questioned. The desire to question assumptions, challenge norms and look at ideas from a variety of perspectives, as well as the opportunity to have exposure to non-mainstream ideas and a critique of western, industrial values are listed in Appendix C1 as common characteristics of ecologically-oriented educators. The educators interviewed for this study may, therefore, be of an age group which is uniquely receptive to ecological approaches due to the

correspondence of their early adult years with a time in North American culture that was rife with the type of cultural critique that provides nurturance for ecologically-oriented educators.

Communication of Results

i) Dissertation Structure

The second way in which the unique challenge of foreignness has surfaced in this study is in the overall structure of the dissertation. While traditional dissertations follow the format of Introduction, Literature Review, Research Method, Research Results and Discussion and Conclusion, there have been several significant changes in the format of this dissertation.

First, and perhaps most significantly, the majority of material that would typically be considered to comprise the literature review and research method have been assigned to the appendices of the dissertation. This placement was based in an attempt to bring the reader into the appropriate frame of mind for understanding an ecological worldview and thereby assist with understanding the challenges that form the basis for the empirical aspects of this study.

An analogy can be drawn to reading a poem. While it is possible to rationally analyze a poem, looking for reasons behind word choice, historical references, rhythm and pattern and rhyme, to truly understand the spirit of the poem, the reader typically enters into the vision of the poet, listening from the heart, from a place of empathy, shared experience, memory and participation in the world¹³. The same is true of attempts to understand an ecological worldview. The words of study participants are best understood when read from a place of sympathetic resonance which is based in reflection on the reader's own life experience.

One of my tasks then in writing this dissertation was to help the reader to enter into the mindstate that is most conducive to hearing the truths of an ecological perspective.

¹³For lively discussions about the function and form of poetry, see Berry (1983) and Snyder (1980).

Contextualizing the research and providing information about the method undertaken was as important in this dissertation as it is in any doctoral work. But putting this rather linear form of discussion in its typical placement, preceding the study results would, I feared, take the reader into a mindset that would make hearing of and understanding of the subsequent work more difficult. As such, the background information has been placed in the appendices.

The second unusual aspect of the dissertation structure is the inclusion of Section I. Whereas the placement of the background information in the appendices was based in an attempt to ensure that the reader didn't get pulled into the wrong mindset for reading ecophilosophical writing, Section I is an attempt to actively pull the reader into an ecological worldview. As was mentioned above, while the original intent of this dissertation was to uncover the challenges of ecological education for teachers and students, the foreign worldview in which this work takes place necessitated a second study purpose: helping to establish a sense of familiarity with an ecological worldview. Since the establishment of that familiarity must occur prior to discussion of the empirical study so that the challenges of ecological education can be fully understood, this secondary purpose forms the basis for Section I of the dissertation.

Section II provides the study results, discussion and conclusion. In other words, while stylistically Section II is somewhat unusual (see the discussion below regarding stylistic choices), its content is in keeping with a traditional report of empirical research.

Although Section II provides a conclusion to the empirical aspects of the study, the study as a whole is not thereby complete. Since there are two purposes to this study, some discussion is required to bring the two purposes together and provide a sense of cohesion for the study as a whole. The purpose of Section III is to draw the two study strands together.

Section I of this dissertation attempts to demonstrate that an ecological worldview is not often lived out in western society, discusses the possible reasons that this perspective is lacking and outlines some of the problems that have resulted from eschewing an ecological perspective. Section II suggests that embracing an ecological worldview within a modern world is problematic and outlines some of the challenges in attempting to be in the world

and conduct education in an ecological manner. Section III therefore asks the question, "what then?"¹⁴. How do we proceed in the face of the knowledge that Section I and Section II have elucidated?

The layout of the dissertation, then, is as follows. Section I, *Leaving Home*, attempts to bring the reader into an ecological worldview. Through a description of the personal path that led to the undertaking of this doctoral study, Chapter One, *Sharing Stories*, attempts to show the pleasures of understanding the world ecologically, and the sense of disconnection and bewilderment that can occur when one turns one's back on an ecological perspective. Chapter Two, *Losing our Way*, moves from a personal story to a cultural story. This chapter provides the theoretical and philosophical underpinnings of an ecological worldview; provides evidence that, as a society, we are not strongly rooted in an ecological perspective; and suggests that ecological education may be a means for reconnection. Chapter Three, *Exploring Topos*, attempts to further elaborate an ecological worldview by demonstrating what it might look like to live ecologically within a particular context, in this case, as an academic researcher.

Section II, *Against the Current*, discusses the findings of the empirical research undertaken, uncovering the challenges of ecological education for both teachers and students. The first three chapters of this section are organized thematically. Data analysis¹⁵ showed that ecologically-oriented people have three strong threads that run through their lives forming an important part of their interpretation of a life well-lived. Each of these threads forms the basis for one of the chapters. Chapter Four explores the necessity to live out one's truth, or in Parker Palmer's (1998) words, "to live divided no more" (p.167). Chapter Five suggests the importance of living in a state of connectedness to the rest of creation, or living in a "state of grace" (Spretnak, 1991). Chapter Six is based in the

¹⁴Garret Hardin (as cited in Orr, 1992) has suggested that ecological literacy is the ability to ask "what then?" (p.85).

¹⁵See Appendix B2 for a detailed outline of the data analysis procedures.

imperative to take pleasure in the world, to be "surprised by joy" (Lewis, 1955)¹⁶. Chapter Seven mines the narrative of these three chapters to provide an outline of the empirical study results.

Section III, *Coming Home*, consists of one chapter, *Living Between Dreams*. As mentioned above, this chapter brings together the ideas of Section I and the findings of Section II to look to future implications.

This section is followed by a reference list, and three appendices. Appendix A contextualizes the research by outlining where the work fits within the field of ecophilosophy (Appendix A1), ecological education (Appendix A2) and environmental education (Appendix A3).

Appendix B provides information related to the research method in addition to the information regarding research design discussed in this preface and researcher stance discussed in Chapter Three. More specifically, Appendix B provides an audit trail (Lincoln & Guba, 1985, pp.319-20) for the research. Appendix B1 contains participant consent forms. Appendix B2 provides a step by step outline of data analysis procedures along with samples of data at each step of the process. Appendix B3 provides a discussion of those paths of the research design and data analysis that were abandoned and discusses the reasons that these avenues were not pursued.

Appendix C provides an overview of ideas that may be helpful for those readers who wish to engage in ecological education. Appendix C1 outlines the characteristics that were held in common by ecological educators. Appendix C2 mines an abandoned path of data analysis to provide an overview of the categories of challenges that students encountered with ecological education. Appendix C3 provides a list of the suggestions made by educators and students to help ease the process of ecological education. Finally Appendix C4 takes the first step in the process of outlining criteria for the development of effective ecological education programs based on the three themes that underlie Section II of the research.

¹⁶Surprised by joy is the title of C.S. Lewis' autobiography which, in turn, comes from a poem by Wordsworth. Educator and study participant Emma Applegard uses the term "surprised by joy" frequently to denote a way of being-in-the-world which is full of gratitude for the beautiful moments of life.

ii) Dissertation Style

Section I - Leaving Home

In the writing of Section I of this dissertation, the issue of foreignness found its greatest hurdle. As was mentioned above, the purpose of Section I is to bring the reader into an ecological worldview in order to provide the context within which the challenges that are the topic of the empirical study, can be well understood.

But how does one go about explicating a foreign worldview? Cognitive means and linear argumentation aren't helpful because the ideas put forth are understood and assessed through an inappropriate lens. Furthermore, as discussed above, entering into the analytical aspects of mind can actually undermine attempts at understanding.

In undertaking the work of explicating a foreign worldview, I have one advantage over the ethnographer. While it is true that an ecological worldview and a modern worldview are based in very different, sometimes incompatible assumptions and therefore understand the world quite differently, it is also true that "all human systems of logic exist within the grand cosmologic" (Spretnak, 1991, p.81). Modernist, postmodernist, positivist, hermeneut, critical theorist: we are all ecological beings.

My challenge then is to tap into the ecological heart that beats within us all. I have chosen a variety of ways to attempt this task. At times, I take the reader to stories of those people who live life from inside an ecological lens as with Naess' story of watching the death of a flea in Chapter Two and Henley's story of opening to the possibilities of plant vibrations in Chapter Three. At times, I describe my own experiences with the realization that the only stories that I know intimately enough to embroider with the required detail and genuine emotion to bring them to life, are my own stories¹⁷. Whether I am sharing my own

¹⁷Personal stories are also used as a means to avoid being presumptuous about the reader's experience and beliefs. That is, I believe, and anecdotal evidence has indicated, that ecological understandings resonate with each of us. But I can't nor do I wish to speak for the reader or presume what his or her experience may have been. By owning the stories myself, I can speak from a place of certainty of experience and can provide the reader with the room to create distance. At the same time, stories provide a way of sharing knowledge and

tales or others', it is hoped that, while the reader won't have identical experiences, s/he will have experiences that are close enough in kind to relate.

Sometimes, I turn to universal human experiences, as with the discussion of the death of a loved one, that arises in Chapter Two. Through turning to a fundamental and shared human experience, we may truly begin to understand that "within each person lies the 'divine spark'" (Miller, 1993, p.61) that connects us to each other, and connects us to the cosmologic that Spretnak mentioned.

At times, I turn to popular icons and current events. By viewing familiar situations through an ecological lens, we have the advantage of having common ground on which to hang unfamiliar interpretations. In Chapter Two, the discussion of signs that may indicate that we have ceased listening to earthly resonances uses this approach. The goal in this section is to show the world through an ecological perspective, to demonstrate how common everyday experiences are viewed from the perspective of a person who holds an ecological worldview.

At times, I turn to poetic citations from gifted writers. The creatives among us seem to live in a state of connection with their own ecological heart and are capable of finding ways that tug the reader inside those understandings. Most notably, this is the case with the passage from W.O. Mitchell's (1947) *Who Has Seen the Wind*, that I use to frame the idea of the ecological self in Chapter Two.

Finally, I attempt to bring the reader into an ecological worldview through the style and tone of the writing itself. The tone is intended to be meditative, urging the reader to stop a while, to contemplate and to dig deep into her heart. I intend for the reader to be lulled into slowing down, to go gently and easily with himself. This work is intended to hold the reader in the embrace of an ecological worldview, to experience both the agony and the joy of living there, and the affection, generosity and lamentation that accompany an ecological way of being-in-the-world.

Though the task of writing necessarily leads to simplification, I attempt to avoid foreclosure, holding open the complexities of life that an ecological perspective hopes to

finding commonalty. If the reader, therefore, has undergone similar experiences, my hope is that s/he will read him or herself into the story and connect with his or her own life's tale.

maintain. The style meanders, gently drawing open ideas, leaving them and coming around to them again, unfolding in the way that understanding in the world actually occurs. It is hoped that the reader will be able to have patience with this pace and style. These chapters don't present argument after argument in a classic thesis statement per paragraph manner. But through the unfolding of the words, a tale is told so that by the end of each chapter, the reader should be taken a little bit closer into the heart of an ecological worldview.

I am faced in this section with the challenge of using a linear form of communication to help the reader to enter into a non-linear way of seeing the world. I am attempting to provide analysis without switching over to an analytical mindstate. I am aware that the results will not be perfect and will not be satisfying to all who read this work. I am hoping, however, that the reader will go with me on this adventure and open his or her heart to the challenge of entering into an ecological worldview.

Section II - Against the Current

The presentation of study results, the purpose of Section II, posed the greatest stylistic challenge. I hoped to accomplish two tasks through this section. First, I wished to bring to life the challenges of ecological education for teachers and students in their own words and through their own experiences. I wanted to show what the challenges were and what those challenges meant within the lives of the study participants. Second, I wanted to frame those challenges within a larger cultural perspective. That is, I wanted to help the reader to understand why these challenges might arise for a person who viewed the world through an ecological lens or a person who viewed the world through the lens of modernity who was encountering ecological thinking for the first time.

I hit snags with both of these goals. Problems arose with the first goal due to the nature of emergent research (Lincoln & Guba, 1985, p.41). When I conducted the interviews, I didn't know that participant stories would provide an important means of communicating the research results. My conversations with study participants took place more on the level of idea sharing. Although there were some stories that were an inherent part of that idea sharing, there was not sufficient contextualization or an adequate number of rich stories to be able to allow participant experiences to speak for themselves. At the

time of writing, I needed to work with the data that I had collected, and that data was in the form of opinions and perspectives about ecological education.

The second goal encountered a different obstacle. I realized that providing the type of cultural context that I hoped to offer, was going to involve me in another research study altogether. For example, one of the issues that was highly problematic for both ecologically-oriented study participants and those who were challenged by ecological perspectives was our societal relationship with time. Students were frustrated by the slow pace of ecological education and by the long time in which it takes to build the relationships required for deep learning and to truly internalize the ideas that were being shared. Ecologically-oriented educators, on the other hand, were frustrated by the fast pace of modern society and the demands to always come to quick resolution for difficulties and then move on to the next idea to assimilate. In order to provide the cultural contextualization that I was hoping to offer, it became clear that I would need to undertake in-depth cultural and historical research on our cultural relationship with time, our notions of productivity, our view of how learning takes place, and our beliefs about self-care and downtime. Time was only one of many contested issues that arose. It became clear that this cultural contextualization was not possible within the parameters of this study, though I do hope to take up these ideas in subsequent research¹⁸.

The goal of Section II then became much less complex. I wanted to indicate the challenges that arose with regard to ecological education for both teachers and students, and to substantiate my assertions with evidence from the interview transcripts. In doing this work, I came up against a different obstacle that was more related to my own sense of integrity with this work. No matter how many times I organized and reorganized the chapters and recategorized the challenges that had arisen, I seemed to have lost the spirit of the study participants' words and of their concerns. I felt a strong sense of obligation to the

¹⁸I do provide limited cultural contextualization for the theme which undergirds Chapter Five. An in-depth discussion of the meaning and implications of understanding oneself embedded in creation is well beyond the scope of this study. It was necessary, however, to provide some framing for this theme because it engenders a very large conceptual leap from modern perspectives and because the shift in understanding which is required is not apparent on the surface.

study participants who, in many cases, had chosen to share their pain and vulnerabilities with a total stranger. Providing a fragmented and soulless account of their challenges with ecological education felt like a betrayal of the study participants.

I settled on the current style for Section II. I took the three themes that undergirded the lives of ecological educators and, in a sense, threw them back out to the study participants to ponder. That is, while I didn't literally take these themes back to the study participants for a large-group conversation, I went back to their collective interview transcripts and pulled out the various concerns and opinions that surrounded each theme. I then organized the study participants thoughts into a discussion around the theme. The conversations meander with comments building on one another, offering clarification and support, moving off in tangential directions, disagreeing, offering alternative interpretations. Through these meanderings, the challenges of ecological education are shared from the perspective of students and teachers. Chapter Seven then returns to a more conventional writing style to pull the challenges out of the three thematic chapters and to provide a summary of the research findings.

iii) Assumptions of Dissertation

Embedded in the writing style discussed above are many assumptions about what constitutes valid knowledge, how we come to know, how communication occurs, what constitutes a life well-lived and what the purposes of knowledge are. This section provides a brief outline of the more significant of these assumptions along with their implications for the writing of this dissertation.

Sharing a Personal Vision

First, this dissertation is rooted in the belief that scholarship within a highly complex, speculative, multi-faceted, contentious field such as human-environment relations revolves around adding a reasoned voice to the conversation. For example, when Lynn White Jr. (1967) speculated that environmental problems were rooted in the Judeo-

Christian underpinnings of society, he was not offering the only possible interpretation for environmental degradation nor was he presenting the whole picture. But he did open up discussion within the environmental thought community, discussion that has been vital and vibrant and argumentative and ever-changing for more than thirty years. And he did offer one interpretation of environmental problems that was worthy of a hearing.

Similarly, in this dissertation, I am offering *a* perspective, my personal interpretation of the environmental challenges that we face. My intent is not to claim that I have found the solution to environmental deterioration nor have I pinpointed the ultimate cause for this decay. I am simply adding another voice to the conversation. My interpretation is based in twenty years of being involved in environmental work, reading hundreds of books and articles on the subject of human-environment relations, thousands of hours of discussion with colleagues and thousands more hours of thinking and working through ideas. From that experience and that knowledge base, I have taken in the ideas that I have encountered and put them together in a way that is influenced by my own understanding of the world. Ultimately, in such a complex and uncertain field, I don't think that we can do anything else. None of us has a monopoly on truth. But we can offer ideas so that we can figure out together how we might live better on the earth. My response to that question is offered throughout this dissertation, and most significantly, in Section I of this work.

Background Literature as Community Members

If all that we can 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.

This work owes a large debt to many gifted writers and thinkers who have provided me with a sense of homecoming and safety to explore my ideas, have pushed my ideas to greater depths through their own work, and have forced me to consider alternative perspectives. Yet as influential as these people have been to my work, they are not, I believe, experts to whom we must defer, nor sources to be cited as representing truth or

substantiating one's own position. They are simply community members to whom we may eagerly listen, elders to whom we may turn in order to gather wisdom, virtual friends with whom we may share stories or extend empathy for their own struggles¹⁹.

As such, literature is cited throughout this dissertation, but it is rarely cited as substantiation for the ideas that I put forth. Rather, the literature sources are included to offer another perspective or a further elaboration or a well-crafted turn of phrase or a story that crystallizes a point that I am trying to make.

Truth Claim of Experience

Implicit in the discussion above is the suggestion that truth comes in many different forms. Throughout this work, I turn strongly to the value and validity of life experience as a basis for truth. The desire to reclaim the validity of life experience and to reawaken the ability to tune into that wisdom is, in fact, one of the goals of ecological education as I have interpreted the endeavour in this dissertation.

As this reclamation is a goal, so the validity of experience is also an assumption that underlies the writing of this work. This dissertation, therefore, points to life experiences in helping to elaborate ideas that are being discussed. The challenge with suggesting that experience has a truth claim is that we need to have some way of discerning which experiences are worthy of listening to, and which interpretations are well-grounded enough to provide substantive information. The way towards that discernment is not clear or simple, but this challenge is taken up in Chapter Two.

The Nature of Critique

This work is critical but the intent is not to tear down but to build up. In the same way that a good friend will be blunt about our shortcomings in order to help us to grow, I take North American society and cultural institutions to task. This approach can be offensive to some readers and can seem arrogant to others. My intent, however, is not to

¹⁹See Pivnick (1999/2000) for an elaboration of the relationship which ecological educators have with their environmental elders.

antagonize, but to find ways of living that are more generous, more kind, more fulfilling. I believe that this goal demands that, at times, we must do the frightening and uncomfortable work of confronting our assumptions and our taken-for-granted ways of living.

This work is based in the belief that there is a bottom line in life as articulated by Thoreau (1854/1981) and Muller (1996). In speaking of his Walden experiment, Thoreau states that "[he] wished to live deliberately... and not, when [he] came to die, discover that [he] had not lived" (p.172). Muller elaborates this point: "If we are aware of our mortality, we can live less by accident and live instead with clarity and purpose" (p.xii). I believe that living in a manner in which we will have no regrets at the end of life requires facing fears, acknowledging mistakes and weaknesses, being self-reflective and self-critical, staring down hypocrisy, calling into question commonly held assumptions, looking beyond the immediacy of desires, stepping outside of our comfort zone, having the courage to not simply slide into what is easy and safe, extending a hand in care and compassion, admitting confusions, sharing vulnerabilities.

While undertaking this process may seem confrontational and, at times, abrupt, this critique is undertaken in the spirit of hope that as a community (academic, educational, environmental), we can work together to help each other through the fears and to work towards ways of living that are meaningful, fulfilling and compassionate.

Critique of Everyday Life

While living life in the manner suggested above sometimes involves large-scale questioning, more often than not, it simply requires taking the lens of scrutiny to everyday life. Many of the issues that arise in the empirical part of this study, therefore, are small, ordinary concerns: challenges and wounds that many people experience everyday and take as part of life.

This dissertation is based in a desire to live well and kindly on the earth with our fellow creatures, human and otherwise. With that intent in mind, the everyday insults of life - the small ways in which we demean each other, in which goals aren't nurtured and in which individual truths aren't supported - become part of the ground for critique. When confronted with these small insults, this dissertation asks, "do we need to live in such a

way?”. Are there ways of approaching life, conducting research, teaching, conversing, relating that are more life-affirming and sustainable? By listening to the study participants' words and bringing to light some of those injuries with which we live everyday, this dissertation aims to open discussion about the acceptability of the taken-for-granted wounds with which we live.

Contribution to the Field

The research study, *Against the Current: Ecological Education in a Modern World*, is designed to uncover the challenges that are experienced by students and teachers in a modern culture when engaging in ecological education. This study has the potential to make a contribution to the ecophilosophical and ecological education literature by taking the vision that the literature provides, and investigating the challenges of living out that vision in the actual existing world, thereby beginning the process of filling a current gap in the literature.

Furthermore, this study aims to contribute to the field of educational practice by outlining the challenges of ecological education for both students and teachers. By providing this base-line information, this study has the potential to assist educators in teaching and developing ecological education programs that are sensitive to and responsive to the types of challenges that ecological education evokes.

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This doctoral work would not have taken shape without the personal support and encouragement and professional assistance of many people. While it would be impossible to name every person who has, in some way, left their mark on this work, there are several people who are deserving of a special mention and a heartfelt thank you.

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Dedication

To my mother and the memory of my father

who both always encouraged me

to "step to the music which [I] hear, however measured or far away"

*Henry David Thoreau. *Walden* (1854/1981. p.345)

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Epigraph

School, I don't think, really helps you find out where you're supposed to go at all. I don't know if that's what it's made to do, but it doesn't. I do wish that school taught you more about making sure that you have a creative pulse all the time.... Like being soulful, whatever your soul tells you that you need to do.... But that's sort of my problem. Somehow I ended up without that, so now I have to find it.... I'm not sure if there is something out there that is really fulfilling and that's really going to help us out in the whole emptiness that people end up feeling a lot of the time. But I think it does lie somewhere hopefully for me in sharing and caring and loving other people.

Suzanne Young, Environmental Science Student, University of Calgary

As I sat there on the rock I realized that, in spite of the closeness of civilization and the changes that hemmed it in, this remnant of the old wilderness would speak to me of silence and solitude, of belonging and wonder and beauty. Though the point was only a small part of the vastness reaching far to the arctic, from it I could survey the whole....

I named this place Listening Point because only when one comes to listen, only when one is aware and still, can things be seen and heard. Everyone has a listening-point somewhere. It does not have to be in the north or close to the wilderness, but some place of quiet where the universe can be contemplated with awe.

Sigurd Olson, *Listening Point*

SECTION I - LEAVING HOME

CHAPTER ONE - THE SHARING OF STORIES

The people who come to see us bring us their stories. They hope they tell them well enough so that we understand the truth of their lives. They hope we know how to interpret their stories correctly. We have to remember that what we hear is *their story*. (Coles, 1989, p.7)

Prelude One - A Dialogue

This study is a story about love and about ache and the journey traveled from one to the other and back again. It is a story about the space which exists between the two quotes which open this dissertation: Sigurd Olson who speaks as a gentle inhabitant of the world, and Suzanne Young, who is experiencing a vague sense of disconnection and loss.

Suzanne is an environmental science student who had elected to take an informal course which I was offering on ecophilosophy. She is a quiet, young woman: quiet in the sense of someone who is deeply reflective. I was impressed by her intellect, by her desire to engage seriously in work, by her gentle heart, and by the courageous and honest way in which she explored her life and expressed herself.

The day that she arrived for our interview, she was obviously in the midst of the inner turmoil which besets a young thoughtful person from time to time. She was feeling disillusioned with the path which she had chosen in life, and was trying to figure out how to live a life of meaning. The conflict in which she was embroiled lent a touch of vulnerability and poignancy to our discussions.

Suzanne's words are so compelling to me because she states with such innocent candour the thoughts which so many others have intimated: *the way that we are living and the way that we are educating is not working*. We see signs of decay all around, whether in the deterioration of drinking water; the loss of temperate and tropical rainforest; increased youth violence; higher divorce rates; increased numbers of species added to the endangered species list; accelerated melting of Arctic ice; or skyrocketing rates of attention deficit disorder in children, alcoholism in men, depression in women and a corresponding increase in prescription drug use.

Suzanne's words also speak strongly because she wishes her world otherwise and has the courage to follow her heart but does not know how to proceed. While Suzanne will find her way through the tangles which her life will reveal, I believe that we (society and the education system) have failed her. There is no reason that a young person should start their journey into adulthood by trying to find their way back to the sense of being at home in the world which is their birthright. There is no reason for the pain which is suffered as a result of our disconnection from our earthly roots. Nor is there reason for the time and energy which must be expended to reconnect to the ecological self¹ and to recover from the pain and self-doubt which such a journey requires. This is time stolen from a life; time that could otherwise be spent living fully and joyfully, finding one's path, doing one's lifework.

* * * * *

Sigurd Olson was a gifted nature writer, environmentalist and activist. He was a contemporary of Aldo Leopold, one of a group of men who took over the fight for wilderness preservation from John Muir. Born at the turn of the twentieth century, he was involved with battles to preserve wild lands in the United States from the 1920s through the 1970s (Sigurd Olson website).

While Olson died when Suzanne was just entering her first years of school, I like to imagine a conversation between the two. And if such a conversation had taken place, perhaps this dissertation reflects some of what would have been said.

In the quote which I have borrowed from Olson, he does not directly speak to Suzanne's pain. He does not offer suggestions for how to fill the "whole emptiness that people end up feeling a lot of the time". Instead he speaks from a place of being otherwise. Olson's words emerge from a sense of being-in-the-world which is deeply grounded and calmly and quietly joy-filled. In choosing this quote, there is no suggestion on my part that we need to only find a space in the wilderness and all will be well. Rather, Olson shows us what it might look like to be a person who knows their place in the world and has found it

¹See Chapter Two for an extended discussion about the ecological self.

to be a place full of wonder which touches the soul. These are the messages which we need on an ailing planet: words from people who speak of humanity and speak from humanity and, for that matter, speak for humanity.

In this dissertation, I would like to contemplate how we have moved to an understanding of the world which enables Suzanne's pain to be possible, and how we might find our way back to a sense of being at home in the world. But more than that, this dissertation chronicles the difficulties of that journey against the current.

Prelude Two - Those Apples and Snapdragons

I was initially drawn to Olson's book because of the name: *Listening Point*. While the journey from fremdheit - "the condition of being no longer at home in the world" (Weinsheimer, 1985, p.4) - to belonging is a complex one, it is characterized most strongly by the art and the act of listening - to our own hearts, to the earth, to each other.

The reader of this work if s/he wishes to leave with an understanding, must also come with the intent of being a gentle and compassionate listener. What you will hear are the tales of people who have graciously agreed to share their struggles and insights about how to live well on this earth. If I am successful, what you will also hear are resonances in your own heart. If we can courageously turn to these shared harmonies, then we may all engage together in this critical conversation about how we can achieve "what we'd hope for on the planet... creativity and sanity, conviviality, the real work of our hands and minds: those apples and snapdragons" (Snyder, 1980, p.161).

Throughout this piece, we will hear gentle whispers of the tales of ecologists and poets, educators, philosophers and spiritual seekers. Their vibrant, heartfelt lives softly echo, leaving faint traces behind, marking the lives of all who have been inspired by their words and their deeds. We will hear the tales of teachers who, imbibing such words for sustenance, attempt to translate and share with students a world which turns away from the

race for globalization and its concomitant dehumanization². We will hear the tales of students who, raised in a world where the pace of life does not leave room for a "settling word" (Jardine, 1992, p.18), where they find themselves treated as commodities to oil the industrial machinery, struggle to comprehend how the world could be otherwise.

This study is a tale of a journey which many people at the beginning of the twenty-first century are undertaking as they find that the ways which we have been living are no longer serving. But this project could not have consumed my heart and soul for so many years unless the journey described was also my own.

Like Suzanne, my earliest studies were in environmental science, minoring in zoology and geography. My first "real job" after graduating was as an environmental officer with the Spills Action Centre of the Ontario Ministry of the Environment. That is where this tale begins, with a typical night at the "Spills Centre" in a hermetically sealed office in eastern Toronto.

From Personal Journey to Doctoral Study

A tractor trailer lumbers down the deserted highway. It is the middle of winter, deep in the night on a quiet tract of North Ontario highway. Ice crystals form from warm breath in air that is thin with cold. All that can be seen are long stretches of snow under northern lights dancing in and out of the stars. The driver is picking up speed, trying to reach his destination by morning. He hits a patch of icy road. The tractor trailer swerves. The driver struggles to regain control, but the truck jackknifes, the front gliding down a small embankment: and the truck comes to rest on its side in the ditch beside Highway 17. The driver is fine: he climbs out of the cab unharmed. But his cargo has been shaken up, dislodged. Liquid is leaking out of the back of the trailer, first a trickle and then a regular flow - across the highway, into the ditch, seeping into the snow and into the bare patches of soil. As the driver watches, his toxic cargo, a load of polychlorinated biphenyl (PCB) oil en route to disposal, is finding its way into the underground water system, into the wells of the handful of people who call this place home.

²See Mander & Goldsmith (1996) for a discussion of some of the social and environmental concerns with globalization.

Later, a Toronto business owner, a painter by profession, is seen throwing barrels into the bushes near an industrial park. The barrels are unmarked, and badly corroded. In another part of the city, there is a fire on an open lot, a place where used tires have been stored waiting for reclamation.

And finally on this night, routine industrial discharges in Sarnia. Chemical valley is sending chlorine emissions into the air. Momentary outages of abatement equipment are a matter of course in this highly industrialized area.

These are the sorts of incidents with which we dealt, at the rate of one thousand per month, at the Spills Action Centre (SAC). A twenty-four hour centre, SAC handles environmental emergencies across the province.

At the moment in which an environmental emergency occurs, minimization of impact is the first priority, followed thereafter by remediation and in some cases, investigation and enforcement. An assessment of an incident requires a series of routine questions coupled with some knowledge of the multifaceted information which comprises environmental work. What is the toxicity of the chemical involved? How much will it be diluted in this particular situation? Is the substance flammable? What are wind conditions in the area? Where are the nearest residences? Is evacuation of an area required? Are there downstream water users? If so, should water treatment plant intakes be closed off? What are soil conditions? Is the area environmentally sensitive? Is it politically or socially sensitive? Is this a routine occurrence or a crisis situation? What is the quantity of the spill? Is the spill on-going or is it stabilized or stopped? How long would emergency personnel take to reach the spill site? What is the best method for clean-up for this particular chemical, in this particular quantity, given these particular environmental conditions?

The human-environment relationship which exists during an environmental emergency is immediate. Human health and environmental viability need to be protected NOW. The relationship is after the fact; one in which environmental protection centers around dealing with situations which are currently unfolding or have already occurred.

The lens shifts somewhat when an emergency is over: then the question of prevention arises. In the context of a provincial Ministry of Environment, prevention

centers around two key elements: abatement and legislation. What technology can be installed to reduce the amount of emissions (air, land or water) which result from industrial processes? Are these economically viable and practically feasible? Are there better manufacturing or refining processes which would reduce waste and increase reclamation and recycling? What legislation can we enact to deter purposeful environmental catastrophes, to provide guidelines for industry and to provide some teeth for enforcement? Are there tax incentives or innovative policies which could supplement legislation to encourage compliance? What will the economy bear; society accept; current knowledge and technology provide?

The seductiveness of this work, of these words, draws me in as I write. The clinical talk of abatement, maximum acceptable concentrations, technology holds no beauty. But what a sweet delight the language of objectivity (Berry, 1983, chap.2) offers. The words sound so full of knowing. *I* sound so full of knowing when I allow myself to hide behind their precision. The world that is conjured up in this work is a place of certainty; of clean, simple truths.

Subject, object, not to be entwined, not to be bothered by the messiness of our connection. Clipped, harsh sentences full of "its". Yet those "its" free me in an odd way. If chemical spills, technology, polluters are objects over there, and I am a knowing subject over here, then I can manipulate and alter, control and manage, and enter into the equation only as an instrument of salvation. How holy I can feel. How clean and pure.

In my youth I could get lost in this world, not through the donning of self-indulgent blinders, but in total innocence. The world simply was a place of cause and effect where pushing the correct button, or undertaking the right action, would set things straight.

For better or worse, the sincere forthrightness of youth gives way to a world which is governed by "it depends". The clarity begins to lose its allure, not because we come to know better, but rather because we realize that we know less. I don't have the answers which my innocence so wished I would. My entanglement with the world is always more messy, more earthy, more complex.

There is a certain wistfulness to the loss of that clear, controllable world - but not much. For what is gained in living amidst uncertainty is a richer, deeper tapestry of experience. A world that thrills to the waking, in ways that never could have occurred when I believed that I could understand and control it all. A world that is gentle to my own contingencies - my impossible agonizing loves, my cruel deaths of omission and commission, my earnest attempts at living kindly, my stumbles and falters along the way.

While part of me still longs for that world of clarity, allowing myself entry would require too much conscious denial of lived experience. My journey now is, at times, accompanied by more angst and more panic. But these struggles do not arise because I allow myself to enter into the messiness of life but rather when I attempt to map my desire for control and clarity and simplicity onto the world as I have come to know it.

There is deep pleasure to be found in embracing this shifting soil both through a surrender to life, and through the peace created when knowledge *of* the world and action *in* the world flow in the same direction.

It is a stolen afternoon - a bright spring day where I have escaped for awhile from my computer and its demands. My friend and I gather wood for his woodstove, fuel that will keep his family warm through the brutally long Alberta winter. We travel, not far from his home, to a place where wood has been discarded, abandoned - a veritable treasure trove of winter heat waiting to be harvested. We open into a large clearing spacious enough to park a truck sandwiched between two strips of forest: a space which funnels and concentrates the sun's rays, beaming, beating out the stickiness of the day.

I take the chainsaw from my friend's outstretched hands, casting a furtive glance to see if he can detect the nausea rising in my stomach, the strains of theme music from the Texas Chainsaw Massacre playing in my head. I start the saw tentatively, determined to somehow find a sense of ease. I plant my feet wide apart, recalling some snippet of a safety lesson about using an axe. "Keep your feet firmly planted yet wide apart so that if you slip, the axe can't go into your leg". Surely a chainsaw must be the same. Once it is buzzing, I hold it awkwardly, far from my body, unaccustomed to the vibrations. I feel coltish, clumsy, trying to get the pressure just right, letting the saw do the work, pushing down enough to get it to bite. My friend is infinitely patient, neither condescending nor taking over nor becoming exasperated, as I blunder again and again and again.

A few logs cut. I feel like I can take a break with a measure of dignity. I bend down and pry the logs loose from the tangle of wood

which holds them firm. My computer-mushy muscles strain to lift the newly-cut wood. I arch and throw, the wood landing a short distance from my feet. My friend chuckles at my attempt, and comes in closer to retrieve the fallen log and haul it off to the truck.

The sweat pours off both of us, turning our faces to dirt as we swipe at them with earth-covered arms. Slipping down bodies, penetrating the ground: our salt-water exchange for the bounty we are reaping. I'm melting into the earth, disintegrating. Flesh joining with land. Sacrifice, payment, Union. Insects swoop in close to enjoy the salty feast. Grimy. Buzzy. Itchy. Swat. Nothing could be finer.

A rhythm is set up, accommodating to each other's movements, working in a slow - very slow - dance of cut, pry, throw, haul, stow. Earth, chainsaw, body, sunshine, sweat - all come together in this act of survival, of promise. All of life has moved together to this moment.

Bateson (1972) claims that man, tree, axe are all one in the system of felling a tree. The "tree-eyes-brain-muscles-axe-stroke-tree" (p.317) system continually responds to the "difference which makes a difference" (p.318). But missing from this closed loop is the buzzing insect tasting the sweat pouring down my face. Absent is the grey jay watching from the nearby spruce or the magpies darting over head with their caw caw caw commenting on our goings-on. The difference which makes a difference must include the quickening of my friend's breath and the swish, gush, slurp of his heart pounding in tandem with my own. Pounding which is felt, responded to, connecting us across the expanse of corduroy road.

Bateson neglects to mention the necessity of particularity. The system always exists, but is not always felt. Blessedly it is inescapable on that blazing afternoon, unavoidable because of the particularities of people, climate, mood, stage of life, waking of earth, fledging of birds. Bateson doesn't concern himself with what happens when that system becomes part of conscious experience.

As the rhythm takes over, thoughts drift. Silently at first, then uttered aloud in reverie. Conversation somehow becomes more intimate. It loses its edge; stops looking over its shoulder. Words spill over each other; dreams ushering forth from places heretofore unexplored, totally devoid of self-consciousness. Hummed snippets offered to the wind; said to oneself. We breathe in each other's hopes and fears as the rhythm of work passes between us.

I would not part with this moment for all the world. Earth, body, heart. sweat, heave, throw. I lost myself that day, and others like it. I lost myself to something bigger. And in that surrender to life, in that naked abandon, I came to be fully alive. I would lose myself forever in that rhythm, if life could be so lived.

As I draw back from that memory, two types of knowledge lay lightly in the back of my head. The first arises from various sources, but most significantly from time spent preparing an interactive video on air pollution for a science museum in Philadelphia. The second, admittedly, is a projection, a speculation, though I think it to be a steadfast, trustworthy one.

In the late 1980s, Colorado, land of the Rocky Mountains, home of cabins and chalets spilling over with back-to-the-land types, instituted restrictions on woodstoves. There was an indisputable linkage between the burning of wood and the increased carbon monoxide and particulate levels. Emissions from woodstoves were clogging the Colorado air, and contributing to a global greenhouse effect (Colorado Statutes 25-7-401, 1984).

I know too of the pleasure that my friend would take as he put one of those logs into the woodstove, knowing that his body had been given to create warmth for his family. I am aware of the intimacy with which he knew those logs, pressing his nose in their tender inner regions, breathing in their scent. "Perhaps this very piece". he would say to himself, his hand caressing, finding placement between the gnarled surfaces. "was the one where the grey jay landed to watch us". Or "that one with the knob on it, looks like the one which cut me". enjoying the thought of his blood mixing with the tree sap. Or, chuckling to himself, "this big monster has to be the one that made us collapse in a fit of laughter, getting the better of us when we both struggled to fit it into the truck".

As each piece is chosen to be carried inside to the stove, he would anticipate the blue sputter and spark of the spruce resins, or the hardness of the aspen which would take longer to ignite but would then provide a slow, long, steady burn. I know of the enjoyment that he would have reading in front of the warm, soft glow or the animated conversations which would be accompanied by the fire's blaze. And then too, there would be the strange

pleasure that he would feel when he tiptoes over icy floors early in the morning, shivering and cursing and hopping around, not able to stand still until the fire again begins to gain strength and warm the room.

As the smoke curls out of his chimney, bathing the nearby trees with faint traces of their ancestors, it lays bare a world of living. Breathing it in, I gently hold these two bits of knowledge in my mind, weighing them for their import. This process of consideration is what living in this complex world must be - acknowledging many truths and then deciding how to live well in the face of them. For even in the midst of this complexity, in the midst of not knowing, we still must face the ultimate question, "how, then, shall we live?" (Muller, 1996). "It depends" requires a fine sensitivity, an ability to hear the world, an attunement which is bathed in an ethic of care. Such living does not allow me to ignore carbon monoxide levels, playing games of pretend amnesia. Nor does it allow me to rationalize my actions. But it does say that the system of accounting is larger than that: Being fully human must be able to respond to lived, deeply worlded, sensuous experience.

I look back now to talk of abatement equipment and remediation with a vague sense of bewilderment. It seems strangely lacking. Environmentalism³ is silent on the question of how to live in the face of the actualities of life, and so in its very hope for salvation, environmentalism has abandoned us to find our own way.

More tragically, the path which is illuminated by environmentally appropriate actions, has no place for the felt connection to the world. Rather than bending and accommodating itself to the sticky web of human experience, seeking ways to weave itself into such realities, environmentalism sets up a behavioral norm, to which we must bend our actual experience of the world. Rules and models can be helpful but when experience must be forced to fit the model then the tools rule the master and the world becomes disjointed. If the model is strong enough, bombards our sensibilities often enough and is enforced with enough power, we begin to become suspicious of our own experience.

³The environmentalism which I'm referring to here encompasses all codes of environmental conduct which include but are not limited to the above mentioned scientific-technological solutions to environmental problems.

The implications of the rift between how we experience the world and how we are told that we *should* be experiencing the world, will be further developed in upcoming chapters. At this juncture it is important to mention that both this version of environmentalism and the consumer messages which environmentalism speaks against, are co-conspirators in creating a sense of internal dissonance. The mistrust of an internal voice which emerges from the "monoculture of the mind" (Shiva, 1993) which is thereby created, holds within it very damaging environmental and social realities.

But what of those people who experience that worldly fleshy connection too strongly to deny it? What of those who understand the deep pleasures of losing oneself to earth-body connections and for whom such experiences resonate with a sense of deep truth? What of those people who know the depth of soul loss which would occur if they were required to excise that connection from their lives or fit themselves into the mold of environmentalism / consumerism / modernism which demands a betrayal of sun-sweat-magpie grimy winter warmth?:

I've always had to hide who I am, hide my care for other life, because people didn't understand that sensitivity. You want to be understood and accepted, and I never felt that I was. (Educator and Study Participant, Jamie Crowe)

Most of my life has always been on the fringe, mainstream but not. 'Cause my views have always been just a little bit outside the envelope. And before, I think that I didn't trust myself to say that I saw the world differently until I heard others [say it]. You know, I'd go and look for literature that said it was okay to talk like that, it was okay to be like that. (Educator and Study Participant, Lindsay Naylor)

It may be hard for you to understand this. We feel we do not fit. We feel that there is something wrong with the way we are. After all, we are told that each and every day that we are around you. We feel insecure.

Each time someone pushes us, teases us or makes fun, another wound is inflicted. Some of these wounds we can heal ourselves. Other wounds of insult,

however, continue to grow until we can no longer stand the pain.... (Adams, 1999, p.A17)

This final quote was excerpted from an anonymous letter which was posted at W.R. Myer's High School in Taber, Alberta after two boys had been shot there, one fatally. The note refers to the experience of being a victim of schoolyard bullying, the supposed motive for the shooting. There is an eerie resonance between these three quotes. Not being accepted: having to hide who one is: not trusting oneself are all wounds inflicted by trying to live out an experience of the world which isn't honoured by the majority of society. The wound of not belonging is deepened by the constancy of hearing that what you deeply believe in is "irrelevant" as my class of undergraduate education students told me, or "sentimental" (1987, p.184) and "utopian" (1990, p.113) as Wendell Berry has been told. The wound is opened daily by media images of reality which don't speak to one's lived experience but are held up as the only truth.

The human drive to link up and belong to community is powerful but the admission price - a denial of that moment of sun-earth-man-woman-insect union - just may be too high to pay. These two strangely conflicting desires - the desire to live one's truth and the desire to "fit" - form the somewhat prickly nest in which this doctoral study was hatched.

Like a nest, the motivation behind the research didn't simply arrive one day as a good idea. Rather it was a necessity, a springtime urge to build which was coursing through my veins. I repeatedly ignored its calling as inconsequential. But such silent demands are relentless. The sense of dissonance between attempting to honour my lived experience and desiring to fit into a society which didn't honour the truths which I knew, has lived within me since adolescence and finally, it could no longer be ignored.

The research motivation and the research question while closely related, are not one and the same. If the initial impulse is the nest, the question is the egg. Which species will hatch, how nurturing the yolk-sac will prove to be, which habitat the bird will rest in, when it will fledge, how lovely or haunting its call will be: these matters will spill out as the

dissertation unfolds. For now though, it is necessary to describe the outward appearance of the egg lest the nest alone appears sufficient for life.

The suggestion to acknowledge lived experience is, in essence, a shorthand for a much more complex engagement with the world which I hope to reveal. This relationship with the world known of as an ecophilosophical perspective⁴ or an ecological paradigm has been put forth by a myriad of writers, environmental and otherwise, as an antidote to the sense of disconnection which many people are experiencing within western society. This news should bring much rejoicing among those who experience the world through the lens of ecophilosophy, that is, those who cannot abide the clean clear surfaces which the modern world (and as has already begun to become apparent, many versions of environmentalism) lives out and instead wish to acknowledge their felt connection to the sun-earth-wood complex. If ecophilosophical notions start to be embraced by the larger society, then those people who found it impossible to deny this bodily lived experience of the world will find an alignment between living their truth and finding a sense of belonging.

Certainly, the promise of relief exists. Again, however, we must turn to lived experience. Ecophilosophy as a vision for society holds many internal contradictions and external tensions. For a moment though, let's assume that the vision itself is problem free and has the potential to relieve the disquietude, dis-ease and dysfunction of modern society.

Even if this were the case, we still must face the reality that the actual attempts of people to live out ecophilosophical understandings in the existing world has been a painful proposition. Ecophilosophy is based in a very different set of assumptions from modernity. A transition from one worldview to another, even if it were deemed to be desirable and even if social change actually happened in that fashion and even if this were the intent of ecophilosophy, would require a co-existence of those two sets of assumptions for a long while until the momentum of the new paradigm took over.

⁴This dissertation, while rooted in an ecophilosophical understanding of the world, focuses most specifically on one idea which emerges from ecophilosophy: the ecological self. The relationship between the ecological self and ecophilosophy is discussed in Appendix A1.

When these two ways of viewing the world meet, they conflict and clash, tussling like jealous siblings, stomping their feet and refusing to see truth in each other's statements. On the part of ecophilosophy, this behavior is a conscious rejection of an older sibling's power. As such, it can be stepped outside of when calmer heads prevail. Modernity however, as the older sibling which defines validity and truth, appears to be transparent. That is, modernity doesn't seem to be steeped in *any* assumptions. It is, rather, simply the way that the world is. And from the standpoint of modernity's world, the ideas of ecophilosophy seem "utopian", "sentimental", "irrelevant".

So some problems are arising. Living life through the lens of ecophilosophy is proposed as a way out of current societal problems, environmental and social. Yet life which is actually lived through that lens is fraught with miscommunications, misunderstandings, angers, conflicts, wounds of not belonging. In order for the promise of ecophilosophy to be realized, it is necessary to gain an understanding of the problems of its emergence in the actual existing world.

I start edging up on the research question by asking: *what is the experience of living from an ecophilosophical perspective in a modern world?* There is only one more turn which needs to be taken in order to move from this question to the question which underlies this dissertation. Pedagogy needs to be called upon to join the fray. Education is, among other things, a tool of social change. While it could be debated whether ecological education actually finds a home in this version of pedagogy, much of current environmental education practice finds its roots here⁵. In this capacity, the field of education should have an important role to play in the transition from a modern to an ecological worldview⁶.

⁵The goals, characteristics and historical emergence of ecological education are discussed in Appendix A2. Distinctions between ecological education and environmental education are described in Appendix A3.

⁶The transition from a modern to an ecological perspective does not imply the abandonment of one set of beliefs for another set. Rather, this alteration involves a widening of the definition of human ontology. That is, the understandings of ecophilosophy encompass the ideas of modernity rather than turning against them. At the same time, an ecological perspective and a modern perspective provide different, mutually exclusive lenses through which to view existence.

Within the classroom, however, there exists an intensification of the problems which occur in the broader society when ecophilosophy and modernity meet head on. The school system is a modern institution within which is found a curriculum grounded in modern ideals. Students have been raised to understand the world through a modern lens. Indeed the teacher him or herself has also been raised with the same assumptions.

What happens when a teacher finds this modern perspective to be lacking and eschews it for his own lived experience of the world, an ecophilosophical experience? In the process of teaching, a "teacher transmits nothing more or less than his or her being" (Goldberg, 1993, p.87) in the very routines which are set up and relationships which arise in the classroom. Furthermore, within broad guidelines, how and what a teacher teaches depends on his or her view of the purposes and processes of education which in turn depends on his or her view of what it means to live well in the world.

An educator then, lives out in full view and often with the participation of students, a series of assumptions about relationship, community, knowledge, self, success. The older that the students are, the more likely that they will already have strongly formed notions of these components of life. When students are entrenched in modern assumptions and educators teach through the lens of ecophilosophy, we see a form of "intercultural communication" (Scollon and Wong Scollon, 1995) arising which has the potential to open up new worlds of understanding and yet at the same time may engender conflict and confusion.

What happens when ecophilosophy and modernity meet in a classroom? This, at last, is the question which drives this research study. Interviewing both ecophilosophically-oriented educators and their adult students, I have attempted to understand how "meeting at the boundary" of ecophilosophy and modernity is experienced by these two groups. What challenges do both groups face? What openings and possibilities are created? What are the obstacles to understanding? What approaches are effective, frightening, frustrating?

Before these questions can take flight to see where they will carry us, some time needs to be spent in the nest exploring the environment. The next chapter, then, will turn to

the question of how we have come to move from Olson's sense of belonging in the world to Suzanne's vague sense of unease, and the ways in which ecological education responds to this disconnection.

CHAPTER TWO - LOSING OUR WAY

At the outset of an experiment [some physiologists] would sever the vocal cords of the animal on the table, so that it could not bark or cry out during the operation. This is a significant action, for in doing it the physiologist was simultaneously doing two other things: he was denying his humanity, and he was affirming it. He was denying it in that he was able to cut the vocal cords and then pretend that the animal could feel no pain, that it was merely the machine Descartes had claimed it to be. But he was also affirming his humanity in that, had he not cut the cords, the desperate cries of the animal would have told him what he already knew, that it *was* a sentient, feeling being and not a machine at all. (Evernden, 1993, pp.16-7)

Listening Point

As I sit down to write, I am still in my "mourning clothes" for the funeral which I attended this morning. Something of that moment of temporary finality, of bewilderment and bereavement has turned me back to my work and compelled me to write.

A few hours ago, the service completed, I stumbled into the bright daylight outside the funeral parlor, feeling somehow exhilarated, certainly not joyful, but imbued with an aliveness which is all too rarely felt. This awakening was not born of contrasts (in the face of death, I celebrate that I am alive), but rather had a sense to it which I am struggling to articulate.

The passing away of a life in our midst reveals "the jagged torn place in [our] spirits that lets the small flying agonies pass in and out" (Kingsolver, 1998, p.296). Each of us in our solitude is, for a moment, broken open, and through that thin crack comes the faint whisper of a voice which has long been ignored. While we may choose to shut the door again, the fact that it once had been open leaves us with a doubt and a possibility. In this possibility, if we choose to attend to it, lies the hope for ecological survival.

The voice which called out in the face of death was no different from the one which echoed through the clearing in the forest where my friend and I gathered wood. It is the silent cry of humanity; its vocal cords appearing to find momentary connection. What was so strikingly different in the funeral parlor was that this voice wasn't only responded to by

two people who seek out earthly resonances. Rather, it was shared by a room full of people who come from a variety of backgrounds with a diversity of worldviews.

It seems that the intensity of grief is so raw, so deep, and so real that within its presence, there is no possibility for turning away, pretending that we do not hear. The confrontation with death seems to provide one of the rare "listening points" which are still left in modern society. For that instant where we look death in the eye, truth is in the air. In that moment of honesty, we receive a respite from our carefully and often innocently constructed illusions, those tiresome obstacles to living fully. Within the funeral parlor, there is an acknowledgment "of silence and solitude, of belonging and wonder and beauty" (Olson, 1958, p.8), and a turning towards those deep places within which make us profoundly human.

This acknowledgment of what is real, however beautiful or traumatic, however frightening or uplifting, is, to me, the essence of being alive. Berry (1983) suggests that "there is relief and freedom in knowing what is real" (p.200). This relief comes from a connection with our humanity, our sources, our roots.

At the funeral, I was given a box seat to despair and felt somehow that I should slink away. I didn't know Anna well, and the agony which I was observing made me feel voyeuristic, an unwelcome and unwanted witness to the most profound despair.

But the tears which I was crying were not polite ones, not shed out of dutiful respect. The words of tribute which Anna's son had written for his beloved mother cut right through me. They have awakened ancient pains, opened up healed wounds, have made me recall a forgotten sorrow which is held deep in my body and until this moment, whose vibrating intensity lay dormant. My tears are for Anna, for her son, for my own loss, for the absolute agony of the surreal finality of it all, for this incomprehensible condition which we all share.

This moment of raw humanity binds together every member of this unlikely gathering. It connects us to each other, to our past, to a universal human experience, to the deepest and truest parts of each of ourselves. It enables us to know that we are part of

something larger, immersed in the flow of a temporal lineage, and a spatial community. Moments such as this one, provide the comfort of knowing that we are not alone, and give us back our place in the universe.

Partaking in the rituals associated with death demands something of every person present. There is an obligation to do right by the person who has passed on. In order to appropriately honour their memory, we are required to give our best, our most dignified, our most compassionate. This is not a time for pettiness or posturing, for laziness or making do. As we stare down the precipice of "crossing over", we are called on to offer the finest that we have to give.

While it would be possible to theorize about the various ways in which death has been interpreted and engage in a debate about abstract meaning, to do so at such a time would be vaguely inhuman. What this moment demands of us is simply to be with the enormity and mundanity of the event; to feel with Anna's son, in the true sense of compassion; to dig deep and tune into that universal experience and somehow figure out what would provide comfort.

Through this recognition of pain in an other, we are taken out of ourselves. We are at once fully present, and yet we lose a sense of presence. This meeting of souls is full of questions. What am I called on to do here? How do we live in the face of the unlivable? Together, those gathered seek answers as we confront mystery, the unfathomable which forms a hazy frame for our lives demanding acknowledgment only at such moments. Ironically, as we face the incomprehensible, we become immersed in the warm elixir of profound meaning.

This is how I want to help my students to live life: Raw, honest, fronting up to the natural conditions of our existence, dealing with the confusion and the agony and the joy of being human, finding out the best way to live in a world which is often beyond our comprehension, connecting to others in that immortal, intangible, larger than life humanity which we all share.

It is this aliveness which I seek in my own life, which indeed, I think all people seek. Not a life preoccupied with grieving certainly, but a life which is lived deeply and compassionately, with beauty and care.

From this perspective, it is difficult to understand why we would turn our backs on such a powerful sense of connection to life to embrace an impoverished version of what we could be. I don't comprehend why we would choose to glide over life's surface thereby eschewing the promise of depth, purpose and serenity or why we would create and support a "modern educational system that would force the children at an ever-earlier age into an adult culture already shot through with futility, greed, and banality" (Sloan, 1993, p.1). I am deeply troubled that we would opt for an incessant reduction of humanity.

But both my bewilderment and my despair are irrelevant in the face of what is⁷. When the world is viewed through an ecological perspective, the signs are all around that humanity is not valued very much. Saying that we have lost our humanity, however, is neither clarifying nor does it exactly pinpoint the entire problem. As I go about my day to day life, I, like many people in western society, am continuously bombarded with indications that something is askew. But what is at issue here is somewhat elusive. The problem is not simply that people have become more self-centred, less caring. Nor is it that we value economic growth over quality of human life. Rather, somehow we seem to have lost sight of what it means to be human. As problematic as this statement is, perhaps by turning to a series of examples from daily life and viewing them through an ecological lens, we may be able to chip away at the meaning which is held within the words.

⁷That is, they are irrelevant in the sense that they do not change the reality of the world. The feelings of bewilderment and despair are highly relevant in the context of this study. The ability to read the signs of decay in humanity, and to see those signs in many contexts and many places, is part of what adds to the despair of living from an ecological place. See Chapters Four through Seven.

Severing our Earthly Vocal Cords

Prime Minister Chretien's recent visit to France provides a starting point. During his stay, Chretien assured President Chirac, and through him, the people of France, that genetically modified food was perfectly safe. Even if scientific evidence was conclusive at this point in time and even if Chretien is aware of that information, the effects of ingesting biologically altered substances, like the effects of ingesting chemically altered substances will take years to manifest. Furthermore, as with any biological experiment, synergies exist which cannot be played out in a laboratory and cannot be anticipated. In other words, Chretien can not possibly attest to the safety of genetically modified food⁸.

The motivation for Chretien's comment is, of course, known only to himself and perhaps his close advisors. There are, however, two facts which are indisputable. First, the jury is still out on the benefits or harm of genetically modified food. Second, Europe including France is a potential market for the genetically modified food produced in Canada. When these two facts are put together and they are read through a historical lens which has shown that politicians and industry leaders have, at times, been willing to downplay harmful effects of products in order to increase revenues, Chretien's comment could be viewed as suspect.

Was he willing to deceive a nation in order to satisfy businesses at home? If so, he is showing a diminished version of humanity in which self-interest takes precedence over concern about human health and community well-being. There have been others who have chosen this route. The cigarette companies which banded together to deny the health risks of smoking so that sales would remain buoyant; Monsanto with their creation of terminator seeds; the coal companies which, to this day, deny the human induced aspects and the potential deleterious impacts of global warming (Carty, 2000), have all undertaken similar actions. These public figures are joined by the many people who base their more private

⁸There have been a proliferation of recent publications focusing on genetically-engineered food, discussing the possible costs and benefits. See the special issue of *Resurgence* (1998) on "the gene debate" which has a variety of articles on biotechnology and genetic engineering including articles by Steinbrecher and Thomas on genetically modified food.

actions, not on the furthering of their own integrity but on whether or not they will be caught as they indulge in avarice and sloth. Here we see the willingness to cause harm to others in order to serve self-interest which may point to a loss of recognition of interdependence or community or compassion.

* * * * *

From an ecological perspective, the signs that we are living out a diminished sense of humanity are much more ubiquitous than these blatant examples. The fact that we can entertain a discussion about the ownership of human genes may indicate, in Evernden's words, that we believe that the human body is "merely the machine Descartes had claimed it to be". The problem is that such discussions have a logic to them from an economic, rational position. But thinking of ourselves as bits and pieces which can be bought and sold, and concerning ourselves with material profit rather than the integrity of a human body could also be interpreted as a degraded view of humanity.

Furthermore, there is an issue of control here which may be more easily seen by turning to another example. Recently there was a news item, a blip which quickly surfaced and disappeared, about the development of a drug which will enable women to suppress their menstrual cycles, "a control which all women want", the reporter assured listeners⁹.

Rather than delighting in the wonders of our own biology and developing an intimate acquaintanceship with the subtleties of our enfleshed existence, the development of this drug seems to indicate that there is a desire to escape the human body. We seem to wish to master natural processes, to regulate and control, to turn ourselves into machines. Along with that attainment of certainty and control, we lose wisdom. When we control physiological systems, we are no longer able to hear the subtle rhythms of our bodies or respond to their demands because such needs become buried in a drug infused sea.

Perhaps this reporter's simple statement speaks of a desire to purge life of all its messiness and lead a sterile existence. Maybe too, we are seeing signs of collective self-loathing. Without a doubt, his words speak of the desire to control the world which so

⁹See Sevens (2000) for a discussion of menstruation suppression.

concerns deep ecologists (Devall & Sessions, 1985, chap.5). The wish to control menstrual cycles is more than a metaphor for the ways in which we treat the earth. Rather it is one and the same thing. Banishing human biology *is* banishing earthly existence: it *is* denying our ecological heritage. If we can not embrace our own messy existence, then how can we open to the flesh of the world? If we can not honour our own body's integrity, then how can we rise to a level that is worthy of encounter with the "more-than-human world" (Abram, 1996)?

* * * * *

What signs of reduced humanity would an ecologically-oriented person read into the idolization of a seventeen year old well-marketed pop star? The meteoric rise of Britney Spears to pop icon status may speak of the ways in which we honour image and packaging above all else. But it is not just the adulation of youth and beauty over talent and substance which is problematic.

If Spears and her managers were content to sell a vapid, sexy image, she would be relatively harmless. Where she crosses the line to insult however, is in the pretense that she is more than this. The establishment of a Britney Spears museum and the production of a video in which she takes viewers on a tour of her "childhood haunts" is dangerous through the attempt to sell substance with, what appears to be, little interest in developing that substance.

This blurring of boundaries is insulting to those people who have honed a craft, suffered on behalf of the muse, put themselves on the line to protect civil rights, that is, those people who demonstrate a depth of humanity which is well beyond the ken of most seventeen year olds.

Even more harmful is the message which is being sent to the young girls who are Spears' fans. If Spears' vacuous, albeit attractive, image was set up alongside images of strength, of integrity, of character, of talent, of hard work, then she would have a rightful place. But the powerful marketing of her image, and the ubiquity of similar images in mass

media in general, attempt to provide the definition of a human being. The parameters thereby established are limited indeed.

In western society, we are fed a daily diet, indeed we are glutted with images which tell us to what we should aspire. Mass media suggests that we need to know how to "look great when it's 100° (Good Housekeeping Editorial Staff, 1999, p.35), perform "sex tricks he's never seen before" (Kemp, 1999, cover), go on the "perfect vacation" (Marshall, 1999, cover) and "make your smooches sizzle" (Czape, 1999, cover). We are told that it's important to know "who's doing what to whom in Hollywood" (Morgan, 1999, p.51) or how "real women snagged hunky celeb husbands" (Perron, 1999, cover).

By themselves, these images may be experienced as offensive by some people. Their greater damage, however, lies in their ubiquity which begins to breed a belief that we are what we look like and what we acquire, as it suggests that relating to others is all about manipulating an other to meet our own needs. People become commodified and dehumanized as relationships lose their particularity to the extent that magazines can offer advice on "'safe' men to sleep with *after* [italics added] a breakup" (Woman's Life Editorial Staff, 1999, cover) without awareness of the perversity embedded in such a topic.

Of course, not everyone buys into these images. "There must be more to life than money, economic success, material gain" was a comment which echoed throughout the interviews which I conducted. Yet the fact that such statements should even arise, indicates how powerfully persuasive mass media has become and how much these goals are part of our collective consciousness.

On the occasions that these goals are attained, they rarely bring fulfillment. So we either question the goals or try even harder to achieve them. Very few people opt out completely. Each of us, in our own way to our own degree, is pulled into the desire to become the images which we see. To the extent that we are captured by the "beauty game" (Rogers, 1994, side A, track 2), we are offered two choices. We can "win" and likely feel a sense of despair that this is all that humanity holds, or we can "lose" and experience ourselves as failures.

In a slight modification of Weston's (1996) notion of "self-validating reduction", mass media portrays a vapid, soulless image of humans. Through striving to achieve the image which is portrayed, people are actually changed and become vapid and soulless. The image thus becomes truth and is not only justified but perpetuated (p.117).¹⁰ While these images don't *actually* limit possibilities for human potential, they limit what we perceive of as possibilities, thereby diminishing our definition and our living out of humanity.

* * * * *

From an ecological perspective, the insults to humanity which occur during a week of living could fill a book. The man speeding through a crosswalk where my friend and I were crossing, whose only thought was to "give the finger" to another driver who honked at him to stop; the elderly gentleman who, walking down the aisles of my local grocery store, threw some unneeded paper on the floor for someone else to clean up; the building of a drive-through funeral parlor in the southern United States; the minimal effort ethic which pervades business interactions giving rise to a society of mediocrity: these are all signs that humanity is ailing.

There is no wonder that Suzanne Young feels a sense of despair. Nor is it surprising that yoga student Roxanne Hillman admits,

I almost feel with what's going on in the world today, sometimes I just want to hide. And I do sometimes. I'll just come home. And I don't want to go out. I don't want to deal with all the bad things out there.

Sometimes the ugliness is too much to deal with for someone who is sensitive to the signs of decay.

They are not alone in their sense of despair. Throughout the years of despair and empowerment workshops which Joanna Macy (1983) has conducted with regard to earthly conditions, she claims that she has met "no one who is immune to this pain" (p.22). She

¹⁰This scenario represents a modification on Weston's thesis, because in the current situation, we actually are striving for the reduction and then obtain it, whereas in Weston's version, the reduction is thrust upon the victim, unwanted.

also claims that such feelings are natural, healthy and normal. Indeed, she says that "they are a measure of our humanity" (p.22).

This point is so crucial. While our external actions may point to signs of human degradation, somewhere deep inside, this diminished state of humanity is experienced as loss. In some cases, as with Suzanne, the loss is recognized even if not understood, and is experienced as a sense of unease. In cases where the sense of anomie is repressed, Macy claims that there are several alternative ways in which the despair surfaces including political passivity, destructive behaviors, psychological projection, burn-out and a sense of powerlessness (pp.14-6).

The sense of malaise which grips society, and the acting out through aggressive means, are, in some perverse way, signs of health. That is, they indicate that we have not severed the vocal cords of humanity or of the earth. Our sense of humanity still beats strongly, deep within us. We have, however, deafened ourselves to its hearing. It is this dissonance between our actions in the world and our deeply intuited sense of what it means to be human (our ecological self) which, I believe, causes much of the pain which pervades modern society.

On a conscious level, many of us may not even be aware that there is something finer within us demanding expression or that our actions are a betrayal of that place within. So on top of the pain, we may experience bewilderment, a sense that we shouldn't be feeling bad, as in the common lament, "I've got everything I could want. Why am I not happy? There must be something wrong with me." Or Suzanne's instantaneous willingness to shrug off the worldly truth of her pain and take the responsibility on her own shoulders: "That's sort of my problem. Somehow I ended up without that [creative pulse], so now I have to find it." Whether or not we recognize or acknowledge its presence, that call of humanity "always wavers there in the distance" (Pivnick, 1997, p.62), haunting us with its song, demanding attention, even as we degrade it with our actions.

I believe that the task ahead of us is to learn to listen once again. We need to tune in and acknowledge the ecological self whose presence has never been far from hand. To

start, we can turn our minds to developing a deeper understanding of this aspect of ourselves whose existence has already been intimated several times in the unfolding of this story.

An Alchemy Imperceptible

In *Who Has Seen the Wind*, the young protagonist, Brian O'Connell, spends much of the book trying to understand and articulate an elusive but powerful feeling which comes over him every now and then. His poignant search begins with his first encounter with "the feeling":

A twinkling of light caught his eye; and he turned his head to see that the new, flake leaves of the spirea were starred in the sunshine - on every leaf were drops that had gathered during the night. He got up. They lay limpid, cradled in the curve of the leaves, each with a dark lip of shadow under its curving side and a star's cold light in its pure heart. As he bent more closely over one, he saw the veins of the leaf magnified under the perfect crystal curve of the drop. The barest breath of a wind stirred at his face, and its caress was part of the strange enchantment too.

Within him something was opening, releasing shyly as the petals of a flower open, with such gradualness that he was hardly aware of it. But it was happening: an alchemy imperceptible as the morning wind, a growing elation of such fleeting delicacy and poignancy that he dared not turn his mind to it for fear that he might spoil it, that it might be carried away as lightly as one strand of spider web on a sigh of a wind. He was filled with breathlessness and expectancy, as though he were going to be given something, as though he were about to find something.

"Breakfast, Spalpeen."

The feeling broke; it broke as a bubble breaks. Once it had been there; and then, with a blink, it broke. (Mitchell, 1947, pp.107-108)

The gift of W.O. Mitchell's writing is that he not only manages to powerfully portray the spirit of the ecological self which young Brian was encountering, but he also manages to evoke that connection in the reader. We know that we are in contact with the ecological self when we are overcome by a "growing elation of such fleeting delicacy and poignancy", a "strange enchantment", the ineffable sensation which arises when we know that we are in right relation with creation. When we are living from the ecological self, we are not changed so much as we are more strongly ourselves. The ecological self is not the experience of god¹¹, but the experience of oneself as in line with god, or in secular terms, the experience of oneself as in line with the flow of the universe.

There are two aspects to the ecological self which both have relevance throughout this dissertation. First, the ecological self is the deepest and truest, the most essentially human place within us. Second, when we operate from the ecological self, we are in line with all of creation and experience ourselves as embedded in the world.

The ecological self turns on its head the subjective / objective categorization which has a hold on modern consciousness. By turning within, we become neither solipsistic nor relativistic. By turning within, we contact the universal which flows through all creation. This sense that the divine can be found within arises from many traditions and is the basis of the perennial philosophy elucidated by Huxley (1945). My interpretation arises most significantly from the ground of lived experience, and secondarily from the intellectual / spiritual traditions of deep ecology and buddhism.

In the field of deep ecology, Arne Naess (1987) distinguishes between self and Self, based on realms of identification:

Traditionally the maturity of self has been considered to develop through three stages, from ego to social self, comprising the ego, and from there to the metaphysical self, comprising the social self. But Nature is then largely left out in the conception of this process. Our home, our immediate environment, where we

¹¹Here and throughout the dissertation, "god" does not refer to the Judeo-Christian God, but the more generic sense of spirit which is known by a variety of names within different belief systems.

belong as children, and the identification with human living beings, are largely ignored. (p.35)

The self which is identified with the more-than-human world and which understands itself as embedded within a web of relations is variously termed Self, the ecological self or ecological consciousness (Devall, 1988; Devall and Sessions, 1985; Fox, 1995; Macy, 1991; Mathews, 1988; Naess, 1989; Rothenberg, 1993). I will maintain the label of Self to distinguish this interpretation from the slightly different meaning which I give to the ecological self.

Self-realization (see the sources listed above) is the process whereby self becomes Self. Or stated differently, Self-realization is the fulfillment of human potential but the ultimate fulfillment of that potential involves the "broadening and deepening of self" (Naess, 1987, p.35) to the extent that we identify ourselves with Nature. "Self-realization refers to the realization of as expansive a sense of self as possible" (Fox, 1995, p.106).

The concept in buddhism which parallels the ecological self is that of Buddha nature:

According to Buddhadharma, the fundamental state of consciousness - the basic state of our minds - is completely pure. This basic purity is called Buddha nature. Thus, the ground, or basis, of learning in Buddhism is the view that the nature of our mind, no matter who or what we are, is fundamentally pure. The goal of Buddhist education is the bringing about of the full understanding and realization of this basic mind: the mind which has been fundamentally pure and fully awakened right from the beginning. Education is then understood to be like a mirror that allows us to glimpse and recognize our own face: our true nature, our original purity. (Rinpoche, 1999, pp.51-52)

These twin understandings - that truth is found within and that opening to truth aligns us with the more-than-human world - are found within both buddhism and deep ecology. But whereas buddhism emphasizes turning within towards true nature, and deep ecology emphasizes identification with Nature, the understanding of the ecological self

developed here places the emphasis on the sameness of the two tasks. Through turning within we *do* turn towards Nature because humans are natural, ecological beings. If we can attune to our own natural state then we are by definition attuned to the rhythms, demands and nuances of the more-than-human world.

The question then arises, "what is our natural state?". This natural state was reached in the clearing in the forest, as it was glimpsed at the funeral. It is an experience of connecting with deep truth within, but that truth cannot be cognitively arrived at. The experience doesn't arise by elucidating core values and beliefs and pointing to them and saying, "yes, that is my truth". "The tao that can be told is not the eternal Tao. The name that can be named is not the eternal Name" (Lao-tzu, trans. 1988, p.1). What was reached was not a tangible state which can be pinned down or defined but an experience - an experience of rightness, of truth, of alignment, of connection. We know that we are connected to the ecological self only by being inside the experience of being connected to the ecological self. When we are inside that experience, we know ourselves to be in line with something beyond our own truth: a universal truth.

Although it may be true that there are universal human experiences and a fundamental ecological state which we all share, that is not the meaning which I intend here. By universal, I am not referring to beliefs or values or experiences which are ubiquitous, but rather a shared form of creation. McVay (1993) suggests that we need only "be in right relation with but one corner of the creation and the whole will become palpable and clear" (p.11). I, like each of us, am very literally a creature of the earth and so may stake a claim as "one corner of the creation". Aligning with my own truth *is* aligning with universal truths, the truth of the universe. Action which honours the truth of who I am is by definition an environmental action. By honouring one of the earth's creatures, I am honouring life on earth.

Since the "truth of who I am" is neither definable nor tangible, the only way that I can know when I am honouring that truth is by being mindful. We have to be careful, because there are many traps out there awaiting entry. Self-delusion, in particular, lies in

wait around every corner. Right relation and right action then, is arrived at through orienting ourselves to "forces much greater than our own" (Sanders, 1999, p.80). We must take ourselves out of the centre, bypass the intellect, and focus on alignment and attunement. Since this orientation requires that we listen to the messages of the universe and trust and be guided by its call, we are allowing ourselves to be ecological beings in the truest sense.

This deep sort of truth has a quality to it which helps us to distinguish it from delusion. Deep truth aligns itself with action which honours the finest and the strongest and the most dignified within us. The ecological self is aligned with beauty¹² and with good and with the furthering of life. When operating from the ecological self, our actions sustain, affirm and add meaning to life. Since we are earthly beings, when we honour the best and finest in ourselves, we honour what enriches and adds quality to life on earth. Align with these qualities alone and we are environmentalists in the deepest sense.

Of course, when we turn within, we do not only see beauty and integrity. We see jealousy, bitterness, pettiness, anger, resentment along with all of the more virtuous aspects of ourselves. This reality is the reason that Self-realization is a process and the realization of Buddha nature requires the work of mindfulness and meditation¹³. "Along the path of uncovering this heart of enlightenment, there are many different processes that we go through. We deal with our ignorance. We deal with our emotions. We deal with all the negative aspects of our mind states" (Rinpoche, 1999, p.52). There is no attempt in any of these traditions to suggest that these less savoury aspects of humanity do not exist: simply a

¹²"A person acts beautifully when acting benevolently from inclination" (Naess, 1989, p.85).

¹³The process of facing ugliness is important for several reasons. First, there is a relief in acknowledging truths even when those truths are not the most pleasant. This honouring of reality is a gateway to Self. Second, when we turn to negative or positive emotions within, we find that all sentiments arise and dissipate, flowing in and out of consciousness. They come and go, and still we are here. We do not need to become attached to these aspects of ourselves, nor do we need to define ourselves by them. Third, in confronting unpleasant reality, we can learn of the truth which it holds, and befriend it. With time, we can either accept this new knowledge and incorporate it into the self, or we can see it as delusion and move through it.

suggestion that in allowing ourselves immersion in them, we are taken away from the flow of the universe rather than oriented towards it.

Where the ecological self, as interpreted within this dissertation, parts company with Self and Buddha nature is in eschewing their focus on an endpoint. Self-realization is achieved and Buddha nature is encountered after the work is done. In contrast, the ecological self does not require this degree of enlightenment to be realized.

That is, the purity which is inherent in Buddha nature and the fulfillment of human potential which drives Self-realization, is also found within the notion of the ecological self. All three of these concepts are grounded in the belief that the most fundamental human state is a state of beauty and that our deepest wish is to live according to what's finest and most dignified within us.

But, we are not only in touch with the ecological self when we reach that pure state. We glimpse it and connect with it many times along the path. It should be remembered that the ecological self is not the experience of god, but the experience of oneself as in line with god. Stated differently, the ecological self is not identical to Self, but is the experience of oneself as in line with Self. Brian O'Connell is experiencing the ecological self and connecting with the flow of the universe as much as the most enlightened bodhisattva.

The first experience of the ecological self is one of belonging. At this early encounter, there is nothing demanded of oneself other than to *be* and to risk being open. Belonging says, "I fit here. I am not alone. I am part of something larger." For Brian, as for many people, this experience arose when encountering the magnificence of nature.

The experience of belonging may also arise when in the presence of a loved one where we feel heard and accepted. Or it may arise when we find ourselves in a place where we feel totally at home. In either of these situations, there is a deep resonance which occurs which enables us to feel honoured for who we truly are. The experience of the ecological self then is one of relief, settling, safety.

This connection to the ecological self is quite passive, simply experienced as a feeling of rightness. But because the accompanying feeling is "growing elation", a "strange

enchantment", it urges us on to further contact. And because the sense of safety enables us to let down our guard, we are able to intuit deeper layers of the self. The way is paved to engage in the process of Self-realization or to open to Buddha nature.

The path towards this ultimate purity where we understand ourselves as embedded in creation consists, in my mind, of a series of spirals which take us ever closer, ever nearer to home. Each spiral etches a similar path from recognition or awareness to compassionate embracing of new understandings and incorporation into the self to action which honours truth.

After first experiencing belonging and finding ourselves opening up, we intuit that there may be deeper aspects to the self (recognition). This realization is accompanied by a giddiness, a joy-filled sense of awe in the world, and a desire to explore further. The exploration uncovers simple truths about the self: core values, moments of beauty which are eagerly greeted with love and acceptance (compassion). We then experience a desire to stand strongly for these values and to make shifts in lifestyle in order to honour those moments of beauty which we have glimpsed (action).

Honouring these truths leads to an experience of a different aspect of the ecological self. Now, rather than the relief which belonging engendered, the experience is one of strength and purpose. When we live according to core values, there is a sense of honouring the integrity of our being, being true to who we are¹⁴.

After the initial elation passes, the spirals have a different tone, but they still carve a similar path. Now, we begin to intuit aspects of the self which are troublesome, from which we would like to run (recognition). We need to do the work of understanding the character of these aspects of ourselves, of confronting the truth within them. Armed with the twin goals of acceptance and moving through, we need to find a way to face ourselves with gentleness and embrace these aspects of the self with love (compassion). Finally, we

¹⁴This feeling of strength and integrity is occasionally experienced without going through the process of opening to self. When we are called upon to offer our finest or to stand up for something in which we truly believe such as when our limits are tested, this deep sense of self often emerges as a moment of strength, clarity and resolve.

need to act from a place of deep truth, where our actions reflect who we truly are, not just who we wish we were or believe we should be (action).

This aspect of the ecological self is experienced as humility, connection, unity. In witnessing and facing our own limitations, we are taken out of ourselves, to understand that we all share the same journey. Rather than the giddiness of a more expansive self, we experience the humility of the first inklings of Self.

While ultimately this path leads to Buddha nature and Self-realization, I believe that as we move through each spiral to a place of action, we become aligned with Self. Each time we move beyond initial awareness, work through deeper truths with compassion, and arrive at a place where our actions honour our truths, we are connected with the ecological self and are living in harmony with Self.

As we travel this path, we begin to intuit more and more deeply that we are not isolated beings and identification broadens. Perhaps the best way to explain what is meant by understanding oneself as embedded in creation, is to provide an example drawn from the day to day work of environmentalists.

When an environmental issue becomes newsworthy, it is frequently portrayed as a clash between jobs and the environment. Environmentalists, so the argument goes, are more concerned with preservation of the natural environment, and business interests (logging companies, miners, fishers, etc.) are concerned with the preservation of jobs. Environmentalists, themselves, buy into this interpretation by trying to present ever more substantive and more encompassing reasons that we should sacrifice economic gain to environmental well-being. But arguments for aesthetics or spiritual respite beg the point. Environmentalists who experience themselves as embedded in creation experience the degradation of the natural environment quite literally as a degradation of the self. Their fight is not grounded in altruism, virtue, platform or posturing: it is about self-preservation.

This argument may be better understood if pushed to an extreme. If the public was presented with the idea that they may retain their jobs but their first born will be taken from them and killed, or the life of their first born will be spared but they will lose their income,

the debate would be closed down in seconds. These two alternatives are non-options. Since nobody would agree to sacrifice a child's life for a job, we would have to reestablish ground rules about what constituted viable work. We would need to redefine practices and find alternate ways of seeking an income.

But for people who are ecologically-oriented, the choice presented between jobs and the environment is equally non-viable, offensive, ridiculous. The environment is experienced as an extension of the self. Damage to the environment *is* experienced as damage to oneself. This perspective can be seen in Wendell Berry's (1990) words:

The pond was a modest piece of work, and so the damage is not extensive. In the course of time and nature it will heal.

And yet there *is* damage - to my place, and to me. I have carried out, before my own eyes and against my intention, a part of the modern tragedy: I have made a lasting flaw in the face of the earth, for no lasting good.

Until that wound in the hillside, my place, is healed, there will be something impaired in my mind. My peace is damaged. I will not be able to forget it. (Berry, 1990, p.6)

There are two kinds of identification with nature which occur. The first type was described by Naess (1987):

I looked through an old-fashioned microscope at the dramatic meeting of two drops of different chemicals. A flea jumped from a lemming strolling along the table and landed in the middle of the acid chemicals. To save it was impossible. It took many minutes for the flea to die. Its movements were dreadfully expressive. What I felt was, naturally, a painful compassion and empathy. But the empathy was *not* basic, it was the process of identification, that 'I see myself in the flea.' If I was alienated from the flea, not seeing intuitively anything even resembling myself, the death struggle would have left me indifferent. (p.36)

This form of identification involves literally seeing oneself in the other, or intuiting in the other some of what one experiences oneself. Feeling pain as a baby bird, struggling

to maintain a grasp on life, shudders its last breath - because we too can experience death. Being amused, watching two squirrels chase each other up and over and around tree branches - because we too know what it is to play. Maintaining calm and speaking gently as a kitten hides herself under a parked car - because we too know what it is to fear strangers.

But I do not literally feel the pain of a tree as it is cut down: this is a different type of identification. When a forest is clear-cut, a mountain strip-mined, a river loaded with toxicity, I feel damaged because I experience a diminishment of the world. This sense of diminishment is not just due to the loss from the world of one majestic manifestation of a tree, mountain, river.

I also feel wounded because that act of destruction betrays respect and betrays care, and in so doing, does not allow the realization of what's finest and most decent in us. We are all lessened by the diminishment of integrity in the world. But even more, the act of destruction does not permit me to turn to the enactment of beauty in my own life, to living out the ecological self. Instead, I am forced to face the horrors of ugliness, to be drawn into them. So, not only is the soul which perpetrated the act of destruction or control, a degraded soul. By requiring my presence, he has degraded *my* soul. I experience acts of abuse towards the earth as a literal diminishment of my own soul, of Self.

This experience of diminishment within oneself when another creature is diminished is a realization of oneself as embedded within creation, an identification with Nature. It is this wider identification of Self which causes Naess (as cited in Macy, 1991) to say that altruism is not only unnecessary but perhaps shaky ground on which to build an environmental ethic:

Unfortunately, the extensive moralizing within the ecological movement has given the public the false impression that they are being asked to make a sacrifice - to show more responsibility, more concern, and a nicer moral standard. But all of that would flow naturally and easily if the self were widened and deepened so that the protection of nature was felt and perceived as protection of our very selves. (p.191)

Each time that we spiral through the journey of the ecological self, moving closer towards the purity of Self, we intuit ourselves more and more in this sort of interdependent relationship with the rest of creation. This understanding of the self necessitates not acting in a way which would be harmful to the earth. In fact, explicitly undertaking environmentally destructive behaviors, or any destructive behaviors, doesn't even arise as a possibility because such actions are experienced as pain within oneself. Because I don't want to cause myself damage, I have to act in a way which won't bring it about. Pain avoidance necessitates that I act from the finest and the truest in myself: it necessitates that I act from the ecological self.

Turning from the Ecological Self

Relief, settling, safety. Strength, purpose, integrity. Humility, connection, unity. The cultural turn away from these qualities which comprise the ecological self amounted to a turning away from our grounding, our roots, our home, our soul. Why would we choose to abandon such an important aspect of the self?

The turning away from the ecological self appears to be a relatively recent occurrence, rooted in the events of the second half of the nineteenth century¹⁵. Barraclough (1964) provides a compelling argument for stating that

a person living today¹⁶ who was suddenly put back into the world of 1900 would find himself on familiar ground, whereas if he returned to 1870, even in industrialized Britain, the differences would probably be more striking than the similarities. (pp.45-6)

¹⁵Much of the ecophilosophical literature places the genesis of environmentally problematic understandings at an earlier date. See Appendix A1 for a discussion about the relationship between ecophilosophy and the ecological self.

¹⁶Although Barraclough was writing in 1964, and a person living in 2000 may find stark differences between current realities and life in 1900, his point remains valid. Drastic changes occurred in the latter half of the nineteenth century on all levels of life, resulting in a very different world from what had previously existed.

He sees the second half of the nineteenth century and the early part of the twentieth century as a point of discontinuity in history. The era before and the era after those years present themselves as radically different.

In Figure 1, I have taken some of the facts which Barraclough has provided and the arguments which he has put forth, connected them to show relationships and viewed them through an environmental filter. In looking at the environmental impacts of this era (shown in oval enclosures), I think it is fair to say that industrialization which was initially heralded with the same fervour with which we greet technological advances today, was beginning to show its darker side. A realization of the limitations of industrialization combined with the final settling of the west and the reconsideration of the frontier mentality (Nash, 1967), created some of the conditions which gave rise to transcendentalism which, with Thoreau as its spokesperson, could be considered the first wave of environmentalism.

But my interest here is in the impacts of this era on the ecological self. What strikes me in reading Barraclough's account and taking a bird's eye view of the changes shown in Figure 1, is that at the end of the nineteenth century, economic priorities took on a life of their own. We were no longer ecological people with economic concerns: we were economic people (later to become consumers or taxpayers) first and foremost. Economic priorities, fueled by large scale industry and the need for global resource extraction, were steamrolling their way through people's lives, leaving numbed souls in the wake.

The point is not that humanity lived strongly in harmony with the ecological self before this time. But rather, the momentum of industrial growth didn't allow time to consider whether actions affirmed life, whether industrial growth and business considerations offered the best option, whether the soul was nurtured by the expansion which was taking place. People were swept up in the bewildering speed of change, leaving no chance to consider life priorities.

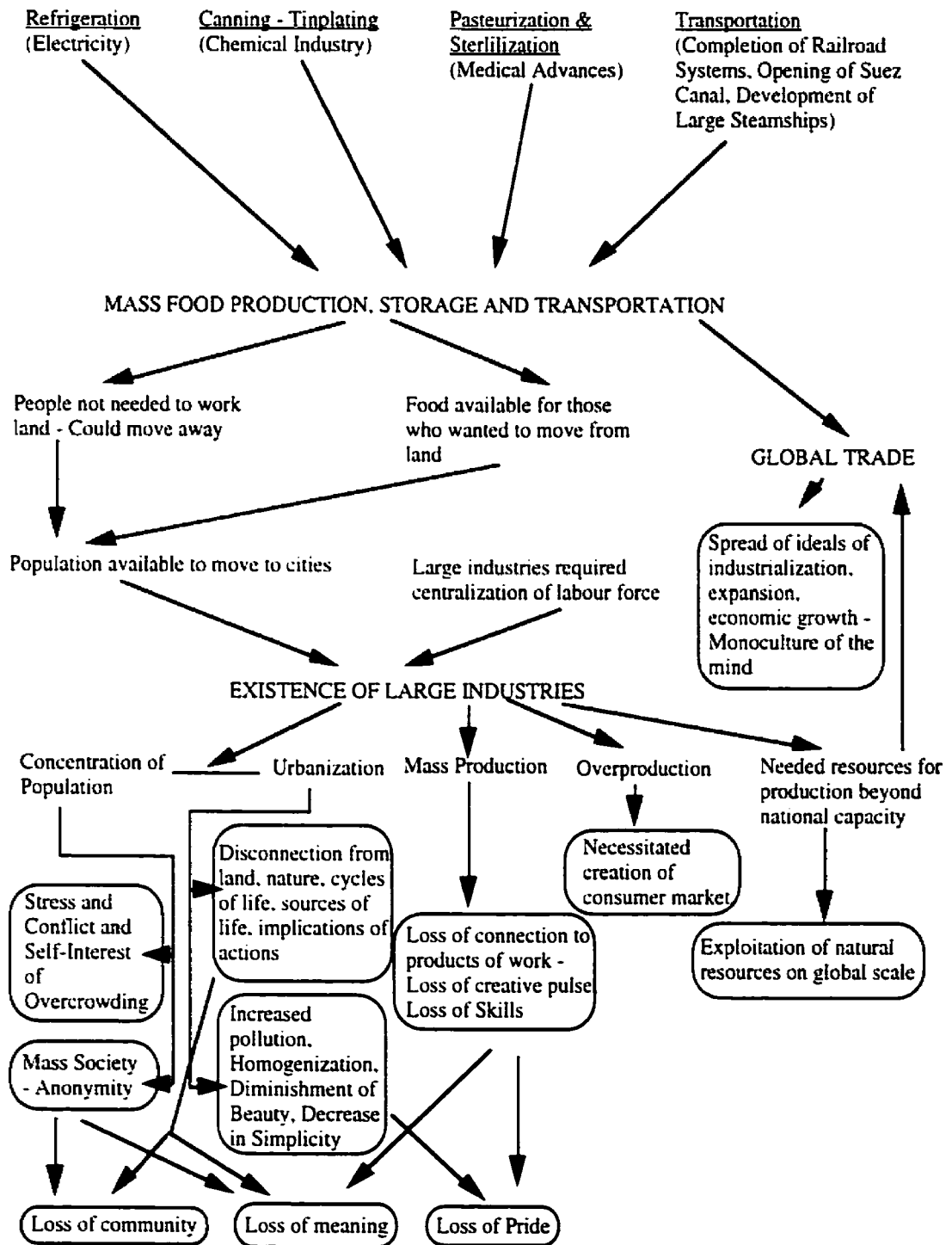


Figure 1. Historical Roots Underlying the Turn Away from the Ecological Self
 (Adapted from Barraclough, 1964, chap.2)

As these changes became systemic, indeed global, the possibility for dissent became drastically reduced. The changes which were sweeping across the world became impossible to choose against. Furthermore, with the globalization of industrialization and economic priorities, the dominance of modern ideals (discussed in Chapter Four as one of *the* largest difficulties which ecological educators face) was taking hold. Not only was life barreling us more and more quickly away from considerations inherent in the ecological self (dignity, respect, purpose), we were reaching a place where the priorities of the ecological self were not even considered valid.

Ironically, at the same time, the seeds were being planted for a return to the ecological self. The sense of certainty which had originally been the domain of religion and later of science, was crumbling. Not only were we experiencing a loss of scientific certainty brought about by the work of Freud, Einstein (Taylor, 1999) and Darwin (Dewey, 1909/1984). Taylor points out that people were also gripped by a sense of doubt, a loss of faith in the universe. No longer could we be certain about human purpose or human nature nor could we trust that we were living in an ordered, benevolent universe. This shaking of confidence, along with the uncertainty about our ability to obtain definitive knowledge of the universe, led to an undercurrent of anxiety.

Coming to terms with the absence of certainty is, it seems to me, the major project of the twentieth century and beyond. We have seen a variety of responses to this challenge, from ideologies which suggest that we embrace uncertainty (radical hermeneutics `a la Caputo, 1987) or that uncertainty is an inherent part of human ontology (buddhism) to those which rejoice in the absence of truth (the nihilistic versions of postmodernism) to those which suggest that there are a multitude of truths which coexist or that truth is situational, to those which wish to return to the certainty of old truths (fundamentalist christianity and "back to the basics" pedagogy), to those which delight in exploring under and deconstructing the appearance of truths (interpretive disciplines), to those which are intent on establishing new versions of truth (new age movements), to those which celebrate the openings created for alternative versions of truth which were previously silenced

(feminism, multiculturalism), to those which seek to impose their own truths on the world (fascism), to those which suggest that truth is personal and relative.

The concept of the ecological self is also a response to this lack of certainty. The ecological self (and Buddha nature) suggests that there is truth, indeed there is universal truth, but that truth can only be found by looking within. Stability and security exists by putting our faith in the call of the universe which we can intuit from turning to inner wisdom, being mindful, attuning to the currents which run through creation. The universe does provide certainty of sorts, but it is not the static, definable, absolute and everlasting variety. There is constant flux and flow in the voice of creation, but if we can align with that energy and become sensitive receptors for the messages which it is providing, then we will know of truth.

Loy (1993) eloquently elaborates this idea:

If each jewel in Indra's Net mutually conditions and is conditioned by all the others, then to become completely groundless is to become completely grounded, not in some particular, but in the whole web of interdependent relations. The supreme irony of my struggle to ground myself is that it cannot succeed because I am already grounded - in the totality. I am groundless and ungroundable insofar as delusively feeling myself to be separate from the world: I have always been fully grounded insofar as I am the world. (p.489)

Finding secure ground requires giving up our tight hold on illusory certainty and aligning with the flux and the flow. Truth is found by turning to the ecological voice which runs through all of us. By understanding ourselves as part of Indra's Net, which is equivalent to understanding ourselves as embedded in creation, security arises. In other words, certainty is found on the path towards Self, or by opening to the ecological self.

If we were capable of turning away from the ecological self, and if this turn was such a recent blip, a "temporary turbulence" in the "big flow" (Snyder, 1980, p.112) of human evolution, then we can also turn back to it. Education could certainly have a role to play in this reuniting with our ecological identity. As I argue elsewhere (Pivnick, 1997),

because the ecological self has not actually been lost but is "perennially within us, dormant as a hard-shelled seed, awaiting the fire or flood that awakes it again" (Snyder, 1990, p.13), education need not teach us something that we do not already know. The task of ecological education is to help us find our way back to our hearing of the ecological self by "brushing away the dust which obscures connections" (Pivnick, p.62) and providing the fire to wake the dormant seed.

Ecological Education as a Turning Back to the Ecological Self

Ecological education¹⁷, quite simply, aims at connecting students with the ecological self. It hopes to foster connection with the deep truth and wisdom which shines within us all. Ecological education focuses on educational experiences which affirm, sustain and add meaning to life.

Although engaging in such experiences has the potential to engender lives full of purpose, serenity, connection and strength, for ecological educators, the interest in turning to what affirms and sustains life is not only and not primarily an interest in personal fulfillment. Ecological education, like environmental education¹⁸, concerns itself with environmental sustainability. As was discussed above, honouring what sustains life in each of us will, by definition, sustain life on earth, as we are earthly creatures. "The more coherent one becomes within oneself as a creature, the more fully one enters into the communion of all creatures" (Berry, 1990, p.11). While ecological education shares methods with other forms of education such as holistic education, spiritual education, or

¹⁷I am describing here a version of ecological education which is focused on the ecological self. For a description of the relationship between this version of ecological education, and the more broadly based interpretations of ecological education, see Appendix A2.

¹⁸See Appendix A3 for a discussion of the difference between environmental and ecological education.

"good education"¹⁹, the underlying goal of environmental sustainability is its primary distinguishing characteristic.

But determining which learning activities or teaching approaches or course content are affirming of life is problematic for several reasons. First, as was stated earlier, the experience of the ecological self and of inner truth can neither be pinned down nor defined. Second, although the experience of connection arises for each person, the circumstance which evokes that sense of connection differs from person to person. Third, self-delusion is a common pitfall for all of us, and even more so, for children who are inexperienced, immature and driven by desire.

The combination of these second and third difficulties, make right action particularly challenging for teachers of young children. Is playing the gameboy all day really what helps Johnny to connect with truth? Does talking with her friend, really increase a sense of affirmation of life for Mary? How are teachers to know what will evoke connections for students?

The conception of self-realization as dependent upon our insight into our own potentialities makes it easy to see the possibility of ignorance and misunderstanding as to which are these potentialities. The ego-trip interpretation of the potentialities of humans presupposes a marked underestimation of the richness and broadness of our potentialities. In Fromm's terms, "man can deceive himself about his real self-interest if he is ignorant of his self and its real needs". (Naess, 1987, p.37)

"If he is ignorant of his self and its real needs" is the key phrase for teachers. Children are likely to be ignorant of themselves and what constitutes "real" needs. A teacher can't know each student's "real needs" but s/he can be knowledgeable about Self and skilled at careful listening. Reading the signs of true connection requires a very practiced teacher, one who is

¹⁹In a presentation at the North American Association for Environmental Education conference in 1999, a professor in the audience suggested that my description of ecological education was, in fact, a description of good education.

carefully attuned to the truth within his or her students. Teachers can only acquire this sort of discernment and sensitivity if they do the work of achieving clarity within themselves²⁰.

Ecological Education's Lens on the World

While turning our attention towards experiences which sustain, affirm and increase meaning in life is not a very radical suggestion, when these criteria are used as the lens through which the world is seen and judged, the shift which must occur is monumental. Indeed, the different reality to which this lens gives rise, as well as the different lens which arises through the understanding of oneself as embedded in creation (discussed above) are, I believe at the root of many of the misunderstandings and confusions which are discussed in Section II. Ideas that are perfectly reasonable within one framework are non-sensical within the other. Unless the underlying assumptions which frame the worldviews are made explicit and are understood, conversation becomes quite a challenge.

I mentioned earlier that the buying and selling of human genes has a certain sense to it from an economic point of view, but is an alien concept from an ecological perspective. Similarly, the statement made to me by one professor: "it doesn't matter whether a faculty member actually *is* ethical: all that is important is that he can speak effectively about ethics" has truth to it when viewed through the academic lens which concerns itself with the effective selling of ideas. From the standpoint of integrity, however, this comment is abhorrent and from the perspective of sustainability it is non-sensical. I would suggest that, in fact, the betrayal of honouring what sustains, affirms and adds meaning to life, is the common thread which winds through all of the examples offered above in "Severing our Earthly Vocal Cords". Examples as seemingly innocent as a man throwing garbage on the floor of a grocery store, or as potentially harmful as cigarette companies keeping a lid on information regarding lung cancer are all degrading of humanity because they don't orient

²⁰The importance of teachers "walking the talk", by becoming aware of and honouring their own deep truths, was mentioned frequently within the interviews and is discussed briefly in Chapter Seven.

themselves towards the realization of the finest and strongest and most beautiful within us. These types of actions are so ubiquitous and so seemingly unproblematic because they are not viewed through a lens which has as its priority the furthering of richness of life on earth.

When the ecological lens is taken to an educational setting, it causes similar shifts in orientation. The question which ecological education asks of curriculum or instructional method is, "how does this content or approach enable or encourage the sustenance and nurturing of life?"

For example, educational technology, distance education and virtual education are considered by many educators to be the cutting edge of innovation in education. Ecological education would not argue this point, but would change the parameters for discussion. That is, ecological education would not provide a critique of educational technology per sé, though many ecophilosophers have done so. (See, in particular, Bowers, 1993a.) Instead it would shift the lens through which we view these "advancements".

From my rather distanced view of the field, it seems that the avid support of educational technology is underwritten by two motivations. First, there is the approach which supports innovations in technology simply because they are innovations. Rooted in a sense of awe in human inventiveness, this perspective has the potential to slip into the assumption that "there is nothing humans can do, that science can do, that they should *not* do" (Sale, 1991, p.22). Second, there is the fear approach which suggests that if we are going to keep up economically, if students are going to get jobs, if academic test scores are going to match up with other countries, then we need to become more and more technologically literate. The question of how educational technology sustains or adds meaning to life is rarely raised within these discussions²¹.

Ecological education, through providing a different lens through which to view education, raises these questions. One of the problems for educators, however, and

²¹Postman (1999) provides some groundwork for the type of discussion which I am suggesting.

particularly for environmental educators²² is that ecological education is not an ideological platform. The above example is not used to imply that ecological education is anti-technology. Rather, it is pro-quality of life. Ecological education asks questions of meaning about everything. Indeed, in Chapter Eight, I discuss the ways in which these very same questions were raised about a school's organizing theme which on the surface was an ecological theme - the web of life.

Furthermore, if the web of life theme didn't add meaning or quality to the children's life, ecological education would discard it. If technology increased the ability to sustain conversation and thought and meaning, then it would be embraced. By orienting towards meaning and sustainability, ecological education, therefore, does not align itself with or against current trends in education. This feature of the ecological lens can be problematic for educators who wish to pin down the approach to a series of techniques or ideological stances.

Ecological Education²³ in a Modern World

When teachers view the world through an ecological lens and students view the world from the more typical western, industrial perspective, what transpires? What challenges arise? What possibilities emerge? Based on the research interviews conducted, Section II of this dissertation, will address these questions.

²²This tension will be discussed in more detail in Appendix A3.

²³While my interpretation of ecological education focuses on the ecological self, the complexities of practice and of living, do not allow the concept of the ecological self to be neatly extricated from other aspects of ecological education, or from other aspects of an instructor's belief system. The difficulties which ecological education practice engendered for teachers and students therefore (discussed in Chapters Four through Seven), encompass aspects of ecological education which are not strictly related to the ecological self. See Appendix A2 for a discussion of the broader field of ecological education. Also, see Appendix C1, for a discussion of the characteristics which are fundamental to an ecologically oriented instructor. Connection with the ecological self represents only one of the seven characteristics which all of the instructors either possessed or indicated were essential to effective, authentic practice.

The next chapter foreshadows some of the issues which will arise in the empirical research. By turning to the ways in which a researcher who views the world through an ecological lens might proceed in the modern world of academia, the understandings of an ecological worldview are revealed. In particular, through an attempt to treat research itself in an ecological manner, the challenges of "method" are highlighted.

CHAPTER THREE - EXPLORING TOPOS

I now live in my subject. My subject is my place in the world, and I live in my place. There is a sense in which I no longer "go to work." If I live in my place, which is my subject, then I am "at" my work even when I am not working. It is "my" work because I cannot escape it. If I live in my subject, then writing about it cannot "free" me of it or "get it out of my system." When I am finished writing, I can only return to what I have been writing about. (Berry, 1990, pp.6-7)

In his essay, "Settling Down", Scott Russell Sanders (1999) tells the story of the Miller family. The Miller farm in Ohio was hit three times by tornadoes. The Millers came quickly to understand that the topography of the area would "coax future whirlwinds in their direction" (p.79). Nonetheless, they stayed on, rebuilding after each devastation, rededicating themselves to this place. Sanders uses their story as a jumping off point to question the mobility of American life and to advocate the value of "staying put".

When, two years into my doctoral work, my supervisor and I parted ways, the nature and character of our leave-taking threw my world into a turmoil no less real than the havoc caused by the tornadoes on the Miller's land. People around me questioned whether I would stay on to continue the work on my doctorate, and why I would choose to do so.

I never questioned leaving, but the "why" was not so easy to explain. The decision to stay on was not so much a matter of choice but of necessity. As the Miller's "farm was not just so many acres of dirt, easily exchanged for an equal amount elsewhere: [but] was a particular place, intimately known, worked on, dreamed over, cherished" (Sanders, 1999, p.80), so too my work held my soul, ran through my veins. We had become entwined. There is both obligation and desire which maintains the bond between researcher and topic. I cannot betray this topic which holds my passion, nor does my own heart beat as strongly when I am separated from the work. Theoretically, the Millers could have run, and so could I. But such an action lacks dignity. It holds no courage and allows only the breaking of obligations.

In more tangible ways, I could not have simply pulled up stakes and left the topic behind, or exchanged it for another one. Like Berry, my place is my subject and my subject is my life. If I ran, the work would run with me. I may escape this manifestation, or this ground in which the work is being lived out, but I could not escape the subject itself which is interwoven with my identity.

To stay in the face of hardship is an act of obligation, and an act of faith. What but faith, could have been in the hearts of the Millers when, after each wave of destruction, they began to rebuild once more? Berry (1983, p.206) claims that "the faith... is that by staying, and only by staying, we will learn something of the truth, that the truth is good to know, and that it is always both different and larger than we thought". Such is the faith which held the Millers in place and which kept me tied to my subject.

But the staying is not unproblematic. Facing a cherished place when its very presence holds memories of sweetness betrayed, rebuilding with "worn-out tools" (Kipling, 1940, p.578), regaining trust and affection for the territory is not a simple affair. More difficult is the daily encounter with the conditions which have made devastation possible: the wild winds of Ohio and the land which funnels them onto the Miller farm. Staying put only becomes a necessity "when the pain of leaving behind what we know outweighs the pain of embracing it" (Sanders, 1991, p.80). Sitting still under these conditions is a test of faith, and a test of love, but it also teaches us about the strength of our love and the depth of our commitment. That necessity to stay speaks to the intertwining of self and place, soul and topic, identity and work.

Such an intimate relationship of researcher to topic, raises some inescapable questions about "research method". Would it be possible to love methodically? Is there any way to systematize a caring attunement? How can I enact care through method, or perhaps more pointedly, do I betray care through method? Who do I, as a researcher, become in living out my love in such a way? What are the demands on me, if I wish to treat my topic with the integrity for which it calls?

Initially, my sense in the work that I was doing, was that there was no method. I cared. I listened. I tried to do what was best for my topic. But I didn't follow procedures. Furthermore, I felt that subjecting myself to the demand for method, for step by step procedures which were decided in advance and which were held in common by all research projects using the same design, was abusive to my topic. Such a demand forced the topic to fit into a mold whether appropriate or not, and didn't allow the topic's full, rich voice to emerge.

While the absence of method and the sense that method betrays the topic, are not specific to my study, the particulars of my topic raised a third issue which compounded these tensions. I start with the necessity to do right by the work because I care about it. But what is the nature of that work? Throughout this study on ecological education, there is a normative suggestion that living from an ecological place would be better - better for a human sense of purpose and peace, and better for the sanctity of our earthly home. While proving that statement is not the purpose of this study, my bias is undeniable.

If I am to suggest that living in a certain way is "better", then there is an obligation for me to be living in that way - in my personal life, in my teaching, in my writing and in my research. I must treat the very act of research, ecologically. How I research then becomes part of what I research, and the obligations to do right by the work, multiply.

Method, it seems, asks for a betrayal of that obligation. Indeed, method arises from the very unecological position of separation and distance, of no longer belonging in the world (Weinsheimer, 1985, pp.4-5). That is, we can only turn life into method if we have lost that intuitive tact for what a situation requires which belongs to the realm of humanness. Indeed, as discussed in Chapter One, the goals of certainty, careful control, predictability which method seeks, are precisely part of the problem which has caused us to lose touch with the ecological self.

Or perhaps, more generously, and more in keeping with Gadamer's (1960/1989) assertions, method does not demand betrayal. Method is simply not large enough. It will take us a certain distance, but no further. Method cannot contain what it is that I wish to

research because the question of how to live well on the earth occurs outside of the realm which method governs.

Despite the prominence which texts such as *Truth and Method* and approaches such as hermeneutics and phenomenology have received in recent years, they are up against centuries of academic carriage. The demand for method is still felt strongly within the halls of academia and called loudly to me. This is the tension which I have lived inside while I pursued the work which was needed for my topic.

I would squelch this dilemma in public by calling my method hermeneutic, quieting both further questions, and my own deep doubts that I had any method at all. Yet, this labeling never sat quite right for me. I knew deep inside that my affinity for hermeneutics lay in the fact that hermeneutics and ecophilosophy share an understanding of and approach to the world. There was kinship there, not method. I was always puzzled when my colleagues would ask whether I was following the hermeneutic method and what procedures I was undertaking to do so. I couldn't conceive of what this question could mean. They seemed to have found within hermeneutics a tangible model to follow whereas I had found only a coming home.

In private moments, I had come to think of my research method as one of stumbling and bumbling, trying to remain open to what was coming at me, trying to remain responsive, always maintaining a fierce, some would say stubborn, desire to do right by my subject²⁴. In Sanders' (1999) words, sitting still is akin to "reverence, a respectful waiting, a deep attentiveness to forces much greater than our own" (p.80). My method was one of sitting still: of attunement, at-one-ment, attentiveness.

How does such an approach in any way constitute a research method? Indeed, "there is no method of stumbling. Method is designed rather to avoid stumbling and prevent accidents, whether serendipitous or otherwise" (Weinsheimer, 1985, p.7). Even in qualitative approaches, where generalizability and reproducibility are not the prime goal,

²⁴This way of being-in-the-world or being-with-research is a hermeneutic stance. Hence the kinship arises.

there is still a demand to be able to articulate method. "Just kind of doing what seemed right" is an academically suspect response to this demand.

As I began to work with the interview transcripts, the question of method came more to the fore of my mind. The insightful, candid words of the people who had engaged in conversations with me, now had to be treated as data. In making that shift, I realized that I was making choices about how to understand their words. These choices were not random but were based in my understanding of the world and what I hoped to gain from the study.

As I thought back to the interviews, I realized that the way in which they were conducted was also not random. My approach may have been intuitive but it was also purposeful. True, I wasn't following a method outlined in a textbook, nor was my own method readily apparent. But not just any approach would have done. At every step of the way I had made choices about how to proceed, and those decisions constituted method. I began to realize that attunement *was* a method, and that careful listening rather than being an innate human trait was, in fact, a way of conducting research which was chosen and could be learned.

At the same time, Tom Brown (1983) turned me to a meditation on "topos". Brown is a "tracker", a man who has made his living by reading the signs of the world. Schooled in the Pine Barrens of New Jersey at the feet of a native elder whom he called "grandfather". Brown became a skilled observer of nature, and developed deep knowledge of ways to live off the land. I had read his *Field Guide to Nature Observation and Tracking* many years ago. Something led me back to this book on my shelf while I was immersed in the transcripts. That turning back was a startling adventure.

What I found in those pages was suggestion after suggestion about ways to be a more keen observer of nature. Let your interests dictate your schedule and be open to what crosses your path. Slow down so that you can pick up subtleties. Don't analyze. See newness in everything: nothing is commonplace. Immerse yourself in nature. Ignore discomforts. Don't try so hard. Follow your heart. Quiet down. Look at details; look at the

big picture (Brown, 1983, chap. 1-2). Brown, in describing how one might be more attuned to nature, was describing the same "techniques" which I had been instinctively using to better understand my topic and to conduct my research.

I began to wonder if there was something about the way in which we come to know place (the topos which underlies both topography and topic) which has a commonality whether it involves a naturalist's relationship with the land or a researcher's relationship with a topic. Is there a way in which naturalists come to know the land which could in fact form a method for more broad forms of research? Is there such a thing as an ecological method?

The more that I worked with the idea, the more that I saw parallels between the way that I was conducting research, and the way that a naturalist comes to know the land. When I presented these ideas to a group of environmental researchers, the response was overwhelming. It seems that I had struck a chord, brought into the open a frustration and unease that many environmental researchers were experiencing. Members of the audience echoed back experiences of feeling that their research didn't have a method, and feeling that the demand to force oneself into the structure of a method was abusive to their topic. They, like I, were hungry for a way to live ethically and graciously within the world of research. Perhaps the ecological method would offer us a way.

The Ecological Method

The remainder of this chapter will turn to a fleshing out of what the ecological method could be, and how it was played out given the context of the specific research in which I was engaged. While the ecological method can be described as an approach to research onto itself, in actuality it exists within a series of nests of connections.

The ecological method has special significance for those researchers undertaking environmental research. The interweaving of environmental research and the ecological method is discussed briefly at the end of this chapter.

The ecological method exists within the broader context of qualitative research, arising from similar assumptions about knowledge and working towards similar research goals. Where appropriate, the kinship of the ecological method to particular forms of qualitative research, most notably phenomenology, is pointed out throughout this chapter.

While there are familial resemblances between the ecological method and hermeneutics and phenomenology as well as with critical and action-oriented forms of inquiry, there is not sameness. While both phenomenology and the ecological method are interested in turning to lived experience and the pre-reflective state, their purposes differ. Phenomenology wishes to describe lived experience. The ecological method wishes to honour the truth of lived experience, suggesting that doing so will lead to a way of being which is ecological in tenor and which holds the promise of earthly sustainability.

Hermeneutics provides two strong pillars of support for the ecological method. First, through its interest in interpretation, hermeneutics opens the door for the ecological method to look under taken-for-granted assumptions, enabling a critique of modernity and the possibility of living otherwise. Second, through sharing understandings of the way that life unfolds, hermeneutics and the ecological method are mutually supportive. But hermeneutics is content to remain within the philosophical realm of interpretation. The ecological method always begins and ends with an interest in living better in the world.

Through its desire to improve practice (teaching and living) and through its strong social conscience, the ecological method has ties to action research. But the ecological method does not take shape within the world of day to day practice, nor is the research necessarily designed in collaboration with practitioners.

These three forms of research have informed the design of the ecological method, but ultimately the ecological method is a form of research onto itself. As such, the ecological method is grounded in the question, "what actions should be taken to maintain the integrity of topos?". The steps used to arrive at an answer to that question are laid out in the remainder of this chapter.

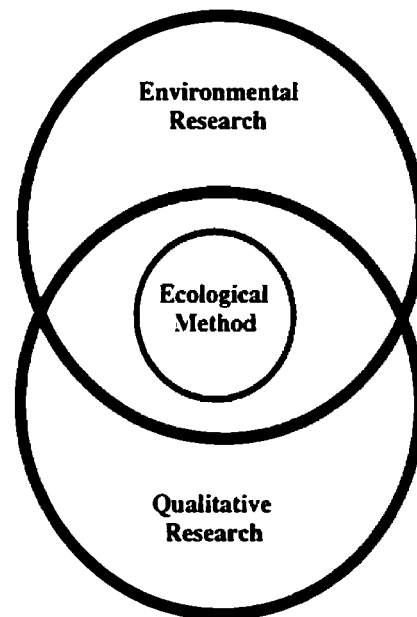


Figure 2. Ecological Method - Widening Circles of Connection

The Heart of the Method - How do I know what's right to do for this place?

When I was a teenager growing up in southern Ontario, my father owned a small cottage on the shore of Lake Huron. To say that it was on the shore, is not entirely precise. While it is true that he owned lakefront property, the cottage actually stood many vertical feet above the beach.

The cottagers along the way had unique ways of dealing with this natural obstacle to the waterfront. Some landowners had built steps reaching from the water's edge to the top of the cliff. Other cottagers had built their homes on stilts at the bottom of the bluff, with the hopes that the raised floor would protect them from high water. For us, there was a natural solution to the problem. Between our property and the cottage next door, the land had severely eroded, forming a gorge which we could scamper down to get to the lake.

From the time that my father bought that cottage, he wrestled with what to do about that gorge. While I didn't ask him at the time, I suspect that his concerns were two-fold. First, he wanted to maintain the integrity of the soil in the gorge so that we would continue

to have safe footholds on our treks down and up. Second, he wanted to discourage the advance of erosion from eating up the land up top, and eventually claiming the cottage.

When faced with a natural challenge such as this one, how do people know what the right thing is to do for a place? Even where the land poses no problems for human habitation, how do we determine whether it is right to plant a garden, to dig a well, to alter a landscape? How do we know where the best location would be for a septic tank, whether the wind is sufficient to generate electricity, which kinds of plants would thrive in this area or would provide a helpful windbreak?

It seems to me that there are four tasks which are required in order to determine right action for a given place. First, we must listen to the land, observing it for a sufficient length of time to learn about windpatterns, to understand its response to cold, to watch the movement of water along its surface. This listening requires an immersion and an opening to what the land has to teach. Second, we must come to the place with a knowledge which allows a thorough and sensitive reading of the land. My father needed to understand the mechanics of erosion in order to see in the gorge the possibilities of future damage, rather than simply a convenient walkway to the water. Third, we must come to the place with questions, and with the tools to find answers. We must undertake a fact finding mission, learning the specific types of knowledge which would help us to make the best response. Finally, and underneath all of these tasks, is the requirement to care about this place. Love is required in order to "respond to the place as it really is", and "image possibilities that are really in it" (Berry, 1983, p.70).

This initial question, "how do we know what is right to do for this place?" drives the ecological method, whether the place referred to is the topos of geography or the topos of academic research. Embedded in this question are the four sub-questions alluded to above:

How do I open myself and listen well enough to hear what this place requires of me?

How do I read the signs with enough sensitivity to hear what this place requires of me?

How do I come to know this place?

How do I care for and about this place?

These questions are interwoven throughout an ecological approach to research. Their answering is not sequential. Rather they weave back and forth over time, informing each other as they create the tapestry which the research eventually becomes.

Opening and Listening

I'm trying to listen to my farm. Before, I had no reason to hear the sounds of nature. The sole strategy of conventional farming seems to be dominance. Now, with each passing week, I venture into fields full of life and change, clinging to a belief in my work and a hope that it's working. (Masumoto, 1995, p.66)

The danger posed by some aspects of the ecological vision is that people will be drawn into the enticing charm of an idea or the prettiness of a turn of phrase without truly excavating to determine what meaning they may hold. The notion of opening and listening to the world is one such place of potential seduction. The image of opening and listening to the world brings with it a sense of relief and yet at the same time, a sense of titillation. There is an almost erotic appeal of laying oneself bare to what the world may bring, allowing the world to enter one's body, and losing oneself to the world's demands. But earthly sustainability and human fulfillment are too important to allow oneself to become distracted by the romance of a notion.

What does it actually mean to listen to the world? If I know at all, I certainly don't know fully. I think that there is a world within that question, much of which I can only guess at. Nor do the small hints which I can offer, wish to be articulated. When I try to pin them down, they slip away from me. I can only share, in the most crude and clumsy form, two possible interpretations which underlie my own sense of opening and listening to the world.

The first image of opening and listening was exemplified by Thom Henley (1997) in a story he related at an environmental education conference a few years back. Henley had

been visiting an aboriginal group in Thailand and was curious about a medicinal compound which they had concocted from the leaves of a plant which grew high up in the hills, and the roots of a plant which grew in the valley bottom. "What made you think", he asked, "to combine these two substances to create a medicine?" They stared at him in disbelief. "Can't you hear them?", they questioned. "The two plants vibrate at the same frequency".

While Henley's story is stunning in its revelation of the depth of attunement which is possible, the very fact of attunement is not surprising. Every time that we are drawn into the story of nature and learn something from our momentary pause, we have listened to the land. The moment of opening to the world and of listening to its wisdom is the moment of intuiting oneself as being embedded in creation. In other words, the act of opening and listening is a living out of the ecological self.

The notion that there are voices other than human which can speak to us and that we may gain knowledge from their hearing, is a difficult one within western society. As Masumoto observed, the act of beginning to listen to the earth requires an entirely new way of being. It is a profound move from domination to humility. No longer are we standing apart from the land, manipulating it to our advantage, and being an agent of change. Instead a more subtle, more delicate relationship develops.

This ability to take oneself out of the centre and listen carefully to what an other is trying to convey, also pertains to human-human encounters, as Gadamer (1960/1989) suggests:

Conversation is a process of coming to an understanding. Thus it belongs to every true conversation that each person opens himself to the other, truly accepts his point of view as valid and transposes himself into the other to such an extent that he understands not the particular individual but what he says. (p.385)

Gadamer's notion of conversation is no more frequently encountered and no more easily embraced than Henley's story of botanical resonances. Whether listening to the human or the more-than-human world, one must (a) believe that the world *can* speak; (b) believe that knowledge can be attained through the act of listening and by simply being in

the presence of truth; (c) retain the humility to take oneself out of the centre and listen with empathy; (d) quiet oneself down enough to listen; (e) develop the skills of listening; and (f) take seriously the truth of what we hear. Each one of these tasks demands radical alterings in how we understand ourselves and how we carry ourselves in the world.

This sense of listening is exactly what is required in order to hear the words of study participants, but such an endeavour is not always easy nor always successful. I was hit brutally in the face with my ineptitude at listening with one of my interviews, and was forced to think about the reasons behind my own deafness.

Bill Hearn, like Suzanne Young, was an environmental science student in my ecophilosophy class. He volunteered to be part of my research study, and our interview had a tone and character to it which set it apart from the other interviews conducted.

As we spoke, Bill frequently referred to environmentally friendly lifestyles - the importance of recycling, bicycling to school instead of using the car, switching off lights to conserve electricity, eating a meat-free diet. He discussed how he was frustrated with the pressure to take part in the consumer culture, and alluded to the tensions which he experienced between the desire to have a good quality of life and the desire to live an environmentally pure life.

Did Bill understand ecophilosophy to be about lifestyle choices, or was he using lifestyle choices as an example in which the ecophilosophical notions of uncertainty, ambiguity and tuning in to inner truths, could be lived out? It seemed important to make this distinction, so that I could understand the ground on which we were walking in order to ask appropriate questions and to interpret his answers with an appropriate lens.

But getting clarity on his interpretation was not an easy task. We went around and around these questions for nearly forty-five minutes until I abandoned that tack all together. Instead of being so focused on my own agenda, had I listened well, I might have heard that Bill was trying to get across two very important ideas. "For me, it's quite brave to think that my actions have consequences.", Bill said repeatedly in different ways. And "you have to look beyond what society tells you." The difficult work of ecophilosophy, Bill was

suggesting, consists of realizing that our actions have consequences, and in determining "who you are and what's important to you" beyond the societal pressures to conform.

On a cognitive level, such information is extremely important for an ecologically-oriented educator. If I know that students are struggling with these ideas, I can spend more time dwelling in this area, search out different ways of working through the ideas, come around to them again and again. On a level of empathetic understanding, I can provide more support and guidance for students who are struggling with these two notions. How overwhelming and frightening it must be to learn for the first time that one's actions have consequences. What turmoil the initial encounter with such an idea must hold for students. What rethinking of the future and regrets about the past, must students have been struggling with unbeknownst to me. The cascade of implications which such a realization engenders may be overwhelming for a student to face, and may require an instructor's sensitivity and assistance.

On an interpretive level, there are questions to be asked about our society if the notion that actions have consequences should come as a surprise to a twenty-five year old. How could we have come to a place that such an understanding is novel or odd? What are the implications for the ways in which environmentally-concerned teachers conduct themselves?

Bill was offering such important, rich information. Why couldn't I hear it? Why did I miss his message in the four months in which we were involved in class discussions together, during our interview and when I transcribed the interview? Why did I have to hold his transcript in my hands before I could hear the profound information which he was attempting to share?

First, the ideas that actions have consequences, and that we must come to understand our own beliefs and desires outside of societal pressures, are such an inherent part of the way that an ecologically-oriented person views the world, that it didn't even occur to me that such notions would provide challenges. I had taken these ideas as a given,

part of the foundation from which other ideas would spring, and never questioned that the foundation itself may be problematic.

I can forgive myself this oversight, but not the other reasons which I believe may have deafened me to Bill's words. My persistent line of questioning resulted in part from my frustration that society understands environmentalism as only a series of actions to undertake such as recycling and composting; my dismay that a student who had been in my class for four months would define ecophilosophy in such a way; and my disgust with my own incompetence at helping Bill to develop any deeper understandings. I was badgering and bullying Bill to clarify his understandings, hoping that perhaps what I was intuiting from his words was incorrect.

The other reason that I wasn't able to hear Bill was more mean-spirited. I believe that I was taking the opportunity of a private conversation to get the upper hand on a power struggle in which Bill and I had engaged in class. Bill was the only student who came to my class with classic philosophical training. He was very skilled at debate, and was clever at sidestepping questions so that he wouldn't be pinned down or have to assert his beliefs: all attributes which would serve him well in most philosophical arenas. But ecophilosophy concerns itself with embodiment. I was never able to move Bill beyond an intellectual engagement with ideas to try to entertain what they might mean for his life. In itself, this lack of embodiment may have only provided an andragogical challenge. But as generous as Bill tried to be, his carriage embodied a subtle, naive smugness as he watched the other students struggle with ideas which he had "got". This misplaced arrogance, however unintended, seemed to mock the earnest struggles of the other students as it belittled the work in which I was trying to engage with them. I fear that in our interview, I was pushing my agenda and not hearing Bill's truth because I was wrapped up in reestablishing a balance of power and assuaging my own ego.

I hate to privately admit to such motivations, and even more, to do so publicly. Teaching after all, should be about engaging in a student's reality and helping them to open a little further, deepen a little more. What kind of teacher ignores the student's needs simply

because they grate? Nonetheless, facing such pettiness and selfishness on my part is an important part of the work. It is precisely these aspects of being human which we all carry with us and must confront in order to be able to listen well to the world.

* * * * *

The other manner in which opening and listening to the world occurs is an inherent part of the practice of yoga. The goal during yoga poses or asanas is to tune in to oneself. What physical sensations arise as subtle readjustments of the body take place? What surges of emotion occur? What images or colours or words come to mind while moving through the asana? These sensations and images are to be taken seriously as providing deep knowledge about the practitioner and her relationship with the world. The body, the emotions, the spirit hold truth which complements well the knowledge of the intellect.

Outside of the context of a yoga studio, such ways of relating to the world are engaged in by all of us continuously everyday. They are such an inherent part of our moment to moment humanness, that we may not even take note of them on a conscious level. These are the subtle sensations which help us to make judgments and ascertain meaning in all circumstances. They are the way that we know that love is in the air: the brush of a hand, a look in the eye, a deepening intensity of the voice, a sharing of personal space. They are the way that we suspect that we cannot trust someone although they have as yet not shown us any reason for mistrust. They are the way that we know that a friend is upset, though her words say, "all is fine". They are the subtle messages which we receive from the world which go above and beyond what is spoken, and indeed often contradict verbal expression.

They are our intuitions: the sense that this is the right place to be, the right job to be doing, the wrong relationship for us. And they are our responses to these signs: the knots in the gut, the spine tingles, the feeling of elation.

We all experience these responses. Whether we bring them to a conscious level and whether we acknowledge that they may contain some truth, is an individual choice. A

world ruled by rationality such as ours, tends to distrust the wisdom of these instincts, and believe that only words have meaning and only reasoned arguments hold truth.

In opening and listening to the world, we want to hear the actual call of the world which imprints itself on our bodies, our senses, our minds, our intuitions. Images, dreams, instincts all play a part in this knowledge. We must take these messages seriously, in order to understand what the world is trying to tell us and to remain true to its call. In essence, what we're trying to undertake in the quest to open and listen to the world in such a way is an acquaintanceship with the phenomenological lifeworld, "our immediate, pre-reflective consciousness of life" (van Manen, 1990, p.35). We are attempting to gain consciousness of our perceptions before theory steps in to tell us how to frame such experiences.

The instructor participants for this study were chosen through this method of opening and listening. I knew that the instructors whom I had chosen to interview embodied the sorts of qualities and tensions which I wished to untangle, but I could not have articulated what it was that I was looking for. They were not teaching ecophilosophical subjects *per sé*. They were not even framing the subjects which they were teaching with such ecophilosophical ideas as connectedness to place or creative expression or integration of topics. Yet there was something about these instructors and the conversations in which we had engaged over the years, which made them "right" for this study.

Yoga student Sarah Connelly, in our conversation, pointed out that people often intuitively know how we should be responding to a situation before we can "cognitively makes sense of it all, or put a label to it". Yet if we wait until that cognitive understanding occurs, we may find that we have traveled down the wrong path, and can no longer hear the initial intuitive response.

Intellectual understanding did bear out my instinctive "feel" about the appropriateness of study participants but such understanding did not arrive until much later. Long after the interviews were completed and transcribed, I was forced to try to distill my

work down to the kernel which was in its midst in order to clearly translate my work for others. When I turned my mind to finding out the impulse which underlaid intuition, pulling apart suppositions, digging deeper and deeper into the layers of the work that I was doing to understand what was at the core, I uncovered the essential notion of the ecological self.

I did not know until that moment that the ecological self was the essential aspect of ecophilosophy for me. Nor was I aware that its realization had driven this study. Yet all of the instructor participants held this trait in common. They were all strongly guided by the wisdom within, and they all shared a sense of themselves as embedded within creation. Had I not trusted in intuition, in the voice which was calling, I would not necessarily have chosen these participants. If I had forced myself to define the characteristics which I was seeking in participants instead of listening to my gut sense of appropriateness, I may have ended up with an entirely different and inappropriate set of participants. Trusting in the rightness of the messages which I was receiving from the world, however vague they were, was critical for the research to unfold as it should.

Reading the Signs

The world is all clues, and there is no end to their subtlety and delicacy. The signs that reveal are always there. One has only to learn the art of reading them. (Shepard, 1995, p.28)

How odd and wonderful the world would seem if we took it in as *only* a series of sense data impressing themselves on our consciousness: symphonies of sound, mosaics of colour, waving light and shadow, flashing and dancing with the motion of the wind. What delight such a world would contain, and what possibilities would be opened up. Seeing the world anew (Brown, 1983, p.25) or viewing the world as a stranger (Greene, 1973, pp.267-8) moves us beyond preconceived notions and familiar patterns of thought to entertain a myriad of interpretations.

But despite the wisdom which can be gained by opening to "pure perceptions... untainted by the meanings we impose upon them" (Willis, 1991, p.176), there is also something vaguely disturbing about the desire to see the world in such a way²⁵. Embedded in this wish for the "original, pre-reflective, pre-theoretical" (van Manen, 1990, p.7) stance to the world seems to be a distaste for the intellectual, a sense of shame in being human, and perhaps even a fear of growing up as Huxley (1945) describes the process:

As the individual grows up, his knowledge becomes more conceptual and systematic in form, and its factual, utilitarian content is enormously increased. But these gains are offset by a certain deterioration in the quality of immediate apprehension, a blunting and a loss of intuitive power. (pp.vii-viii)

The ecological method shares with phenomenology the desire for and belief in the importance of immediate apprehension. But it doesn't wish to banish conceptual knowledge. Indeed, for the ecological researcher, conceptual knowledge and life experience are not only part of the lifeworld but they enhance the ability for immediate apprehension.

To the ecological researcher, the lifeworld is not a presuppositionless state. There is no desire to "put out of play everything one knows about an experience" (van Manen, 1990, p.47). Within the pre-reflective state, there is always a *me* who is "pre-reflecting". That *me* is never a blank slate. I come to my topic as someone who has lived a life, who is shaped by my experiences. This reality is not to be shied away from or to be embarrassed about. In fact, it is something to revel in. But what we are seeking through acknowledging and embracing this layered, complex existence is not the closure that phenomenology fears, but rather maturity and wisdom.

So, the ecological method requires a balancing act. There is an attempt to stay open to the world and increase our ability at "immediate apprehension". At the same time, there is no desire to "hold [our assumptions] deliberately at bay" (van Manen, 1990, p.47),

²⁵Willis suggests that only non-human animals actually are capable of pure perceptions, and that the meaning-making project is an inherent part of being human.

attempting some sort of "pure perception". The wisdom which we have accumulated through living can make us better readers of topos, rather than distancing ourselves from the world.

The work of Grace Gershuny (1991), a teacher of bioregional agriculture at the Institute for Social Ecology in northern Vermont, illustrates this point. As a student in her class in the early nineties, I was taken aback one day when the lesson turned to the question of pest management. I expected that we would be learning about non-chemical means to control insects: integrated pest management, crop rotation, companion planting, hand-picking and the like. Instead Grace turned our attention in an entirely different direction. Rather than focusing on controlling the pest, she informed us that the presence of insect pests indicated a problem, most likely a deficiency in the soil. Our task was to understand the reasons behind the insect's presence. Were there inadequate soil nutrients, too much water, insufficient sunlight? Grace read the presence of an insect as part of a larger story waiting to unfold.

Had Grace and I entered a field and looked closely at the plants growing there, we would have seen very different things. I would have seen bugs - icky or beautiful, wondrous or frightening. She would have seen a riddle which could be easily untangled if we knew what to look for. Grace brought with her conceptual knowledge which tainted her view, but her lens gave her a deeper reading and a more sensitive feel for the territory.

While I never came to have the deep understanding which Grace so eloquently and simply demonstrated that summer, the field courses which I took as part of my masters program in New Hampshire did afford me an understanding of the transition which occurs when one comes to a place as someone who knows how to read the signs. I was previously a reluctant naturalist, preferring the experience of nature to the labeling of it. But the necessity to take several natural history courses forced me to think beyond labels and incomprehensible scientific names, beyond abstracted facts, to learn about familiarity.

This sympathetic resonance with a place takes time, maturing like a sweet, strong love affair, the "other" at first inhabiting an unknown and impenetrable world, and later,

the territory becoming so familiar as to become one's own. Over two years, as I gained knowledge of the trees and wildflowers, and later the mammals and birds of this area, came a sense of being at home. The willow tree no longer only showed me her long, flexible limbs or portended spring with her soft buds. She also spoke to me of moisture, telling me that where she thrust her roots down, I would find water. She told me tales of ancient wanderers who would turn to her inner bark for relief from the aches and pains of their travel. She helped me to learn the language of this place, and rather than that knowledge obscuring the pure aesthetic experience of a forest or a hillside, it provided a sense of belonging. I learned that the land is full of signs, and if one can learn to read them well, the story of the land will emerge.

In the case of ecological research, knowledge and experience is not just a fact of life that has to be accepted, an unfortunate byproduct of being an adult. Rather, such subtle wisdom is sought out and cultivated in order to provide a more sensitive, more tactful (Gadamer, 1960/1989, p.16) reading of topos.

In order to develop the ability to read the signs, a researcher is required to engage in two tasks. First, we are required to do disciplined study. We must "accept the duration and effort, even the struggle, of formal commitment" (Berry, 1983, p.206). This commitment involves the sometimes tedious, meticulous work of coming to know the territory. D.W. Jardine (adaptation of personal communication, 1995) has described this task as monkish work which involves copying portions of text out by hand, labouring over each letter again and again until the repetitive motion of the hand takes the work of the elders up into the body and soul of the initiate.

As well as disciplined study, skilled reading of the world requires us to have lived a life. We must have come to understand some of the workings of the world, to have lived through something, to have struggled and rejoiced. Not only must there be a general understanding of the ways of the world, but a well-prepared ecological researcher must also have come to understand the topic as someone who has lived in its midst. We must have worn the mantle of the work and developed the tactile knowledge of someone who

has taken risks and suffered on behalf of topos. Only when we have subjected ourselves to this level of experience can we truly hear the demands of the work and properly read the signs which are presented.

Being fully prepared to read the signs was an important aspect of hearing the meaning behind the words of the participants whom I interviewed. For example, at one point in our conversation, educator Emma Applegard became quite animated when sharing stories about the work that she and her grade six students had undertaken on grizzly bears. In the midst of her awe about the magnificence of the grizzly and her enthusiasm about the students' work, she recounted the more mundane details of how the work unfolded:

This has been something that rolled through for six months. Initially there was something that was talked about right from the beginning of the year, that this would be the umbrella so to speak. And so background is gradually, gradually given. And then probably, it's hard to say, maybe five months where it just gradually started to consume more of our thoughts and our work. We spent more time for example with the research plan and digging up the information. Like what is it that you need to know? How do you form a relationship?

This aspect of Emma's story would normally get lost in the excitement of the comments which preceded and followed. But having spent much time immersed in the world of ecophilosophy, I knew that what Emma was reporting pointed to a very specific understanding of learning. She was discussing a form of education which involves sitting with a topic for awhile, allowing it to unfold, coming back around to it. She was showing a commitment to collaborative learning not only amongst the students but where she herself became a co-learner. Emma was demonstrating a belief that it is possible and important to allow oneself to be drawn into a topic; that the world is of import and can call to us. She was suggesting that following the meanders of a topic and respecting students' interests is essential. What she was sharing with me was her deeply held assumptions about education; assumptions which formed part of the ecological lens through which she saw the world.

Beyond recognizing the signs of ecological education, I also knew something of the educational milieu in which Emma and I find ourselves and what it means to attempt to live ecologically in that world. I knew that the work which Emma was describing was not problem free. Allowing a topic to unfold at will, "organically emerging" over the space of many months, did not fit well into the structure of a normal school year. While it's true that some teachers undertake extended thematic units, the typical school day is sectioned off, with units requiring completion within a matter of weeks. Her students' year-long relationship with the grizzly bear could potentially cause logistical problems for Emma, as well as conflict with administration and her team teachers.

Furthermore, I knew that the process which Emma had gone through with her students was invisible and intangible. When her colleagues saw the enthusiasm of Emma's students and their parents; when they witnessed her students presenting their work alongside renowned bear researchers, all that Emma would be able to offer was that they had completed a unit on grizzly bears, as if any unit on grizzly bears would be the same. It is not that Emma wouldn't attempt to describe her class' experiences, but the subtleties of engagement are difficult to articulate or to comprehend.

How could she explain that the magic of the work which her class had undertaken was found not in the subject matter, the research techniques used, or the particular outside sources contacted, but in the way in which that subject matter was taken up? The unit was undergirded by an understanding that "this body of knowledge or what we call this curriculum is about their world out there" and by a desire to "generate interest and curiosity and passion and wonder", and to help the "students to interact with text, to each other, to what's coming at them in an open way, and to question themselves". "It's a way of seeing and thinking about the knowledge that's there", and that way does not lend itself well to quick explanations within a staff meeting. (All quotes are from Emma Applegard.)

When I was going through the interview transcripts, analyzing and categorizing what was being said, I coded Emma's statements about the grizzly bear unit as a demonstration of some of the struggles which ecophilosophy engenders. Emma was not

stating either explicitly or implicitly that her grizzly bear unit was problematic. But knowing the assumptions within which her comments were based, and knowing the implications of trying to live out those assumptions, I read within her comments the signs of a potential problem with ecological teaching.

Learning about Place

It invariably turns out, I think, that one's first vision of one's place was to some extent an imposition on it. But if one's sight is clear and if one stays on and works well, one's love gradually responds to the place as it really is, and one's visions gradually image possibilities that are really in it. (Berry, 1983, p.70)

Berry's suggestion that duration and immersion are required in order to truly understand a place, is echoed throughout the "sense of place" literature. This same literature, along with the stories of nature writers, essays on bioregionalism, writings of ecophilosophers, the work of naturalists and tales of indigenous populations is rife with suggestions about how one comes to know one's place, of which extended, intimate contact is an important but not sole criteria.

In order to develop deep knowledge of a place, we must recognize the place as beautiful, fit ourselves to the land, respond to the needs of the place, reinhabit our bodies, have a curiosity of vision, attend to the cycles of life and death, allow ourselves to be marked by the place, recognize our entwined rights and responsibilities, have confidence in our knowledge, delight and wonder and be filled with reverence, avoid tampering with creation, engage in multiple interpretations of a place, remember, make good use, be loyal, be aware, walk the land, bear it steadily in mind, concern ourselves with appropriateness, observe, meditate, wander without destination; to name only a few suggestions which were offered in one book alone²⁶.

²⁶These examples are all taken from a wonderful collection of essays edited by David Landis Barnhill (1999), entitled *At home on the earth: Becoming native to our place*. Berkeley, CA: University of

What becomes apparent in looking at these ways of learning about place is that they have a strong resemblance to the qualities and methods which are required to "open and listen" and "read the signs". There is more than kinship of technique happening here. There is sameness. Once the immersion in the territory has occurred, once familiarity has been established, then we can turn to the process of active knowledge gaining. But this knowing is not something different: it is not meeting the land with pick axes and shovels. Rather it is more of the same: more taking oneself out of the centre, more understanding oneself as part of the land, more attentiveness, more reverence, more care.

What has changed, however, is the relationship between researcher and topos. While before I was fact finding so that I could hear the place better, now I must take my place as researcher, and undertake fact finding to settle my own confusions and curiosities. Whereas before I wished to hear the stories of the land, now I arrive with my own stories in hand, requiring answers. I no longer put myself out of play, hoping only to hear the demands of the world. I now come with my own demands, and with expectations that topos will be up to the challenge. I have changed from being a listener, to engaging in dialogue.

The dialogical aspect of this relationship is extremely important to keep in mind. I do not now become ruthless, imposing my will on the subject, carelessly and clumsily stepping all over its delicate edges. I still need to listen. But now we engage in a two way conversation. We (the topic and the researcher) must engage in a delicate balance, always checking back with each other before plowing ahead.

Perhaps the best way to describe the subtle difference in intent which "learning about place" requires, is by turning to a researcher's relationship with the written text. When one reads to listen to topos, one reads widely and deeply, soaking in ideas and information, not necessarily ordering them, simply letting them accumulate and percolate.

The purpose of this type of reading is to understand what the territory encompasses, what sort of ideas are "out there", what a particular author is thinking and trying to communicate.

Engaging with a text in order to prepare oneself adequately to read the signs is a detailed, meticulous endeavour. Differences between interpretations of a topic are noted, chronology is sought out, subtleties of argument are thought through.

The nature of reading when one is trying to learn about topos, is more purposeful and defined. One reads with specific questions in mind. I no longer want to understand the territory of ecophilosophy, allowing its shape and tenor to suggest possibilities and mold my direction. Nor do I wish to distinguish between Fox's (1995) and Devall and Sessions' (1985) interpretations of deep ecology or to understand the implications which social ecology raised for ecofeminism. Now, I am reading to understand more deeply my topic alone: the tensions which are experienced in the attempt to live ecologically within the context of a modern world.

Immersing in the literature enabled me to become acquainted with the territory so that I would know what questions to ask. But once the questions were asked, they required a turning back, a re-entry into the same territory, now with a purpose in mind, now with an investigation underway. Adult educator Gary Whitlow articulates this subtle difference:

We do a lot of searching and we've done that for years. You and I have been talking and trying to figure out the world. That's the searching for me. Now you want to put a hyphen before search and put "re" and you have re-search. Because what you're doing is going back in a sense into knowledge, into memory, to reframe and question.

Re-searching is learning about place. In the case of the study at hand, this learning process was centred on the research interviews. These interviews were alike in kind to the conversations in which the instructors and I had engaged many times before. The conversations meandered; we followed the threads which interested us; we got drawn in; we listened; we disagreed; we puzzled over ideas which frustrated us; we left with deeper knowledge of ourselves, each other, the world.

But the conversations also were not the same, and it was not simply the presence of a tape recorder and the establishment of a particular time and place for the discussion which was different. Now I was framing the conversation within a context and I was directing the conversation towards the territory of the questions which I needed answered. Now I was playing the role of researcher. Now I was on an active fact finding mission in order to learn in depth about the topography of this place.

Learning to Care For and About Place

A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise. (Leopold, 1966, p.262)

Before embarking on a discussion which is rooted in an understanding of love or care, it is necessary to pause and clarify communication, for the very notion of what it means to care is interpreted quite differently through an ecological lens than it is from a modern viewpoint. By modern love, I refer to desouled love, the love of the autonomous individual, acquisitive love as understood through the lens of consumerism. From this modern perspective, Leopold's land ethic may seem an odd choice to begin a discussion of care. His words don't spill over with excess or indulgence. They don't drip with need or possession or demands. There is no melodrama, no assertion of needing an other to complete oneself. But Leopold's words hold a much deeper, finer love which is rarely seen these days: a love of restraint, limits and respect.

Love within the ecological context arises from a recognition of beauty in an other, and the recognition that when in the presence of the other, the most beautiful in oneself is realized. Germinating from this seed, such love then becomes an act of preservation. Ecological love is turned towards working on behalf of and upholding what is the finest, most dignified and most noble in the self and the other.

If the ecological lens is framed around what sustains, affirms and adds meaning to life, then love seen through this lens is a union which honours and encourages the deepest, most fine sense of humanity. Certainly it is much easier to be oriented to what "feels good" at the moment; the love of immediate gratification which is frequently worshipped today. An ecological love, in contrast, requires strength and courage. But it is also much easier to run from a love which just "feels good", because there is nothing deep which is sustaining it.

While desire is an integral part of ecological love, it is not what governs it. Rather such love is governed by treating the beloved with integrity, wishing what's best for them, and doing what's right on behalf of the two souls "in love". Sometimes "doing what's right" means saying "no" to oneself, to the other, to desire. It means saying no despite the hunger, because there is something more important for which we must stand. There is no denial that temptations exist; no pretense otherwise. There is simply a recognition that love which elevates the soul calls for something better, something stronger, in us. Love calls for a turning away from allurements in order to preserve beauty. It is, in fact, in this turning away, this act of ultimate sacrifice, that love may have its finest showing.

Wendell Berry (1983) suggests that "if we want to get safely home, there are certain seductive songs we must not turn aside for, some sacred things we must not meddle with" (p.68). Getting safely home is precisely what we are attempting to do: getting home to the most profound realization of humanity, and to the deepest connection with creation.

The core of ecological living, as stated earlier, is connecting with the ecological self, that place of deep wisdom and truth within us. While we can consciously delude ourselves, on some deep level, a selfish love is not experienced as truth or as integrity. Rather, it embodies diminishment of one's own soul, demeaning of beauty in an other and erosion of compassion in the world. The only way that such a love can be maintained therefore, is by deafening ourselves to the call of humanity and to our own deep wisdom. Barriers must be put up to the ecological self in order to maintain the illusion of all being

well and healthy. These barriers are exactly the ones which ecological education wishes to tear down in order to live in right relation with all of creation.

Ecological love then, is a love which wishes to uphold the "integrity, stability and beauty" of an other and of oneself. Such a love increases the quantity of compassion in the world. Through their honouring and upholding of beauty, the lovers elevate humanity as they elevate themselves. The love then, almost becomes an entity onto itself. Whereas the lovers must respond to worldly demands, turning to their enfleshed existence, the love floats up and away, joining with and adding to integrity, stability and beauty in the world.

When this notion of love gets turned to the land, restraint again becomes key. Rather than simply asking, "what do I want to do in this place?", love for the land gives rise to the question "what would be the best action to take to maintain integrity of this place?". As with a love between two people, this sort of love may mean saying "no" to one's desires on behalf of something greater.

This same understanding may be turned to the love of a topic or a body of knowledge as yoga instructor Johanna Fried notes:

For me, as a receptacle of this knowledge, I'm constantly checking who is also a receptacle for this knowledge. And who is not. And if they're not, then they have to do their work to become one if they want the knowledge. And I'm not going to give it unless they do that work. So it requires something from them. Because if I give it, then I'm being dishonest and unethical to the teachings. Because I'm giving something very precious to somebody that has no idea of what to do with it, how precious it is. And so they just chuck it, junk it. This is too valuable.... As someone who's been through this process and this journey, if I don't make it valuable and important to myself... then what's it been about?

What seductive songs could possibly be calling to an academic researcher to entice one away from honouring a body of knowledge which is so precious? They are many: songs of expediency, songs of acceptability, songs of credibility, of precedent, of self-indulgence, of praise, of innovation, of panic and trepidation. Yes, fears too have their

allure. I must stand strong against the vortex of trivial concerns which tease at a graduate student's insecurities, pulling us away from deeply lived truth.

But how do we know which songs are true and which are seductive diversions? If I eschew conventional approaches in the writing of this dissertation, am I doing so in order to follow the demands of the topic or because I want to be viewed as innovative and cutting edge or because I am incapable of doing "traditional" work? If I shy away from critique, is it because I am afraid of reprisal? If so, I must learn to stand up to my fears on behalf of my topic. Or on the other hand, am I only taking a critical stance as a means to vent my own frustrations and anger? In this case, restraint is necessary so that I don't end up demeaning my topic on behalf of self-indulgence.

These are the sorts of questions which I have asked myself constantly throughout the undertaking of this study, and particularly throughout the writing of this dissertation. An ecological researcher needs to be sensitive to motivation. Why am I wishing to write in a particular way? Why am I sharing a particular story? There must be a constant checking back to make sure that I am at all times aligned with doing what's best on behalf of the integrity, the opening up and the deepening of the topic. Actions which are undertaken with this motivation in mind are not always the easiest, the quickest or the most appealing. Such is the nature of ecological love and such is the enactment of care for topos.

Widening Circles - The Nature of Environmental Research

In our society as a whole we conceive of the land in terms of ownership and use. It is a lifeless medium of exchange; it has for most of us, I suspect, no more spirituality than has an automobile, say, or a refrigerator. And our laws confirm us in this view, for we can buy and sell the land, we can exclude each other from it, and in the context of ownership we can use it as we will. Ownership implies use, and use implies consumption. (Momaday, 1999, p.28)

The sentiments which Momaday expresses are familiar enough to anyone engaged in environmental work. His words can also find placement within the field of academic research. Research can be lived out as something simply to use, to manipulate and to control for our own purposes, lending no integrity to the work itself. In such a case, the researcher has ignored what the research demands, favouring an oppressive, manipulative relationship over dialogue.

Research can be treated as something which we can own and from which we can exclude others, either for proprietary reasons or to create a division of insiders and outsiders. Research can be carried out in such a fashion that the researcher takes on the role of consumer wanting to acquire more knowledge, more status, more accolades. Research can be lifeless, devoid of spirituality, if the researcher does not allow him or herself to invest any heart and soul in the work, to be drawn in and to be moved or changed through the unfolding of the study.

Environmentalists, including environmental researchers, are attempting to work against an exploitative, desouled way of living. It becomes incumbent upon an ecological researcher, therefore, to avoid forms of research which are consumptive, disrespectful and exclusionary in their demeanor.

The ecological method may offer a way to avoid these pitfalls of research. With its desire to listen carefully to the voice of topos and to be responsive to its demands, the ecological method may lend greater dignity to the work and be more life-affirming. While the ecological method may be useful for a variety of research topics, it may have special significance for environmental researchers by allowing alignment between the goals of their research and the sense of being-in-the-world which the research method embodies.

In order to understand the role which the ecological method can play for environmental researchers, it is necessary to explore the nature of environmental research. For some assistance with this task, I would like to turn to the work of one of the most influential environmental researchers, Rachel Carson. A brief exploration of the impetus behind her work can be useful, not only because her pesticide research was ground-

breaking, but also because it was so different in subject matter and method from the study at hand. Despite the difference, both studies are held together by the thread which I believe winds through the vast majority of environmental research.

Growing up in Springdale, Pennsylvania, in the early part of the twentieth century, Carson began her life steeped in two influences. On the one hand, she had a mother who had a deep "respect and love for wild creatures" (Lear, 1997, p.15) and who took her children "outdoors every day when weather permitted" (p.14) . Rachel could tramp around the woods, farmland and wetlands of Springdale; and her own childhood homestead encompassed sixty-four acres of "rural charm" (p.8) which held within it no end of exploration and discovery. Nearby was the wide sweep of the Allegheny River, and somewhat more distant but with a much more magical pull, was the ocean which became Carson's main love (chap.1). These facts of her upbringing, as well as Rachel's own nature, conspired together, to form a delight and fascination in all that was natural and a deep and abiding love for nature.

At the same time, Springdale was experiencing the first wave of industrialization which was " leaving scars on the land, pollution in the air, and debris in the river" (p.8). Lear, in her biography of Carson, recounts Rachel's reaction to this surge of economic and industrial growth:

In the end, Rachel Carson remembered only how embarrassed she was by the foul smell of the glue factory that greeted disembarking passengers at the train station; how dreary and dirty the working-class town became when the West Penn Power Company and Duquesne Light Company squeezed it between their huge power stations at both ends, and how endlessly ugly Springdale was. (p.9)

Lives are complicated things and Carson's took her through many twists and turns, always increasing her scientific knowledge of the natural world, her gift for writing, her love of nature, and her dismay at the defilement of the world with the spread of industrialization. The impetus behind the work which led to *Silent Spring* (1962) lay not only in her concern about the horrors of DDT and the effects that it was having on the food

chain, but in a lifetime's worth of watching the nature which she loved being desecrated. With the writing of *Silent Spring*, undoubtedly the combination of love and defilement, intellectual curiosity and dismay had developed and mixed to the extent that she felt her work to be a moral imperative. She had witnessed the harm which humans were causing to nature throughout her life, and her position as a government scientist had enabled her to gain the scientific data to ring the alarm bell. Nearing the end of her life, that public declaration became critical.

She wrote to a friend who had some reservations about the task which Carson was undertaking:

You do know, I think, how deeply I believe in the importance of what I am doing. Knowing what I do, there would be no future peace for me if I kept silent.... It is, in the deepest sense, a privilege as well as a duty to have the opportunity to speak out - to many thousands of people - on something so important. (Lear, 1997, p.328)

This push and pull in her life - love and defilement - should sound familiar, as it is alike in kind, though not in content, to the tension which I discussed in Chapter One. Love of nature ... and watching it destroyed. Love of living from a place of truth ... and finding no acceptance for that sense of truth. This sense of deep love and passion for a literal or figurative place, followed by watching damage done to that place is, I believe, the tension which underlies most environmental research.

The purpose of environmental research is to find some reconciliation for the love and the wound: to move towards healing. In some cases, healing comes simply through understanding. In other cases, healing requires direct action in the world to "set things right". In either case, the intention is to create a place in which the "love" can blossom within the world.

This movement from love to wounding to healing is not unique to the process of environmental research. All environmental work shares this path. Advocacy, education, engineering are all rooted in similar tensions and desires.

What sets research apart from these other environmental endeavours is the desire to understand the truth behind the wound. Environmental researchers understand that there are reasons that the defilement is occurring. Rather than treating the degradation of nature as an alien, incomprehensible act which must be stopped, environmental researchers share the goal of understanding root causes. Healing can only come, they believe, through this understanding of "why" and the incorporation of the wound within the love.

Love. Wounding. Truth of Wounding. Healing. This is the route of environmental research, the invisible thread which binds together research as diverse as Carson's and my own.

With this path in mind, where is the place for the ecological method within environmental research? Each of these stopping points - Love, Wounding, Truth of Wounding, Healing - is a territory onto itself which needs to be explored in order for topos to be deeply understood. In order to come to know the research topography, each of these stopping places is subject to the four questions which underlie the ecological method:

How do I open myself and listen well enough to hear what this place requires of me?
 How do I read the signs with enough sensitivity to hear what this place requires of me?
 How do I come to know this place?
 How do I care for and about this place?

The ecological method as applied to environmental research is represented in Figure 3.

But how does this playing out of the ecological method within environmental research respond to the particularities of the empirical study at hand? What are the territories of Love, Wounding, Truth of Wounding and Healing within the parameters of this study? Before turning to the reporting of the findings of the empirical study in Section II of this dissertation, the final section of this chapter will frame the study within the four territories of environmental research.

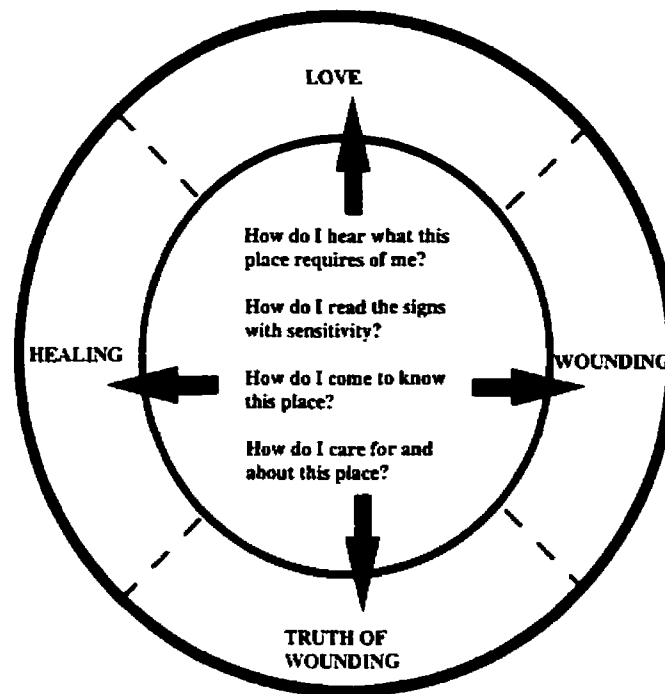


Figure 3. Ecological Method and Environmental Research

The Ecological Method, Environmental Research and Ecological Education in a Modern World

For study participants, the love, or place of passion, within this empirical study exists within the living out of an ecological way of being. Study participants indicated that they feel a sense of inner peace, purpose, integrity and joy when they live life in a way which is in line with an ecological worldview. The specific characteristics which the study participants indicated were important to them in order to live life well are outlined throughout the data analysis in Appendix B2, and most particularly in Steps Four through Seven of the analysis. The underlying assumptions about what constitutes a life well-lived wind through the ecological educators' lives influencing and being influenced by their view of reality, their view of knowledge and their view of education.

It has been the purpose of the first section of this dissertation to demonstrate this view of the world, this place of love and passion, the general attitude and priorities of an

ecological orientation to the world. Since the territory of love is not the focus of the empirical study and since three chapters have already been devoted to sharing this territory in order that the challenges of ecological education may be better understood, the territory of love is not discussed in an explicit manner in Section II of the dissertation. Rather, this territory comes into the conversation incidentally, and it comes to the fore through the three themes which frame Chapter Four, Five and Six.

That is, in further analysis of the transcripts (Steps Eight through Eleven), it was found that there were three strong themes which ran through the lives of ecologically-oriented study participants and to which they attached greatest significance in creating a life well-lived. Study participants believed that in order to live a fulfilling and dignified life it was important to: (a) live in a way which honours one's inner truth; (b) live in a way which honours one's connections to other people and to the more-than-human world and which arises from an understanding of one's embeddedness in the rest of creation; and (c) be deeply engaged in and find a sense of joy and wonder in the world. These three themes form the framework for the next three chapters and they represent the territory of love in the empirical study.

Wounding within environmental research is related to a sense of denigration of the territory of love. In the case of the study at hand, the territory of wounding is played out in the situations in which the ways of living in the world which are honoured by ecological educators cannot be realized or are demeaned by the world in which they find themselves.

The term wounding implies that there is a wounder and a wounded. Yet many of the struggles which ecologically-oriented people find in teaching and living from an ecological perspective, are not due to acts of an other nor are they due to overt acts at all, but rather surface due to the difficulty of living out a way of being which is based in very different assumptions from the surrounding culture. Sometimes these wounds are self-inflicted; sometimes they arise from a sense of inner confusion and conflict, sometimes they are due to a lack of structural supports within society; sometimes they are the result of overt acts, whether intentional or not, on the part of modern culture; and often the wounds

are due to the pain of watching the demeaning of what one holds dear by a culture which doesn't share the same values or interpretations or priorities.

Understanding the territory of wounding is one of the two purposes of the empirical study. Through the narratives of Chapters Four through Six, this territory is explored and shared. Chapter Seven then mines the narratives of these three chapters to discuss the wounding of ecological education in a more explicit manner.

The second purpose of the empirical study is to explore the territory which I have called "truth of wounding". The term "truth of wounding" implies that behind the wounds which are experienced by ecologically-oriented people is another version of truth. The wounds are not simply resistances or antagonisms to an ecological orientation but arise from another way of seeing the world. In the case of this study, they arise from a modern worldview.

When students are resistant to ecological education, rather than that resistance being viewed as a place for argumentation, within this study it is viewed as an indication of a difference in perspective and a place where the challenges of ecological education are arising. The resistances are plumbed to understand the interpretations and meanings which the students are giving to the situation and to uncover the places of conflict which ecological education engenders for students raised within the world of modernity. As with the territory of wounding, the territory of "truth of wounding" is explored throughout the narratives of Chapters Four through Six, and is outlined in a more overt manner in Chapter Seven.

Healing within the context of this study has two meanings. First, healing involves helping ecologically-oriented people to find a way to live in the world in which they find themselves without experiencing a sense of wounding or, more realistically, to live with the wounds which occur. In this capacity, the territory of healing is a response to the sense of wounding which ecological educators experience when engaging in ecological education in a modern world.

Second, the territory of healing is a response to the challenges of ecological education for students who view the world through a modern perspective. The second role of healing, therefore, is to find ways to help students with the challenges which arise and to find ways to ease the process of ecological education in a modern world.

The territory of healing, like the territory of love, is not the focus of this study nor is providing an outline of the methods of healing, the purpose of the study. Appendix C3, however, does list some of the suggestions which were offered in the interviews for ways to ease the process of ecological education for students. Chapter Seven addresses both types of healing by discussing, in a preliminary fashion, aspects of the path towards healing to which this study points for both ecological educators and their students.

In keeping with the purpose of the empirical study then, Section II of this dissertation turns its lens most strongly on the territories of wounding and "truth of wounding". The territory of love finds voice through the three themes which frame Chapters Four through Six. The territory of healing is discussed in a preliminary manner in Chapter Seven, after the wounds and challenges of ecological education are explicitly outlined.

SECTION II - AGAINST THE CURRENT

CHAPTER FOUR - TO LIVE DIVIDED NO MORE

Many of us know from personal experience how it feels to live a divided life. Inwardly, we experience one imperative for our lives, but outwardly we respond to quite another. This is the human condition, of course - our inner and outer worlds are never in perfect harmony. But there are extremes of dividedness that become intolerable, when one can no longer live without bringing one's actions into harmony with one's inner life. (Palmer, 1998, p.167)

In *The Courage to Teach*, Parker Palmer (1998) tells the familiar story of Rosa Parks, the black woman in Alabama who refused to move from the whites-only section of the bus, refusing to yield her seat to a white man, and in so doing sparked a civil rights movement. But Palmer gives a different reading of this story. Rather than casting Parks as a woman standing up for black rights and resisting the oppression which the blacks in the south had been experiencing, he suggests that Parks had made a very personal decision on behalf of her own integrity:

She was simply tired, tired in her heart and in her soul, tired not only of racism but of her own complicity in the diminishing effects of racism, tired of all the times she had yielded her seat to whites, tired of the self-inflicted suffering her collaboration had brought on. (p.169)

"The decision she made was rooted in the only sure place we have, no matter how shaky we feel: the deep inwardness of an integrity that tells us we must do this thing" (p.169). Palmer speaks of Parks as an icon who stands on behalf of the decision to "to live divided no more" (p.167).

When Palmer claims, as he does in the quote which opened this chapter, that "there are extremes of dividedness that become intolerable". he also provides a different reading of the words of the people who participated in this study. Initially, my interpretation had been that ecological educators were guided by a fierce sense of integrity and an unwavering desire to not betray their hearts. Certainly they are. But perhaps we²⁷ are all guided by that

²⁷The pronoun "we" is used frequently throughout this section of the dissertation. This term is not meant as a collective of study participants in which I have included myself, nor is it meant to presume the

desire. The call to inner truth and integrity which is sounded throughout the interviews may, in fact, be due to the intolerable difference between inside and outside which is experienced by people attempting to live ecologically in a modern world.

What pushes the sense of dividedness to the point where such conditions seem intolerable? I believe that there are two causes: Either the distance between inner truth and outer action are so large as to find no way to reconcile them; or the outer actions which one is called upon to live out are so distasteful that every fibre of one's being cringes through the carrying out of day to day living. Either way, these amount to the same thing: the sense of self-betrayal is too great to endure, and a change of direction must ensue.

The necessity to live according to one's inner truth is the first defining characteristic of an ecological life, according to study participants. This chapter explores the theme of living an integrated life in the myriad of ways in which it was interpreted by study participants: the various ways in which the theme arises in their lives, and the challenges which following inner truth creates when pursued within the confines of modern culture.

For yoga students Roxanne Hillman and Olivia Arentine, working in Calgary's oil industry, the challenges of working in a system which runs counter to who they are takes its toll. Olivia, who had left her job many years earlier, was philosophical about the conflict:

The president of the company was a very competitive person. And he liked to see people fight. And even in the company, he loved to see departments fight against each other. And this went contrary to my nature which was if you're in one company, for heaven's sake, at least you should work together for a common goal.... It always caused stress. Because it's hard to go against your nature.

But for Roxanne, this tension of inner and outer worlds was a current dilemma and was causing her much distress:

experience of the reader. Rather, in order to understand and frame the concerns of study participants, I frequently step back from the immediacy of their words to place their ideas in a cultural context. The term "we" is used to indicate that we are all embedded in and take part in the complexities and challenges of western culture.

The expectation that I feel is placed on me as the person in my job is in conflict with who I am. So something's going to have to give and that's likely going to be the job. Because I think I'm trying to fit a round peg into a square hole.

Roxanne's way of reconciling the inner and outer conflict was to leave the situation. The other options open to her would be to overtly resist the demand to conform or to find a source of inner strength which was so unshakable as to allow her peace and calm within herself in all situations. While resistance didn't fit Roxanne's temperament, she did say that her goal was to carry a sense of peace with her wherever she went.

The very fact that she had the option of leaving the situation points to a crucial distinction about inner / outer divisiveness which speaks strongly to the theme of this chapter. We all experience places where we don't fit, where the ethos of the place is in conflict with our values or sense of self or life priorities. What is so dramatically different between that situation and the circumstances in which ecological educators find themselves, is that the outer actions which betray the inner heart, are systemic. Ecologically-oriented people cannot escape from the image of humanity which they find distasteful because it is ubiquitous. What betrays their inner truth are the very assumptions which underlie the culture in which they find themselves.

What must it be like to live in a culture where every facet of life reflects a way of being which runs contrary to one's soul? What must it be like to, nevertheless, have to live according to those ways of being because other possibilities do not seem to exist? The wounds of this chapter revolve around the difficulties of living in a society governed by perspectives which are anathema to one's being.

One of the challenges of discovering that the underpinnings of society itself demand a betrayal of one's truth, is that ecological educators still must live within this culture. In so far as they want to be contributing members of society, and in so far as they want to take part in the community, they find themselves having to live out truths which are intolerable.

For the women in this study, in particular, part of the difficulty is rooted in the desire to be liked and accepted. Yoga instructor Johanna Fried suggests that problems of

self-betrayal arose for her through "just trying to be the nice girl. And then sacrificing your own knowledge and wisdom through trying to be the nice one."

For educator Lindsay Naylor, the conflict between a desire to be part of society and a desire to honour her own truth arose in a slightly different form. Lindsay wasn't seeking personal acceptance but professional credibility:

The challenges are to maintain legitimacy. Integrity's pretty important to me. And I don't want to compromise certain parts of things. But legitimacy is an issue. And not being true - it creates huge anguish for me when I don't live that way.

What's striking about Lindsay's comments is the taken-for-granted way in which she talks about the need to balance integrity and legitimacy. That is, she is concerned with how to find her way between these two extremes, but she doesn't question why they are polar opposites. Why is Lindsay's truth not legitimate? If Johanna has to choose between being considered "nice" and living out her own wisdom, then we are witnessing a society which only views certain perspectives as legitimate.

Lindsay speaks to the societal tendency to only validate certain truths when she says,

I think that what modernity did was privilege one way of knowing, and we shut out those other ways of knowing as all being less valid. So you were afraid to rely on them or to bring them to the surface in a discussion. As decision makers you don't want to look like a flake. People just don't talk about those kind of things: I had this dream; it didn't *feel* right; I don't feel the energy's right between us. People would say, "what?".

This privileging of only one type of voice and one way of knowing has been termed a "monoculture of the mind" by Vandana Shiva (1993). Norberg-Hodge (1991, pp.2-5) demonstrates that this monoculture is currently spreading its tentacles across the globe giving rise to the belief that no other way of being is valid.

The monocultural aspect of societal vision is problematic for those people wishing to live divided no more. If Lindsay and Johanna came up against a version of humanity

which they found distasteful, but it existed alongside many other ways of being, then it would have no psychological hooks into them. They would simply go elsewhere, or stay where they were but be able to put the way of being into perspective. Since, however, modern ideals are becoming ubiquitous, and since such perspectives tend to define the ground of knowledge and truth thereby silencing or invalidating other viewpoints (Ray and Anderson, 2000, p.70), ecologically-oriented people can feel that they themselves must be defined by a set of assumptions which they find distasteful. This sense that no other possibility for humanity exists, can lead to despair, anger and resentment.

When one's truth is considered invalid, but the desire to live divided no more is so strong that we honour those truths anyway, there are several results. As adult educator Gary Whitlow found in attempting to conduct non-positivist research, ecologically-oriented people may be required to apologize for themselves or prove that they are legitimate:

We went through years of having to justify ourselves. So at the beginning of a presentation we would say, "well I would like, as part of this apology, to justify what I'm about to do". We don't have to do that anymore. It's a waste of time. We know how to do that. We know that our inquiry is as rigorous as anybody's if not more. Because I think that you have to work harder doing this work.

As Gary says, the need to prove oneself is a waste of time. Energy must be diverted to showing others that the work is worthy, rather than putting the energy into the work itself. Furthermore, the need to legitimize oneself is demeaning. That is, Gary is not arguing with the demand for rigour or high standards in his work. If the call to justify was truly only an academic demand for rigour, then it would be unproblematic. But positivists are not called upon to begin their presentations with an apology and a justification. The insult arises because the demand for justification is only one-way. So, rather than a call for rigour, Gary is experiencing judgment of his beliefs. This judgment seems to arise from a sense of "power over" in which another person has the right to deem what constitutes legitimacy from a position of privilege.

Public health nurse Frances Glenn did not find that she was called upon to legitimize her work. But she found her work devalued because it did not match the modern view of legitimate and important:

We're not taken that seriously partly because we're in the age of science. We're in the age of technology. And we're extremely low tech.... When we're dealing with somebody who's saying, "I'm a nurse. I work in emergency. Everyday I save lives. I'm the difference between life and death." And I say, "well I went to work today. And I went and visited a family that I've been working with for three years now.... And we're making some progress. This woman is not abusing her children anymore. Although it's a real struggle. And because of that, she definitely hasn't been able to give up smoking. But I understand. And we're working on her alcoholism." And they say, "Well, what kind of nursing is that?"

There is no dispute about the value of high tech emergency health care. But the question is, "why are all other forms of health care judged according to the same values?". The community health care in which Frances is engaged lives out many understandings of an ecological worldview: the importance of building on-going relationships; the realization that change is slow and difficult; the necessity to work with the patient as a whole person and within the context of their whole life with all of the confounding factors which exist. As Frances says, her work is not glamorous, but that does not mean that it holds no value.

Non-modern ways of being can be ridiculed and dismissed as when adult educator Sam Barlow's students call the class activities "froo-froo". People wishing to live out ecological understandings can be isolated and marginalized as Gary Whitlow has experienced:

In the projects I've had to do, how one is treated by the establishment or mistreated, you're isolated. You become a marginal person.... Obstacles would appear. One's reputation or one's values being undermined indirectly, through support staff. Or resources not being available, just to you.... So by isolating and making life miserable... you get worn out, you get disciplined, you get controlled.... If I

were younger and ambitious and so on, I would have maybe succumbed earlier along and said, "OK, I'm sorry for upsetting you. What would you like me to do?"

While overt means of devaluing and delegitimizing are hurtful, the unintended ways of dismissing an ecological perspective are perhaps more difficult to handle. Referring again to her position in the oil industry, Olivia Arentine claims that

whenever I showed compassion, it was viewed as weakness. So as long as I was prepared to argy-bargy and fight, everything was fine. But if I showed softness, it was very uncomfortable. [My boss] couldn't understand. He just couldn't handle that.

The problem that's arising for Olivia is not so much that her boss is chastising her for being compassionate, although that may be happening as well. Rather, her compassionate behavior is viewed through a modern lens, and is termed weakness. Compassion often requires great courage, but in a world which thrives on individualism and competition, kindness towards others can't be viewed as anything but weakness.

Olivia is experiencing, what is termed "intercultural communication" (Scollon & Wong Scollon, 1995) within cultural studies, or what Kuhn (1970) has described as the challenges of speaking across paradigms. That is, actions within one paradigm are viewed through the lens of another paradigm and are thereby misinterpreted.

Instructor Jamie Crowe has found that her attempts to have fun with her students is viewed by other teachers as "trying to make [them] look bad". "No matter what you do, [other teachers] won't see it as doing something for the school and the kids. But they see it as a selfish thing that you're trying to be a popular teacher."

For educator Emma Applegard, her desire to question deeply and entertain multiple perspectives has been viewed by administrators as threatening and a desire to challenge authority. For myself, particularly in academic circles, my desire to honestly face and admit to the difficulties in a situation has been viewed as vulnerability or lack of self-confidence.

In all of the above examples, the fact that the modern interpretation of behavior is just assumed as accurate, causes much damage. Casting Emma's questioning as threatening

is an effective way to sideline her concerns and silence her. But then the important work which she is trying to do can never be taken up. When it is assumed that I am lacking in self-confidence, the lack of self-confidence becomes the topic of conversation, rather than the difficulties which I was trying to point out. Energy must be diverted away from the work towards attempts to explain that the behavior is being misinterpreted.

Depending on the tone of the misinterpretation, the ecologically-oriented person may not just be called upon to explain her intent, but to defend himself and refute the accusation. But whether explanation, refutation or defense is called for, the energy is wasted because from a modern standpoint, no other interpretation is possible. The ecological person is simply labeled and dismissed, and any attempt to suggest a different interpretation for behavior only further calls his / her legitimacy into question.

Emma describes this experience as being shut down: I experience it as suffocation. We simply are what we've been labeled and no further discussion is warranted.

Through all of the various ways that a monocultural approach to life can demean and diminish the search for inner truth, and through all of the pain that it causes ecologically-oriented people, in the situations discussed so far, the monocultural nature of western society does not, at least, cause ecologically-oriented people to question their own truth. They continue to maintain and honour inner wisdom: they simply are frustrated that society does not likewise honour their way of being.

But there are two more insidious ways in which monocultural thinking can be wounding of inner truth. For those people who have less life experience, the ubiquity of modern thinking can cause them to believe that no possibilities exist outside of monoculture dictates. This sense of despair is never named for what it is. Doing so would indicate an understanding that modernity does not, in fact, hold a monopoly on truth. But it was apparent in the sense of futility and self-deprecation which accompanied some of the conversations with study participants.

I believe that Suzanne Young's quote which opened this dissertation is indicative of this phenomenon. Suzanne is clear that she doesn't believe in or accept the way that society

is playing itself out. But, at the same time, because societal views seem impenetrable and appear to be the only possible way of living, Suzanne turns her sense of dis-ease back on herself, believing that something is wrong with her.

But while Suzanne chastises herself, she hasn't given up her vision and hasn't lost touch with her inner truth. For many young people, this is not the case. They learn at a young age to defer to the vision which they see around them and accept it as truth. Sooner or later, however, the beliefs of modernity usually clash with personal experience. For someone who has never been taught to question experts or to believe in her own wisdom, the ensuing tension can be traumatic.

Mary Simon who works as a secretary at a local high school, spoke of the pain which she saw being lived out by student teachers:

I see these poor kids coming out, and they come crying into my office. And I'm sitting there trying to build them up again. And they're saying, "gosh we were told if this happens, we do this, and this should happen" So much of this is taught this way and it's not the way life is.

The students were led to believe that human interactions followed the laws of causation. They were given recipes to help them to survive their first frightening days in the classroom, and held onto these techniques for dear life, hoping that technique would get them through difficult situations. But life is always more messy than techniques can allow, and human nature is not that predictable.

So the student teachers are left with the humiliation and despair of feeling that they are failures as teachers, and they are also left with a sense of betrayal that what they have been taught in school has let them down. There are two possible directions that this experience can point, neither of which is easy. The students can work through the pain of betrayal and learn to trust in their own experience. Or they can assume that the information which they were given was correct, and feel a sense of confusion and self-loathing that they weren't able to make the world fit the model which they had been given.

Because of all of the situations described above, and most particularly because of this last reality, educators who are interested in the pursuit of personal truth, see it as their role to help empower students to discover their own truths. Randy White describes his role as a junior high school industrial arts instructor in this way:

I want [my students] to think, "yeah, I learned that I could make something, that I could go through a mental process and that out of that mental process, I could get something for myself that was physical. I could plan and sketch and figure out how something worked or how to build something. And that is something that I can do. Not something that I need somebody else to do." So my real goal is to give them that sense of independence and personal power.... If they think they can do it themselves then they're much less likely to react out of fear.... If they think that they're beholden to somebody to give them something, or me to give them an answer all the time, that's the most disempowering thing you can do. Then they have to say, "oh my God. We better agree because if we don't agree, we'll be dead."

So helping students connect to inner truth is a goal for ecological educators, not only because they believe that this way of being will help students to live more fulfilled lives. This work is also important because it will act as an inoculation against the sometimes oppressive nature of dominant cultural beliefs, helping students to stand up to those people who wish to exercise power over them.

The educators in this study have a variety of ways to help students to discover and articulate inner truths. Adult educator Sam Barlow encourages students to question societal assumptions and to reflect on their own priorities. He helps students in this process by teaching them the skills of questioning and journaling. Junior high school instructor Jamie Crowe attempts to create an atmosphere in the classroom where students can speak honestly about their concerns and beliefs. When conflict between students or between herself and students arises, she attempts to bring the problems out into the open and name them. She also engages her students in project work in which they can "show themselves"

and in which their work and their worth can be publicly endorsed. Educator Lindsay Naylor tries to challenge and provoke her undergraduate students. She believes that creating dissonance and exploring the cause of that discomfort helps students to identify the core values and beliefs which run through their lives. Students found that they were best led to an exploration of their own beliefs when there was an opening in the subject matter which enabled their own viewpoints to surface and be honoured. That is, rather than reflecting directly on their own identity, students found that their beliefs became apparent in response to a topic.

Whatever way in which students are helped to discover their own truths, educators pointed out that there is a radical nature to this kind of work. In so much as students become proficient at identifying their own truth, they are less susceptible to being swayed by and less likely to defer to people with positional authority. The work of identifying inner truths can, therefore, seem to be a threat to power. In turning to personal truths, "we're challenging the control of schools" (Gary Whitlow).

Education student Neil Herzog suggested that "this whole issue of power might just be the pivotal force of human interaction." For Neil, the reason that people feel threatened when their power is questioned is because they don't feel an internal sense of power. If "they know inside they have power... they no longer have to be someone who's always seeking power".

His assessment points to an interesting circle of events. Because people are not honoured for or allowed to live out their own truths, they don't feel a sense of personal power. And because they don't feel a sense of personal power, they feel threatened when other people question their authority. So, they have to exercise their positional power to squelch opposition. But exercising that power does not allow other people to live according to *their* own truths. And so they have perpetuated the situation which created the problem in the first place.

Randy White suggests that the school system works against the kind of questioning which is needed to develop a sense of personal power: "We all have the ability to question.

I just think that the system doesn't encourage it or nurture it." In fact, Randy suggests, the question which the school system is set up to answer is "how do you follow rules, and not directly follow rules. How do you internalize rules so that you follow them? How do you question but within boundaries? Sure we're taught to be critical but within boundaries."

He provided an interesting assessment of the reason that students are taught not to question:

In schools everything is circumscribed because people are afraid. They're afraid that their sons or daughters will change so much that they're not related to them.... We all fear that our children will grow away from us and not love us anymore. Or we won't love them in the same way. And it's something we know will happen. But we don't want it to go so far. And so we try to control what happens to those kids in the education system by keeping control of the curriculum. Question, but don't question too much. Yes, it's good to question, but don't ask the big questions.

While there is, no doubt, a sense of resistance to oppression inherent in identifying and living out personal truths, Parker Palmer (1998) suggests that this work isn't about "us" and "them":

[Living divided no more] is not a strategic decision, taken to achieve some political goal. It is a deeply personal decision, made for the sake of one's own identity and integrity. To decide to live divided no more is less a strategy for attacking other people's beliefs than an uprising of the elemental need for one's own beliefs to govern and guide one's life. The power of an authentic movement lies in the fact that it originates in naming and claiming one's identity and integrity - rather than accusing one's "enemies" of lacking the same. (p.168)

Palmer's words have profound implications for the environmental movement, but steeped as environmentalists are in a desire to "gallop in on their white horses to save the planet" (Berry, 1990, p.197), Palmer's words are also difficult for environmentalists. The

environmental science students whom I interviewed demonstrated this struggle in their references to what they saw as an on-going debate in our ecophilosophy class:

You can have two choices. One choice is you focus on yourself.... And then people might see what you're doing and then you can almost lead by example.... And then the second path seemed to be, you can go out and apply public pressure, go out and campaign, write letters, join greenpeace. And I got the impression that the way the debate was going was that those were being separated. (Bill Hearn)

Bill is correct in suggesting that I was putting forth two alternatives: being an activist or focusing on creating change within oneself. But the point of focusing on personal change was not to be a role model so that others would follow suit and engage in environmental behaviors in their own lives. The point is that by turning within and living out inner truth and honouring the ecological self, we have done all the work that needs to be done.

Honouring personal truths are not a means to an ends. They are the ends. "The decision to live an undivided life, made by enough people over a long enough period of time, may eventually have social and political impact" (p.168). One by one, if we turn to living out our own truth, we have altered the assumptions of the world so that the conditions for environmental abuse no longer exist.

The orientation towards outer resistance or inner work was the greatest place of divide among the ecological educators whom I interviewed. The male teachers focused more on resisting oppression and setting themselves against systemic abuse. The female teachers focused more on turning within and finding ways to live gently and compassionately. While all of the teachers viewed their work as containing some elements of each of these approaches, the place where they put their emphasis differed and, by and large, it differed along gender lines.

In the end, however, the work of these two groups may not be all that different. If living divided no more means bringing inner truth and outer actions into alignment, then all of the causes for disharmony must be considered. While some of those causes are external,

many are internal. Honouring inner truths, therefore, requires turning a magnifying glass onto personal actions as well as to systemic oppression.

Self-critique is hard, painful and humbling work. Yet, for the ecologically-oriented people interviewed, there was neither embarrassment nor self-deprecation which was attached to this work. Rather, their ecological leanings simply attuned these people to larger forces. Their own egos paled in comparison to their desire to live a sense of truth.

The most striking example of this brutal honesty with oneself arose in my conversation with health practitioner Sarah Connelly. I asked Sarah how her inclinations towards holism and interconnectedness were received within the medical environment in which she worked. She suggested that the reaction had changed over the years.

"Initially the dissonance was greatest for me. And the odd physician who thought I was a nut-bar." But over time, "a really interesting thing started to happen.... My practice improved unbelievably.... Obstacles and barriers and things that I had been working on in my own professional development were just lifted." Sarah found that she was respected more, consulted for her opinion more frequently and offered more opportunities.

What had happened which had changed the response to her approach so drastically? There was a series of shifts which had occurred but the process of change began when Sarah realized that

you have to practice what you preach. So I have to really appreciate their philosophy. And I have to very much believe and act on the belief that my philosophy is not superior to their philosophy.... In early years, not realizing it, I was presenting my model as superior to theirs. So I was being co-opted by the larger system if you would because I was approaching the same process as they were, just a different content. And then the light bulb goes on and you say, "wait a minute. Is mine any better?"

Sarah's realization is not an easy one to make. It is humbling to realize that you are living out processes which you have been decrying. It takes courage to look at oneself so honestly, to admit to error, and to find different ways to proceed. But underlying Sarah's

process is the belief that hypocrisy is a betrayal of inner truth, and so it needs to be stared down and altered.

This desire for self-consistency raised some dilemmas for ecologically-oriented people. Specifically, these dilemmas arose as three variations on one larger theme. While ecological educators had no concerns about honouring their own truth in their own lives, they struggled with the question of where one's truth leaves off and another's truth begins.

In the first variation of this theme, ecological educators asked the question, "who am I to say that my truth is right for other people?". On the one hand, they see their truth as being the right way to live, and on the other hand they don't wish to impose their truth on others or be complicit in the oppression of others. Jamie Crowe spoke about this issue in reference to a move that her family had recently made out of the city to a rural area:

I get lots of guilt thinking, here I drag all these guys out here and drag them away from what they know because I know I need this and in my heart, this is healthier.... I have a lot more sense of peace out here. But I do worry sometimes about what I've done. Maybe it's been a really selfish thing. But I think of all the experiences that have led me outdoors and have been just really wholesome, just really meaningful for me. It always comes back to that.

Part of Jamie was convinced that the connection to the outdoors is important for all people and would be beneficial for her family. At the same time, she worried about whether this nature connection was only a personal need which wasn't shared and which she was imposing on her family.

The second way that the pursuit of personal truth gives rise to dilemma for ecological educators is in defining their role as educators. Sam Barlow speaks eloquently and passionately of this problem:

I want to come in to change the world to make it better. So did the Jesuits.... So I get into a really hard place.... I come in with ecophilosophy saying, "we need to do this folks. Because we're screwing up everything in a lot of different ways."... [These] are things I deeply believe. [but] how do I come in and not act as a

Jesuit.... That's to me one of the quandaries. How do I not be a Jesuit and still act as educator?... I've chosen to be a change agent, because that's what an educator is.... [But] I've always got Black Robe flags.... Do I want to become a Black Robe priest of deep ecology?... That's an on-going dilemma. And I think everybody needs to have that one.

Sam's concerns about imposition and indoctrination are part of the whole dilemma of educating from an ecological perspective. Ecological educators walk a fine line. If they allow personal truths to be imposed on others then, as Sarah Connelly said, they haven't changed the monocultural nature of truth, only its content.

Yet, in tiptoeing too carefully around the concerns of indoctrination, a third dilemma may surface: the desire to be open to all truths. In this version of the dilemma, ecological educators find two truths conflicting. They want to honour diversity but they also want to stand strongly for integrity. So they are conflicted about what to do when another person's perspective seems to undermine integrity:

I have fairly strong views. But yet one of my views is to respect diversity. But yet when people want to perpetuate things that they think are just fine, all this grading and giving kids letter grades, to me that's atrocious. And I can't respect that. So, it's a contradiction. (Neil Herzog)

Randy White argues that this desire to respect all points of view is highly problematic because it feeds power right back to those people who will use the power to oppress:

This is where multiculturalism can be very insidious. Because it says, "well everything is moral then".... You can question. But only to the point where you don't step on anybody's toes. And in the process, we lose sight of the fact that we're all being stepped on and nobody's questioning who's doing the stepping because we can't. Because that would be like stepping on somebody's toes.

In a desire to honour all truths, we are led to a place where we can't stand for anything. All truths, even those truths which are demeaning and abusive, must be

honoured. Lindsay Naylor also finds herself in this dilemma but she suggests the way that she comes to terms with it:

I have trouble being tolerant with some corporate ideas.... But I think with this whole issue of diversity, the problem always becomes that, if we accept that, then we can't talk about anything.... We can't talk about values because for me to talk about values is to privilege my values over yours. So let's just not talk about it. I don't believe that. I think that I can talk about what my truth is right now, what I believe right now.... We can open up the conversation because we're starting from something.

Perhaps Lindsay has offered half of the starting point, and Johanna Fried offers the other half. Lindsay is suggesting that all that we can do is speak honestly of our own truths, realizing that they are neither absolute nor unchanging. Johanna, on the other hand, suggests that her starting point is opening to the truth of her students. But the truth to which she is referring, is not the "anything goes" truth which is the source of concern in the above comments, but the deep truth of the ecological self:

It's very much to be sensitive that there's an intelligence working in each individual. That intelligence knows better than I do what's required. And if I can address that intelligence and work with that intelligence, then I'll know what to do as a teacher. So I just have to trust when it's speaking to me.

Ultimately, this is the work of ecological education - to open to students' truths and to help them to open to their own truths and take ownership for their lives. But that work cannot just occur on the part of the teacher. Students have to be willing to engage in self-discovery and to learn to take ownership of themselves and for themselves. Sam Barlow tells his students that

it's up to you to take ownership of this.... I can offer something. You can choose how you want to interpret it. You can walk out of the class. And you can say, "hah, that's froo froo" which many of them do. Or you can work with the knowledge and try to change it.

For Sam, ownership doesn't just imply students creating their own knowledge. They also need to be selective and self-protective:

You have to look after yourself. You have to be selective. If you need to just listen, then you need to do that. There's so many people here. I'll try to look after the safety of the group. But there are times when I'm counting on you to be responsive.

Some educators found that students had no interest in taking ownership for themselves and were, in fact, quite hostile to the idea:

I wanted them to take some control and responsibility over their learning.... And what I wanted to do was to get them to render an account of what was significant learning for them in this course. They hated that. They hated that. They kept trying to figure out what is it that I really wanted. (Lindsay Naylor)

Lindsay is encountering the deferral to authority which ecological educators are specifically working against in their own lives and in the lives of their students. Parker Palmer (1998) suggests that people don't want to take ownership and honour their own truth because they fear punishment. He suggests that

when you realize that you can no longer collaborate in something that violates your own integrity, your understanding of punishment is suddenly transformed.... The courage to live divided no more, and to face the punishment that may follow, comes from this simple insight: *no punishment anyone lays on you could possibly be worse than the punishment you lay on yourself by conspiring in your own diminishment.* (p.171)

Some of the students whom I interviewed were concerned about the punishment which would ensue if they followed their own truth. For these students, the punishment they feared was in the form of lower grades, peer ridicule and teacher criticism.

Education student James Davidson spoke of his mixed reaction to being given freedom to explore his own interests within assignments:

The two assignments were both things that I was really interested in doing. And I found them exciting because they were open-ended enough that I didn't feel stifled. Like I had the opportunity to write things out in pen. And I didn't feel like I was going to get shot down for doing that. Whereas in a lot of courses, I know that I could write things out by pen or type up something ten times worse, and get a better mark on it just because it's typed up. The fact that it was open-ended enough for me to let me do it in my own way was really nice for me. Just to sort of have the creative freedom. And again that's scary.... Because you're not sure if you're going to get shot down because you've never done something like that before. It's a risk. And it feels really safe to type something up on the computer. To do anything out of the norm, it feels like a risk. If it doesn't have a title page with your name and the title of the assignment in the center, that's scary. From square one, we've been getting it back with red marks all over it if we haven't done it that way. We've been focused pretty well.

There are two aspects of James' comments which are troubling. First, the degree of conformity which he claims is demanded of students is monumental. If he hands in an assignment in which his name is not in the centre of the title page, he feels like he's taking a large risk. Second, his fear of being shot down speaks to the high level of criticism which he has experienced, as it gives rise to a desire to mold himself into whatever his teachers want him to be.

Neil Herzog felt that this fear of punishment was well warranted:

We don't reward kids who don't fit in to the school the way we have it set up.... In fact we beat them down and we try to mold them into a different way. And we don't respect them very well.

Neil is suggesting that the school system attempts to foster a "monoculture of the mind" by demanding conformity and squashing those students who have different ways of being-in-the-world.

But for the vast majority of students, it wasn't fear of punishment which caused them to resist taking ownership of their own work. In some cases, fear of a different nature surfaced. Environmental science student Kirsty Cochlin spoke of the fear of standing up for something, all on one's own, without any other support. Perhaps she's expressing fear of being ridiculed or ostracized or, just simply, fear of being alone:

People aren't willing to just step out there and say, "this is what I'm going to do. And this is how I'm going to do it." If you don't have a buddy standing there with you going, "yeah, this is what we're going to do", you don't do it.... Sometimes you just need that little buddy. But sometimes I think we have to say, "my buddy's not here today. And I have to find it in myself to do something that I'm going to make a difference in."

In some cases, the fear which arose had to do with opening oneself up and being vulnerable. In work which engages on only an intellectual level, or work in which teachers have set all of the parameters, there is no investment of self and no chance of embarrassment. But when the work becomes more personal, more honest, there is more concern of being exposed:

Whenever you're investing some of your own thought into something, or your own emotions, then you start to feel.... It's a lot safer when it's not at all personal.... People feel like it's a risk to share anything more than "how's the weather?". If they're talking about their feelings or they're talking about their deeper thoughts, it's scary for them because they're more personal and they're more rooted in who they are. And so therefore they run a great risk of being hurt or let down or made to feel really small if they invest themselves in something. (James Davidson)

For Mary Simon, the fear which arose was fear of entering uncharted territory, fear of pushing one's limits, and the corresponding fear of failure:

[The instructor] gave you options. I think that was one of the hardest things to deal with.... I mean, we had options before. You can write your report on this or this.

Here's your option. He gave us *options*.... Do whatever you want. Just do it. It's scary. It's really scary.

What becomes apparent in Mary's comment is that some of her fear came from not having someone else telling her what to do, not being able to defer to authorities, and having to make her own choices. Education student Liam Mattheson spoke of this same concern, although he framed it more as discomfort than fear:

What [the students] were looking for was what we've had our whole educational lives, and that's being spoon-fed. And telling us 'cause it's easier.... And ... all of a sudden you're taken from your safe learning environment and ... all the pressure's on you to learn. No one's making you learn and no one's helping you learn. It was a bit of a shock to my system.

For many students, it wasn't fear which kept them from wanting to take ownership of their work and their lives. In some cases, they preferred deferring to others. The comfort of having someone else make decisions meant that they didn't have to think or invest energy or take responsibility for the outcome.

I sometimes wanted, "well just tell me the answer! Forget the empowerment. Just tell me the answer and tell me what I should do."... You can see the seduction of a paternalistic model. And the university is extremely paternalistic. And you can see why it would be seductive. There's times when I go to work or to school and I just want somebody to tell me what to do. (Frances Glenn)

Neil Herzog suggests that "a lot of people are very comfortable or conditioned or both to being led and to accepting things at face value". The idea that we are conditioned to being led was perhaps the most cited reason for not wanting to follow one's own course. In some cases, the conditioning was overt as with Mary Simon's experience: "We've been brain-washed since grade one. Sit down. Shut up. Listen. Write it. Forget it and leave."

But more often than not, participants couldn't pinpoint a reason that they didn't feel that they could honour their own truth, nor did they recall a situation which specifically influenced them to defer to authorities. They just never considered the possibility of doing

otherwise. Though Jamie Crowe wasn't certain about why we are taught to not listen to our own truth, she recalled vividly the point in her life at which she started learning to find and listen to her own voice:

When I went to my masters, it opened everything up.... In our undergraduate [classes], you'd talk about all [these readings] and what [this author] had said. And in this [graduate] class, everybody was disagreeing with what the [writer] said or putting holes in the argument. And it was a whole other way of thinking. And it took me a long time to be able to think like that. Because it didn't occur to me until then. Everything before, I'd usually read and took verbatim and never would criticize somebody else's [viewpoint]. Never thought to do that.... We shouldn't start thinking like that when we're doing our masters. We should be starting to think like that when we're children.

I went into my first undergraduate teaching experience, thinking that all that was needed for people to start thinking for themselves was to have permission to do so. I believed that if I gave students the freedom to take ownership of their work and to be creative and follow their own passion, they would embrace the opportunity and would soar. Clearly, there are many reasons that such opportunities are not embraced.

As the ecological educators in this study have indicated, it is our job as teachers to help students to start to see the possibility of living their truth so that they don't have to experience "extremes of dividedness that are intolerable". But we can't force students to live divided no more. As yoga instructor Johanna Fried put it,

I would accept the challenge before. I'm going to try and convince you and make you see that this is possible. Whereas now it's like, "OK, maybe this is part of your path just to get a taste of this now".... We all come to it in its own time and own way.

Johanna is suggesting that honouring students' truths also means honouring the appropriate timing and their own readiness to open to those truths. Waiting and allowing events to unfold in due course is difficult for ecological educators because they know the

pain which is caused by deferral to others, and they know the peace which is created by living divided no more. Nevertheless, as educators, we can help to change the conditions which have created fear of ownership, and we can help to point out that trusting oneself is possible. But beyond that, the path is the students' to embark upon or not with or without our assistance. Forcing ownership is a contradiction in terms. Living divided no more requires beyond all else, an ability to step back and allow life to unfold as it will. This ability to let go of control turns us to the second theme which weaves through ecologically-oriented people's lives: the desire to understand oneself as embedded in creation.

CHAPTER FIVE - A STATE OF GRACE

When we experience consciousness of the unity in which we are embedded, the sacred whole that is in and around us, we exist in a state of grace.... Experiencing grace involves the expansion of consciousness of self to all of one's surroundings as an unbroken whole. (Spretnak, 1991, pp.24-6)

In 1543, with the publication of *De Revolutionibus*, Nicholas Copernicus drastically altered the human conception of self:

Men who believed that their terrestrial home was only a planet circulating blindly about one of an infinity of stars evaluated their place in the cosmic scheme quite differently than had their predecessors who saw the earth as the unique and focal center of God's creation. (Kuhn, 1957, p.2)

What must it have meant to the human psyche and the human ego, to suddenly realize that we had not been singled out as the centre of the universe? How destabilizing it must have been to realize that, in fact, we are no more important than any other orbiting mass of rock. The Copernican universe, as is well documented, was not heralded with fanfare and acclaim, but with derision, consternation and suspicion. Understandably so. Copernicus was not only turning on its ear human understandings of astronomy, but was throwing into question notions of God and the human place in the world. And he was doing so with, what must have seemed to be, limited evidence:

It is safe to say that even had there been no religious scruples whatever against the Copernican astronomy, sensible men all over Europe, especially the most empirically minded, would have pronounced it a wild appeal to accept the premature fruits of an uncontrolled imagination, in preference to the solid inductions, built up gradually through the ages, of men's confirmed sense experience.... Contemporary empiricists, had they lived in the sixteenth century, would have been first to scoff out of court the new philosophy of the universe. (Burt, 1952, p.38)

The second defining characteristic of an ecological life as suggested by study participants requires, I believe, a repositioning of our notion of self and cosmos which is

similar in kind and as large in magnitude as the Copernican revolution. Study participants suggest that living ecologically implies understanding ourselves as embedded in creation, a strand of the web of life. The reasons that this shift is so monumental will take some excavation to understand. That is, it is not the concept of the web of life itself which is so unsettling. Rather, there are implications upon implications upon implications which reside within this notion. I consider these layers of implications to be the five "C"s of living in a state of grace: community, connectedness, taking oneself out of centre, accepting lack of certainty and letting go of control.

While ecologically-oriented people may find it comforting to acknowledge that "man did not weave the web of life; he is merely a strand in it" (Chief Seattle as cited in van Matre & Weiler, 1983, p.122), when viewed through the lens of modernity, such a notion may seem extremely destabilizing and disturbing. While Chapter Four and Chapter Six present ecological ways of being-in-the-world which are problematic for students from the perspective of actualization in their lives, this chapter presents the largest and most dramatic conceptual leap which students have to encounter.

Since ecological educators are living out rather than bringing to the level of consciousness the implications of an interconnected life, it may not even be apparent to students that a conceptual shift is occurring. Instead, they may continue to view the actions and words of ecological educators through a modern lens, and so experience confusion and bewilderment.

Nor would it be simple for students to do anything else. The shift which is demanded to live in a state of grace requires a certain amount of insiderness in order to understand. "Belonging contains the actual presence of the way" (Heidegger, 1959/1971, p.126) towards understanding. For those people who live outside of an ecological worldview, a certain leap of faith is required. And leaps of faith are difficult when, as pointed out in the last chapter, we don't have the strong sense of self or personal power needed to feel secure.

This chapter will take up the theme of understanding ourselves as embedded within creation, and explore the multiple interpretations of this idea and the many challenges which this theme evokes when lived out within western culture. The major challenges with this theme for study participants revolved around the last two implications: accepting lack of certainty and letting go of control. In order to understand how these conceptual repositionings are related to the desire to understand oneself as embedded in creation, it's necessary to travel through and briefly explain the first three levels of implications: community, connectedness and taking oneself out of the centre.

Community

On the simplest level, understanding ourselves in a connected state, is understanding ourselves in community. No longer are we isolated and alone, but we are connected with other people in a state of mutual support and with the more-than-human world in a relationship of reciprocity. Ecologically-oriented people have been eager to embrace this notion for it overcomes the separation which many people experience in modern life and provides a sense of nurturing and belonging.

We feel a need for hope, for possibilities in the midst of despair; for integrity and wholeness in the struggle against alienation; for nurturing and closeness based on equality and respect, not on obligation and exploitation. These needs dictate the journey, and many of us find what we seek in community. (Forsey, 1989, p.230)

It is not my intent here to problematize the notion of community nor to explicate the many variations on the concept which exist, but rather to say that on both the conceptual and practical level, community, like locality, simplicity and sustainability is one of the concepts which has great currency in ecological circles. This form of connection is so appealing for many people because it provides the sense of comfort which they feel that they are lacking in day to day life.

Gary Whitlow suggests that professorial work can be a lonely, isolating endeavour, and he finds much sustenance through the learning community.

Partly my wanting to be engaged with learning is so that I can reach out, and express myself. So that I can be comforted. It's an emotional, spiritual need for comforting.... I need love and affection too. I don't want to be locked back in here doing all of these wonderful professional things.... You can become isolated so quickly in this culture. And there are all sorts of pressures to encourage that.... So you back off further and further.

The pressure in western culture to back off further and further can create a society which is quite insular. We can become unaccustomed to reaching out and supporting each other as Jamie Crowe indicates. She too would like the learning community to be a place of belonging where students feel nurtured and supported. But she mentioned how taken aback her students were when she expressed kindnesses to them, and how slowly, slowly over time, they would seek out the contact which at first they pushed away:

[I would] tell them just how happy I was that I was with them. And I enjoyed them so much. And they would look at me like I was nuts when I said that to them.

Because I don't think teachers [say] that.... Some teachers in middle school have developed a really tough crust. And that's to survive. And you don't ever let kids underneath that. Other teachers look at it as a business. "I'm here to do this in this amount of time and that's all I'm here for."

That need to develop a tough crust for survival or to shut others out for the sake of expediency can take its toll on our emotional health. Community holds the promise of providing a place and a way of being where that guard can be let down, and a sense of connection can be renewed.

For ecological educators, this sense of community is not limited to connectedness with other humans. Randy White suggests that "there's the sense of kinship with the plants and animals.... Feeling of acceptance and companionship.... I feel at home in natural environments in a way that I don't anywhere else." "The further we remove ourselves from

nature and from wild, the more we are traumatized.... We have lost that ground [which] held us, supported us. It fed us" (Emma Applegard).

The fact that community (human or natural) is looked to in order to overcome the trauma which many people are experiencing, does not mean that the living out of community is problem-free. "The thing about a community is that you don't all agree with each other and there are problems that you have to live with and work out over a long scale of time" (Snyder, 1980, p.90). But working through these problems is the real work of living. It is the messy, tangled, ambiguous attempts at relating which give us back our humanity and help us to confront who we truly are.

For the ecologically-oriented participants in this study, it was just this thorny aspect of connecting with others which they sought out:

Too quickly you become used to being alone, thinking that you're really engaged. And I wasn't. Only at a certain level, but I was missing the blood, sweat and tears, and the challenges and the uncertainties and the emotions of contact. (Gary Whitlow)

Jamie Crowe suggested that we have to ask ourselves, "how are [we] going to get along with people and develop relationships? Because we need each other." The task of relating may not be simple but, according to Jamie, it is necessary for our survival.

Ecological educators suggest that western society works against this kind of connection, not only because of the desire to develop a "tough crust" but because our lives are just not organized in such a way that relating - true relating - can happen:

My approach to everything I do has been based on a respect and affection for people I'm with. And those things you can't hurry. If you want to treat people respectfully and gently, you have to have the time to do that. You can't say, "OK, I'll be gentle for two minutes". It doesn't work. (Gary Whitlow)

Yet our work lives and often our personal lives amount to this kind of two minute relating. Perhaps our restricted sense of time leads to a situation in which we don't bother opening up because we know that closeness can't happen in the time which we have available. So,

we keep relationships superficial. Walljasper (1997) tells a story of running into a friend in a bookstore which speaks to the time pressure placed on personal relationships:

We proceeded to have a hasty conversation without even looking at one another as we both scanned the bookshelves. It must have looked highly comical - two talking heads frantically bobbing up and down the aisle, jabbering away. Finally we each grabbed a book, raced to the cash register, and hollered good-bye as we sped off in opposite directions. (p.42)

In so far as we can make the time for relationships and in so much as we're willing to open ourselves up, community can exist but it is not just experienced as a feel-good process. Community requires something of us. Relating well means being self-aware, respectful, acknowledging limits and honouring obligations.

For ecologically-oriented people, obligation is not a dirty word. In fact, there is pleasure attached to the notion of honouring obligations, for it provides the sense of dignity which comes with right action. Berry suggests that it's possible to imagine a sense of obligation or responsibility which is "not grim or merely dutiful, but rising out of generosity" (Berry, 1983, p.60). That pleasure of giving is an inherent part of honouring connections.

Yet such connections are not always honoured. Study participants indicated that they experienced a demeaning of the connections which exist in a variety of ways. This degrading of connections is one of the wounds of modern society for ecologically-oriented people. Roxanne Hillman found that the demeaning of connections was related to a lack of manners:

People don't have any manners any more. They shove you and they push you and they're giving you the finger in the car. And sometimes you just take a step back and you go, "how did we get to here?" It comes back to manners, just how you treat other people. 'Cause we all have to interact, and I guess manners are important to me. It may seem superficial but, to me, it's a way of treating people.

David Ehrenfeld (1996) tells a familiar though disturbing story in an essay which he entitles "Pseudocommunities". In this tale, he is teaching a class at the university. There are two students sitting in the front row who "are speaking to each other and laughing quietly; they see that I am looking at them and they continue to laugh, not furtively or offensively but openly and engagingly, as if I weren't there" (p.20). As he is speaking to the class, part of his mind is speculating about the cause of the students' laughter. Does he have chalk on his face or a hole in his pants?

It dawns on him that "when my students were laughing, they had no idea that I would be bothered. At that moment they were treating me as if I were a face on television" (p.20). He continues with an analysis of this phenomenon:

The students (at least most of them) and I inhabit different worlds, even when we sit in the same room. In my world, the people I speak with are real: if I offend them they are hurt or angry *with me*, if I give them pleasure they smile *at me*, if I bore them they find an excuse to move away *from me*. We are alive to one another. The world of my students is far more complex, a hybrid world, a world in transition. (p.20)

Whether it is this blurring of the real and the virtual which is leading to the lack of manners which Roxanne is experiencing, is impossible to know. Ehrenfeld's analysis could certainly account for some of the disrespect which is rampant in society today. Undoubtedly, there are many other factors. I believe that, in part, some of the rudeness is a form of acting out due to the sense of emptiness which results from a disconnection from the ecological self.

The lack of sense of mutual support and community is, in part, due to the western cultural mythology too. Sam Barlow speaks of the hero myth and the challenges which the living out of this myth causes for environmentalists:

How do you deal with the angst, frustrations? [By acknowledging] that you don't have to do it all. That's the autonomous part of things when one person has to do it all. And it's you. And not realizing that you're part of community. And becoming

the tragic hero. Tragic heroes are generally loners and isolated. And maybe that's got the wrong movement [because] you move into that individual place. It's not that you don't act. It's just that you [don't] see all the actions resting on you. That's the American myth. It all rests on Clint Eastwood's shoulders.... How much [sic] of us in North America are still caught by the fact that we need to be ecological Clint Eastwood's?

There is a sense of pride and honour in being a tragic hero, as well as a sense of hubris. As Sam says, living out this myth requires the carrying of a large burden which could be shared. From an ecological perspective, western culture isn't, it seems, used to thinking in terms of these larger connections. Ecologically-oriented people wish to honour community because community helps to remind us of our connections and obligations to others, as it helps us to share the burdens of life, even if only on a small scale²⁸.

Connectedness

Community is a source of comfort which requires the working through of some difficult notions of interconnectedness²⁹. Because of the appeal of belonging, community provides a form of interconnectedness which can be easily embraced. I call it a simplistic level of interconnectedness, not because there is anything inherently wrong or superficial in seeking out community, but because doing so, does not require a repositioning of any of our notions of self or other or our place in the world.

²⁸See Bellah et al (1985); Berry (1983); Plant (1989) and Vitek & Jackson (1996) for a further discussion of community.

²⁹Here, I am using interconnectedness as a generic word which embraces all five levels of implications of human embeddedness in creation. I am using connectedness to refer specifically to one of those levels. These definitions are not precise. Indeed, these words could be used interchangeably. I am providing different interpretations of the two words only for the purpose of enabling a distinction to be made between the generic definition and the specific definition.

Connectedness, on the other hand, begins with a slight repositioning of self and in its deeper interpretation moves to a larger shift in the definition of self. Connectedness begins with the notion of Indra's net to which Loy referred in Chapter Two:

Far away in the heavenly abode of the great god Indra, there is a wonderful net that has been hung by some cunning artificer in such a manner that it stretches out infinitely in all directions. In accordance with the extravagant tastes of deities, the artificer has hung a single glittering jewel in each "eye" of the net, and since the net itself is infinite in all dimensions, the jewels are infinite in number. There hang the jewels, glittering like stars of the first magnitude, a wonderful sight to behold. If we now arbitrarily select one of these jewels for inspection and look closely at it, we will discover that in its polished surface there are reflected all the other jewels in the net, infinite in number. Not only that, but each of the jewels reflected in this one jewel is also reflecting all the other jewels, so that there is an infinite reflecting process occurring. (Cook as cited in Loy, 1993, p.481)

Indra's net is an eastern version of the web of life mentioned earlier by Chief Seattle. These images take us one level beyond community, because here we are not only sharing and supporting, but we are realizing that we live interdependently. Our actions effect others and have consequences for the earth.

Frances Glenn spoke of this notion of interdependence in her work life:

I can't think that my actions are going to be without consequence for other people. As their actions are with consequence for me. And with consequence to the place that we live in.... When I go out and potentially work with a family - a single mother and her kids - who just can't get it together for one reason or another. And I help facilitate her growth towards having a healthy family. Along the way, maybe she won't be on welfare anymore. Well, that's a pretty good payoff. And then she's also going to be able to give that message to her children who are going to go out and they're going to do positive things too. So that effects the whole community.... We're all intertwined and we can never separate those threads out.

But Frances had a harder time acknowledging an interdependency with people whom she didn't know and would never meet:

What [Gary] talked about was the idea of our responsibility to the earth, to the earth's people.... It surprised me. And it was quite uncomfortable for some time during the course. I didn't know if I wanted to be that kind of person. "Well I'm not going to go and help poor people in some other place. Why are we learning about this?".... And somebody literally leapt up and said, "I don't want to be at the head of the parade. You're telling me that I have to be at the head of the parade."

Frances and her classmate were relieved to learn that honouring obligations to the "earth's people" didn't require them to overturn their lives and move to a small village in Africa. But her sense of surprise that we have obligations to other inhabitants of the earth, is interesting in its own way. It brings to mind Bill Hearn's comments in Chapter Three, in which he found it brave to consider that his actions have consequences.

The image of Indra's net helps create recognition that actions have consequences and enables us to acknowledge interdependence. On the surface, Indra's net offers an image which is the epitome of connectedness. And it can be read in this way. But it can also be taken up on a much more superficial level.

Each jewel at each node of the net can still remain an autonomous individual. While they reflect each other, and mutually condition each other, and while connections are lived out between these individuals, they can still be viewed as separate beings. That is, the jewels are interdependent but they are also self-determining.

Systems theory proposes a more challenging view of interdependence or connectedness, as outlined by Macy (1991):

The way we define and delimit the self is arbitrary. We can place it between our ears and have it looking out from our eyes, or we can widen it to include the air we breathe, or, at other moments, we can cast its boundaries farther to include the oxygen-giving trees and plankton, our external lungs, and beyond them the web of life in which they are sustained. (p.12)

The insight offered here goes beyond simple interdependence to an understanding that the boundaries between self and other merge and blur. Determining where one being leaves off and another begins becomes an impossibility. Connectedness, defined in this way, moves to a deeper and more radical repositioning of the sense of self³⁰.

Taking Oneself Out of Centre

The implication of Indra's net, in either of its readings is that there is no centre. All jewels reflect each other. All have importance, but none have prime importance. On a conceptual level, this notion is not that difficult to grasp.

But, in western culture, we live out lives in which on a moment by moment basis, we understand ourselves as being at the centre of creation. As a species, our frame of reference is, almost always, ourselves. A quick scan of the media on any given day can demonstrate how human-centred and now-centred, modern culture tends to be³¹. This frame of reference may not be readily apparent because it may appear obvious and logical that all decisions would be made from within a present human context and with concern about present human priorities. It should be remembered, however, that this temporal and species focus is a cultural orientation and not a given of existence. Both educator Sam Barlow and environmental science student Kirsty Cochlin spoke of the long-range vision of

³⁰See Bateson (1972, 1979); Capra (1982); Macy (1991) and Skolimowski (1994) for further discussions of connectedness and the blurring of boundaries of self and other.

³¹The idea which I am most strongly pointing to here, is the notion of anthropocentrism. Bowers (1993b) provides the sort of critique which I'm suggesting in an analysis of commonly used school textbooks. A discussion of anthropocentrism, ecocentrism and biocentrism is found throughout the deep ecology and environmental ethics literature and receives a large amount of discussion within the journal *Environmental Ethics*. See sources such as Devall & Sessions (1985); des Jardins (1997) and Spretnak (1991).

Closely related to the idea of anthropocentrism is the notion of domination. The idea of human domination over nature is discussed throughout the social ecology and ecofeminist literature. See also Ehrenfeld (1978); Leiss (1972) and Livingston (1994). In the postcolonial, multicultural era, discussion tends to revolve more around anthropocentrism than domination. Human domination is still frequently played out, however, in day to day life. Recent conversations within the media about the possibilities of altering the environment and inhabiting Mars, are indicative of this postcolonial dominating mindstate.

native cultures in which actions are based on the consequences which they will have on the next seven generations. Sam pointed out that, for the Hesquit, the seventh generation concept is too short a time span. Rather they focus on planning for the next two thousand years.

This perspective can be contrasted with the frequent focus in modern culture on immediacy - the short term of the economic bottom line, immediate gratification, this year's profits, the four year term of governance, a five year business plan, demonstrable results, this generation, our lifetime. Suggesting the importance of sowing seeds for actions whose results we may never see, is challenging to the mindset of immediacy.

Similarly, the notion that humans are at the centre is a culturally-specific interpretation. Indeed, this perspective is rooted in the anthropocentric nature of modern culture which ecophilosophers find particularly problematic. Moving ourselves out of that position of centre requires the large and humbling repositioning which Copernicus' vision of the universe required.

For some people, the insight that we are not at the centre is very comforting. Rather than finding this repositioning humiliating or frightening, it can be experienced as relief. When we can see ourselves as only a small part of something much larger, then the crises of day to day living lose their urgency. We can simply see them in the context of cosmic time.

Emma Applegard, in particular, took comfort in being only a part of the flow of life. For Emma, the humbling repositioning occurs on both a temporal and species level. She derives great comfort from placing her life and the lives of her students in the context of a continuous sense of time:

It's like looking up at a mountain. Or maybe it's like the astronauts when they look down at the earth. I had a similar experience in Europe, looking out from the boat going across the channel in Rotterdam, and looking at the time clock, this beautiful tower and thinking life has gone on before and will continue. And there's quite a release from this moment and intensity, that there's a continuity. It puts one's life in

a perspective.... History and human nature and nature itself has a way of repeating itself. And isn't that reassuring. That anything that we face ahead of us, most likely have been issues... people and nature have dealt with... in the past.

Emma also found it comforting to acknowledge that, even in this current place and time,

there is a presence of, you could call that the creator, you could call it God, call it gods. [It] has that control and direction that we really don't know about, but it weaves us all, and it can speak to us. It does speak to us. And I think being open to that, that there's that feeling of caring and love and thoughtfulness and a sense of obligation and stewardship. That you appreciate whatever, whoever, but you just honour that presence or that power that has created this special place with beings in it.... It's honouring the life force and it's honouring the creator of that. And seeing that within ourselves and other living and non-living beings. There's just a power beyond. And I find that comforting.

In honouring the life force, Emma can let go of the need to hold the world together, an ability which none of us truly have anyway. She can allow herself to exist within the larger cycles of life, and be freed from self-importance.

Accepting Lack of Certainty

If, as a species, we are not at the centre of creation, then we are also not able to have certain knowledge. This knowledge can't exist because there are other beings who also have a say in the workings of the world. Without the central place, we have to allow room for other whims and other realities.

This certain knowledge also can't exist because the synergies, the motions, the interactions between the various beings create truths which are beyond the knowledge or the predictability of any of us. In relationship, there is an unfolding of realities that are beyond the ken of any of the individuals. When taken to a planetary scale, this continuous

ebb and flow, changing in response to one another and changing in ways that are beyond any of us, is the feedback system which Lovelock (1979) has termed Gaia.

We also can't acquire certainty because, if we give ourselves over to the realization that each of us is but a small creature in a much larger journey of planetary life, then the realization arises that there is much beyond our knowing. There is much that simply is and likely will remain a mystery to us:

I think that we have to be prepared to say we can't understand in some senses. And that becomes the spiritual approach in the sense that if you approach these questions with some awe and aware that it's a mystery in the greatest sense that mysteries are mysteries. To say that we can truly comprehend what's going on here is hubris.... I think we're learning that now. People who have spent a lot of time attempting to comprehend what's going on and attempting to control it, are finally realizing that it's not just a question of we don't have enough computing power. Or we don't have enough information.... The things are operating in a way that is basically incomprehensible. (Randy White)

This realization that we can't know all and we can't attain certainty, points to large shifts in how we conceive of education and how we make sense of the world. First, much of how we come to know the world has to be through intuiting, through trial and error and through experience. We have to be willing to try, to make mistakes, and to see where things take us:

It's in the trying that these things are learned. And you go up against, make a mistake, and crunch on this wall, and crunch on that wall. And that's going to happen and there will be a little discomfort. But how else can you do it? (Gary Whitlow)

The trying, and the seeing what works means that we also have to be responsive to outcome, to change direction based on the way in which events are unfolding. In other words, while we can have a plan ahead of time, we have to be flexible in design, and not assume that we can know all on a cognitive level before even attempting the work. For

Emma Applegard, this sense of responsiveness was a matter of course: "I receive my direction from [students'] questions and their responses to my questions. [By being] willing to listen. And to not feel that I have to have the answers." But in order for Emma to take this approach to education, she has to be willing to enter a classroom without knowing where the day will take her, and that can be uncomfortable. She has to engage in education in relationship to and in response to her students. Living this approach out in actuality requires confidence and faith: it requires living with uncertainty.

If, as Gary Whitlow suggests, we can only know through trying and seeing where we end up, then going through experiences becomes an important part of the educational process. Rather than application being something which we provide for students after they "know" all the facts, the learning itself, the creation of knowledge, takes place through experience and through application³².

There also is another insight embedded in Gary Whitlow's suggestion that trying is the only possible way to learn. This approach implies that we have to be willing to fail:

You have to fail. Or suffer adversity. Suffering adversity or failure is very healthy if you can learn from it.... If you truly have a community of people, then you're not afraid to fail. Because it's not really failing. It's risk-taking. And you're taking risks in order to learn. You're trying things. (Neil Herzog)

Learning requires failure. But in our current educational system, failure has negative connotations. Students see failure as a form of humiliation which they seek to avoid. But in so doing, the learning which can take place is limited.

People are so afraid to do anything. They're afraid to do anything that makes them look stupid. They're afraid to do anything that might put themselves in some form of social or physical jeopardy or harm. (Liam Mattheson)

People are afraid to say "I don't know" or to ask a question. They'd just as soon shove their way through. And that's sad. But why? It's because when we were

³²This view of education is in keeping with the philosophy of experiential education. See Itin (1999) and Lindsay & Ewert (1999).

kids, it was like, "what do you mean, you don't understand? What are you - dumb?" (Mary Simon)

Finally, if we can't know all and can't attain certainty through reasoned deliberation, then we need to open ourselves to the possibility that there are ways of knowing which move beyond or are different from intellectual knowing:

The western culture have maybe identified ourselves as our intellect. And that's probably our greatest lack of fulfillment.... The intellect's very important. But it's not all there is. It can take you far in terms of understanding and clarity and really looking deeper. But it can't take you all the way. (Johanna Fried)

Kayaker Lilace Mellin Guignard (2000/2001) provides a description of the limits of the intellect and the importance of connecting with other forms of knowing:

When I wanted to kayak, I had to learn how to risk with my body. I acquired good technique and skill, the fine points of style and power. I could read the river. All the things I could study and do, I did well. Still, my nerves froze me above all but the most familiar rapids. I wanted to be sure I wouldn't fail. But no one can learn how to kayak without making a mistake that has you feeling like you'll never breathe again. I kept thinking I'd discover the key to what made me hold back as I observed less experienced paddlers try harder moves and bigger rivers. It didn't happen.

(p.39)

Guignard, like most of us in western society was very comfortable with intellectual forms of knowing. She did all that she could to figure out the sport of kayaking. But ultimately she couldn't advance because she had to find a way to learn from her body and learn from the river. She had to be responsive to the cues which she was getting from the world, rather than figuring them out and understanding them ahead of time.

Through the comments offered above, I have suggested that when we acknowledge that we can't attain certainty, a form of education arises which requires us to be responsive, to try without knowing where things will go or what the right answer is ahead of time, to gain knowledge through experience and to be prepared to fail. To actually live out the

implications of these suggestions in an educational context requires radical shifts in educational orientation, and these are the points of contention for the students interviewed as part of this study.

As with all of the shifts which this chapter is suggesting, we may intellectually accept that we can't obtain certain knowledge. But in our moment to moment lives, we often live out the desire to "reach security, and cast aside loose earth and sand so as to reach rock or clay" (Descartes, 1637/1970, p.28). Students' expectations of educational programs and their frustrations with ecological education pointed to a strong belief in certainty as a way of life.

In particular, the desire for educational techniques or recipes points to a belief that if we follow the right method, we will achieve the intended and desired results. This demand for technique was an expectation of many of the students interviewed. In his education class, Rex Langard was looking for

somebody that was saying, "do lots of examples". Someone that's saying, "don't use chalkboard. Use overheads instead." Someone that's saying, "make it as much a discussion with the students as opposed to it being just talking at them."

Somebody who was telling me "have the lights turned on, have the lights not turned on. Have the seats in a circle. Have the seats in a standard row, column format."

Very, very practical specific information that would tell me the best way that I can help my students get the highest marks possible.

Chris Persant, taking the same course as Rex, claims that "as we were progressing through everything, I was kind of angry actually.... I paid to get techniques and that's not what I was getting."

Students want to know what the intended outcome of the course is:

I didn't find myself having a great sense of direction in the course. It seemed as though the material if not the readings we had to do, was fairly often well-defined. I guess maybe I did not have a very strong idea as to what I was supposed to take out of the information. (Rex Langard)

And how to get there:

I want good grades. So I want to know how to get them. And if it doesn't really tell me how I'm going to get an 'A', which she didn't. She just said, "do your best and you'll get graded. I'm not going to give you a rubric or a grading scheme." She couldn't say what you need to know to get an A. Because the whole theory of postmodern teaching, at least a component of, is that there's not a set thing that you have to know. It's just openness, and open your mind, and just letting things fall out and drift in. (Liam Mattheson)

And they want the path to be straightforward:

She goes around and around and around, and once in a while you get a gem. And you think, "wow, that's amazing". But in the process of going around and around and around, sometimes you lose people. (Liam Mattheson)

and unambiguous:

I would be looking for right or wrong answers. And it seemed as though they didn't exist. And I wasn't comfortable with that. I would ask a question and the question would be put to the group rather than being answered by the instructor. And I found that difficult.... I was always looking for black and white. And sometimes it wasn't there. It was grey. (Rex Langard)

Students are seeking a sense of certainty and security. They want to know that if they do A, that B will happen:

If you went home and studied the textbook and learned everything in it, you didn't know that that would result in you getting a good grade. Nor did you really know that if you went home and studied that textbook that you'd learn anything necessarily.... The risk involved in opening yourself up to that. And at the same time, the risk involved in trying to open your mind and let in a whole bunch of new information and new concepts and new values, when you've already had them instilled in you for sixteen, seventeen years in school. It can be intimidating. (Liam Mattheson)

Beneath and between the words that the students were saying, seemed to be a belief that, in reality, there were specific ways to proceed that would get them to a predetermined end. Teachers were just holding back on them. There was a sense of frustration that the teachers wouldn't provide the answers which the students were seeking.

But the teachers, while acknowledging the difficulties of proceeding without certainty about method or end-product, also believed that this discomfort is simply a by-product of education:

You have to work harder doing this work. Because it's so messy. It's chaos. And it's organic. It's uncertain. And it's even hard to know how to take notes, because what is it you're looking for? You probably won't know until you give it an opportunity to sort of wash through you. (Gary Whitlow)

Neil Herzog found that he enjoyed these meandering, ambiguous approaches to education. He indicated that embracing this kind of work required some faith that all would come together or be beneficial in the end:

She talked about chaos. And I kind of got lost there for awhile. But I kind of knew that if I paid attention and thought about it more, that it would introduce something new to me. Or in the very least, it was interesting to have some new area for exploring.

While it appears from the above discussion that students and teachers are working at cross purposes, with a very different set of understandings about education, what is not so apparent is that ecological educators seek a sense of security and stability as well. As discussed in Chapter Two, the educators find that security arising in a different place though. Rather than wanting everything set out ahead of time, they are guided by a longer range vision of what they are trying to achieve:

I know very clearly where I want to go.... I want a greater sense of knowledge of place. I want them to have a greater sense of knowledge of themselves. And by fostering the questions, it can be ambiguous because I don't know what those questions will be. But it's not ambiguous in that I know that we'll do a lot of self-

looking and self-doubting and question one another and question the text and remaining open. Why I do that is not ambiguous. What you don't have is the map in front of you when you start. But you do know that you want to foster a relationship to themselves. You want to foster a relationship to this body of knowledge and to their place. Hopefully the knowledge that they learn will help them to live healthier, better lives. (Emma Applegard)

Emma is pointing to a perspective which separates the necessity of certainty from the desire for a sense of security. This separation carries over into the next implication of viewing ourselves as embedded in creation. That is, although true embeddedness requires a letting go of control, ecologically-oriented people view this repositioning through a lens which finds comfort rather than anxiety in that sense of letting go.

Letting Go of Control

If we don't have a sense of certainty about how life will unfold, then the realization arises that we can't control the world. As stated above, this realization can provide a sense of relief when viewed through an ecological lens. This shift can also be humbling and frightening when viewed through the lens which believes that holding on tightly provides certainty of outcome.

At a certain point, Sarah Connelly decided that she was going to let go of attempts to control the world around her. While the shift had profound and positive effects on her life, she described the initial terror of letting go:

I think I saw it at that point as the only alternative.... [Things are] not working. It's time to do something different. I really didn't know anything else to do. So you let go. At first I thought it was like giving up. Not a defeat versus them, but a personal defeat. That I wasn't carrying on the challenge.

She had previously believed that

you work really hard. You never give up. Life is under your control. And so it felt like I was giving up. It felt like I was doing the very thing that I had always been taught not to do. So then, this was personal failure. It had nothing to do with was I winning against them or not winning against them. This was not acceptable. I mean, what happens to somebody when they just let go of everything? I don't know. I don't know what I thought happened but I thought it was awful. It was going to be horrible.

Realizing that we can't control the world, even our immediate world, necessitates living in a state of acceptance of what befalls us. Rather than fighting the world to make everything pleasant and positive, we begin to face the truth of our existence:

That's why I think people find it so healing to be in nature. It reflects to us what's going on in us: that there is life, there is death, there is strife, there is beauty, there is decay, there is growth that comes out of that decay. But all of that is necessary. That's part of the cycle. And that's naturally what's going on in us, but somehow, I think since the age of reason, we've become really arrogant thinking that my mind can understand this. I can control it. I can intellectualize. We can control things.

(Johanna Fried)

Ecologically-oriented people find that there is relief in acknowledging the truth of the world. And there is a sense of self-acceptance.

The most frequent shift which occurred for study participants with the insight that they couldn't control the world, was that they developed a new relationship to adverse conditions. Whether they were facing physical pain or emotional hardship or a sense of failure in themselves, they developed a perspective which was based in acceptance. Rather than expecting the world to be perfect and being angry when it wasn't, they began to look to the lessons which could be learned in all situations:

I look back at my life, some of the things that I did that make me really upset. I wish I wouldn't have done [them]. So how do I live with that? How I live with that is [by asking], what did I learn from it? (Lindsay Naylor)

According to the lived experience of ecologically-oriented study participants, when we are able to let go of the need to control, and engage in a more accepting relationship with the world, the sense of security which the students were seeking does arise. But rather than that security coming from gripping tightly and not letting go, it comes from release. Rather than that security arising from each of us as individuals believing that we are in control, it comes from allowing ourselves to be part of the flux and flow of the universe. And that type of security is hard to understand without experiencing it. From the outside, letting go implies losing any sense of security in one's life, which engenders great fear. From the inside, the shift provides relief and freedom and a new and lighter kind of security.

Furthermore, because this shift requires us to take our guidance from the universe, there is a sense which develops of being more in line with flow and of actions having a sense of appropriateness rather than being forced³³. Finally, according to ecologically-oriented people, there is a sense of dignity which arises from knowing our place, and from not fighting the truth of the world. Perhaps it is this sense of dignity which causes Spretnak to call the state of connectedness, a state of grace.

In Chapter Two, I spoke about the twin meanings of the ecological self. I suggested that when we are in line with inner truth, we experience ourselves as embedded in creation. That phrase, "embedded in creation", is both accurate and illusory. It is an accurate description of the state of interconnectedness, but it doesn't point to the large repositioning which this state requires. Interconnectedness requires a whole new way of viewing our place in the world, a shift of Copernican proportions.

³³See Belitz & Lundstrom (1998) and Cameron (1992) for a discussion about living in line with flow.

CHAPTER SIX - SURPRISED BY JOY

A child's world is fresh and new and beautiful, full of wonder and excitement. It is our misfortune that for most of us that clear-eyed vision, that true instinct for what is beautiful and awe-inspiring, is dimmed and even lost before we reach adulthood. (Carson, 1956, p.42)

When time and money and a desire for self-indulgence fortuitously meet up with the arrival of *Resurgence* or *Orion* at the local store or when *Whole Terrain* arrives in the mail, I know that there will be an evening ahead when I will shut out the world, and drift away to the worlds which these magazines offer - worlds where ecological understandings are a matter of course. Such an evening, a special event due to the rarity of these magazines, must be prepared for, indulged in, savoured.

One evening last fall, I had settled down with *Orion*, an issue which was devoted to food. First, I read a delectable history of warm, sweet, golden honey, "one of only two foods created by nature to *be* food and only food"³⁴ (Wallace, 2000, p.18). Then I read of Gary Paul Nabhan's (2000, pp.32-40) fifteen-month experiment to "eat locally", ingesting only food which originates from within a two hundred and fifty mile radius of his Arizona home. He spins stories of the delights and challenges of learning to settle into his home place.

Primed by these articles, I was eager to accept the invitation to join *Orion* correspondents for dinner. Eight writers crafted dinner invitations, replete with full menus for the reader aching for sustenance of soul and body. Each sampling was different but they all captured the mood and pace of the meal - simple, slow, sharing, savouring. They offered meals of attentiveness, of nourishment on so many levels, of pure joy in the small moments of life.

My evening with *Orion* slowed me down, put me into a meditative mood. All the sensations of life became heightened as I too became more attentive to my surroundings,

³⁴The other food is milk.

more grateful for all of the precious gifts in my life. This sense of joy in the world, gratitude for life's gifts, desire to live with a sense of wonder and engagement, and attempts to take pleasure in small moments is the third theme which threads through the lives of ecologically-oriented study participants. The challenges with this carriage in the world is the focus of this chapter.

Unlike the last chapter, the difficulties with this way of being for people ensconced in a modern culture do not arise as a conceptual challenge. That is, the notion of taking pleasure in the world does not require a conceptual leap nor is it shunned for ideological reasons. The majority of people interviewed, regardless of worldview, yearned for this sort of relationship with the world. The problems which they encountered revolved around the ability to grant themselves permission to savour life, and the difficulty in fitting such a way of being within society as currently structured.

Rather than *Orion's* implicit suggestion to be in the present moment in a mindful and grateful manner, western media more typically provides the messages which come through in the following radio ad. The ad questions:

how would you like to read the newspaper in thirty seconds? Polish off a novel in your lunch hour? Read a computer manual in minutes instead of hours? Don't have time to read the old fashioned way? Do it the super fast way. Read as fast as you can turn the page.

Hearing this ad shortly after spending an evening reading *Orion*, I thought about how much life would be lost if I had been able to read *Orion* in thirty seconds. But more. I thought about how these two versions of the world are so drastically different, steeped as they are in very different priorities and assumptions about what is important in life. Wolfgang Sachs (as cited in Walljasper, 1997) suggests that "it's possible to talk about the ecological crisis as a collision between time scales - the fast time scale of modernity crashing up against the slow time scale of nature and the earth" (p.44).

While this chapter is not about time or the desire to slow down or live according to natural rhythms per sé, our relationship with time is an inescapable aspect of our ability to

take part in and take pleasure in the world. We can't play unless we are able to let go, even to a small extent, of our requirement for productivity. We can't see beauty in the world around us, unless we are able to be in the moment rather than racing to the many tasks which are calling to us. We can't engage in the wonders of the world unless we are willing to take the time to go deeply and ponder ideas which are not immediately apprehendable. We can't live out a sense of nurturance of ourselves except through granting ourselves the permission to move through life at a less hurried pace.

The sense of slow time in which ecological education lives was highly problematic for students whom I interviewed. They had difficulties with both the pace of this form of pedagogy and the length of time required in order for the work to unfold and to be internalized.

Both Olivia Arentine and Sarah Connelly discussed how they had to fight all of their instincts and all of their training for efficiency and productivity when they initially encountered Johanna Fried's approach to yoga:

The first day when she started the reading, I thought, "OK". And then she started chatting. And after a while I started looking at my watch thinking, "get on with a little yoga here. I want to do some exercises and get my back fixed". And she didn't do any yoga the whole hour and a half the first day. And it took me about a month before I settled down enough to accept the pace. And then, ever since, I've just loved it. (Olivia Arentine)

I went into the class:... "Come on.... Tell me what to do with my body." Whereas you can get off on some philosophical point in somebody's knee joint and you're there for an hour. And it drove me crazy.... An hour? An hour to tell her that. I could have told her that in five minutes. But it was really interesting. I knew that this slowing down, really positioning herself very differently, that was where I was heading. It was going to take me a while to get there but that was where I was heading. (Sarah Connelly)

Both Olivia and Sarah came to love the slow pace of the yoga class and the sense of self-care to which it led. But Sarah's desire to just be told what to do with her body and both of their initial bristling at the pace at which yoga unfolds is indicative of a society which is wedded to immediate results and "fast knowledge" (Orr, 1996, pp.30-2).

This demand to be productive and move quickly and acquire ever-increasing amounts of knowledge in a short time span is not lost on ecological educators even when they don't give in to the demand. Sam Barlow admits,

I can lambast myself for living the way I do sometimes because I feel I'm not good enough at achieving results. House, money, twenty-five kids. Dog, cat, maserati. Turning forty, I can feel that. And living slowly, the way I choose to live, I can layer that with a different interpretation of lazy. Because I'm not achieving in the same way. So I can find different interpretations for only living with certain contracts. And living with large, huge spaces of time to assimilate information.... I can lambast myself that way too. 'Cause I would like to be doing more. But I also need to survive.

While Sam may be down on himself for his choice to live slowly, there are several participants in this study who dearly craved his lifestyle. It was not a lack of desire to slow down that was their problem, but rather they were so connected into a world which was whirling at breakneck speed that they couldn't conceive of how to alter the pace of their lives³⁵:

It's tough to try and really incorporate what you want into your life and to really slow down. Especially when there's so many people around you who don't make it easy.... I'm someone who likes to please everyone and be everything for everyone. So, often, I can't slow down. Because I have this thing due and this thing to do. So I feel pulled. (Suzanne Young)

³⁵The study participants who lamented the frenzied nature of their lives were all women. Perhaps this frenzy is more of a reality in women's lives or perhaps they are less able to disengage and create calm amidst the storm.

I get in a frenzy. You're so busy. You've got to do this and you've got to do that, and if you want to do something after work. It's just a vicious cycle. And it wears me out. So, by the end of the day, I'll come home and I'm so tired that I can't do anything. (Roxanne Hillman)

It becomes overwhelming when I've got so many time constraints. I'm supposed to do this for this person. And I'm supposed to do that for that person. And I'm supposed to write this paper and read these books. So I guess our lives are so busy.... The world gets driven by getting more things done in a shorter period of time. (Kirsty Cochlin)

Personally, I'm having a hard time slowing down. And I talk to more and more people that are in their forties, like myself, have a job or two or three, or if they don't, they have other commitments with their full time job and family. And want to be able to do so much, want to learn so much. And yet, [they] know slowing down is important. And I know some people have successfully slowed down. But what is slowing down around us? I can't identify that. I don't know what it is. (Jessica Frennay)

What becomes apparent in listening carefully to these excerpts is that slowing down is a choice. It is not an easy choice, but Suzanne does not have to "be everything for everyone", nor does Jessica need to "learn so much". But this shift to say "no" and set limits is a large cultural shift, setting oneself not only against the desire to be the "nice girl", but also against the entire consumer culture.

For example, Jessica says, "there's so much to learn. And it's exciting. Now and then it gets you down. You want to know more and faster. Give me faster computer skills. Let me go with less sleep." People are commended for their desire to know more, to do more, to accomplish more. In a society based on consumption, these are laudable traits.

To shift away from such desires, is not only difficult because of the equation of slowing down with laziness as Sam indicated, but there is also fear attached to such a shift. There is a fear of being left behind, a fear of not being competitive and a fear of just

missing out on what life has to offer. These first two fears are stoked daily by the corporate culture, fueled within the work world and within the school system³⁶. The fear of not being competitive is compounded by the reality that "there's always opportunists who will ... go, 'oh, they're slowing down.... I'm going to take advantage of this'" (Kirsty Cochlin).

The fear of missing out, is an inherent part of a society in which there is exposure to so much possibility through media, through the internet, through the ability to travel. The incessant and as Jessica said, "exciting" sense of possibility can give rise to a desire to learn and savour and experience all that the world has to offer. But how much can truly be savoured if we are only collecting experiences? How deeply do we really know anything if we are only trying to cram information into our heads so that we are ready to assimilate the next bit of essential knowledge?

In the world "outside the classroom,... lessons too complex to grasp in a single occurrence spiral past again and again, small examples gradually revealing greater and greater implications" (Bateson, 1994, p.30). By grabbing onto the knowledge the first time past, thinking that we now "know", we may bypass wisdom. Even worse, if we decide to act on our knowledge, we may end up only applying a superficial understanding while thinking that our actions reveal and represent the world. Hubris and foolishness can enter the scene. Orr (1996) suggests that

the increasing velocity of knowledge is widely accepted as sure evidence of human mastery and progress. But many of the ecological, economic, social and psychological ailments that beset contemporary society can be attributed to knowledge acquired and applied before we had time to think it through carefully. (p.30)

Real knowledge, true knowledge, knowledge which is deeply embodied and applied with wisdom, restraint and appropriateness takes time, and a lot of it, to acquire.

³⁶See Postman (1995) and Schumacher (1973) for two discussions, two decades apart, which both call into question the goals of education as lived out within the school system.

Sam Barlow speaks of some of the ancient traditions and the length of time which it took a student to become a master:

Martial arts grew up in a context which [in] Japan and China goes back for thousands of years.... What it meant to do Tai Chi, was something you did your whole life. You constantly grew into it. And you deepened.... But [now] you can be a reiki practitioner in a year and a half. And I really don't know if you should. 'Cause that's pretty deep stuff obviously.

So when Jessica wants to "know more and faster", what exactly does she mean by knowledge? Sam Barlow would suggest that she is living out a consumer version of knowledge in which as long as someone is ready to buy, someone else will sell the information. But ecophilosophers such as Orr have suggested that this is not the type of knowledge which allows us to live well on the earth.

Sustainable knowledge is slow because only through time does deep understanding and wisdom develop. But sustainable knowledge is also slow because we need to be able to meander through ideas, to sit with them, to contemplate, to have space to be in right relation to the work, to the world and to ourselves. There is a luxuriousness to sustainable learning which enables us to come to terms with things in our own time, in our own way. Through this ambling pace, there is the opportunity to become intrigued, to be pulled into the web of ideas and experiences. We can begin to build a relationship to the learning which lasts beyond the next test.

Elementary educator Emma Applegard's connection to the natural world grew in a similar fashion: "It wasn't through a formalized education program. It was through the freedom to be out there, to explore, to make discoveries, to simply have time." This sense of having time, being able to explore, meandering through life, potentially enables deep understanding to develop as it enables a quiet, gentle relationship with the natural world and a sense of gentleness with oneself to emerge.

This gentle, openness with oneself was one aspect of ecological education with which students found difficulty. Olivia Arentine found the yoga course in which she was

enrolled to be supportive and nurturing, particularly as she was dealing with some challenging health issues. But she confessed, "I didn't realize that you were allowed to do that, to be tolerant of yourself".

Roxanne Hillman, a fellow yoga student also spoke of her difficulties with kindness to herself: "I tend to beat myself up or neglect myself in some ways. And that's not good." Indeed, her teacher, Johanna Fried, suggests that "if we're neglecting, that's abuse". As with Olivia, Roxanne found that one of the values of the yoga class was to learn self-acceptance:

[Johanna] was reading an excerpt on loving kindness towards oneself. And I think I'd had a really bad week and was feeling really down on myself. Doing that old self-talk routine, "Oh, you're so stupid. You can't do this. Or why did you do that? If you had done that this way, it would have been better." And I'm just lying there relaxing at the start. And she was reading this excerpt about loving kindness to yourself. Just kind of accepting yourself.... Just [a] way of being with yourself and at one with the things around you and with others.

From an ecological perspective, in which there is a desire to honour creation and to experience oneself as connected to others, it is painful to listen to the way in which a societal preoccupation with accomplishment has caused Olivia and Roxanne to beat themselves up and demean their unique contribution to the world. How could we have come to a place and time where it is possible to be so unaccepting of ourselves, where we live in fear of not being enough - intelligent enough, attractive enough, skilled enough? This dishonouring of the self is related to both the turn from inner wisdom which was spoken of in Chapter Four and the demand to be perfect, to never fail which was spoken of in Chapter Five.

Self-acceptance and kindness to ourselves is part of what is required to live gently on this earth. As was mentioned in Chapter Two, human beings are also earth's creatures. If we can't allow ourselves some scope of being, how can we extend this acceptance to the more-than-human world? If we can't take pleasure in our existence, then not only will we

be less likely to see the worthiness in other's existence, but we will be in a diminished state from which it is more difficult to act in kindness.

Roxanne goes on to suggest a reason that she finds loving kindness to herself to be so difficult:

The loving kindness towards yourself is really important. Because you have to love and respect yourself to really have purpose and be of benefit to others. And I'm still coming to terms with that.... I still go on a guilt trip if I say, "well, no I'm not going to do that because I don't want to do it". I'm standing up for me. And I still get guilt pangs. Because it's like, "oh I shouldn't be doing that".... And it's selfish. It's selfish if you look after yourself.

This sense that self-care is self-ish was echoed by many other students: "You don't want to be too self-absorbed" (Olivia Arentine). "I think too much focus on yourself can be unhealthy" (Cassie Cartwright). Rather than self-ish, in our society, we seem to prefer self-less, as Suzanne Young indicates:

You base how you feel about yourself on how people are with you. If everything's going good and you've got everyone happy, then you're like, "OK". But if you let someone down over there, you're kind of feeling bad about yourself.

Suzanne is displaying some of that need to be the "nice girl" which Johanna Fried spoke of in Chapter Four. While Sarah Connelly, twenty years Suzanne's senior, would undoubtedly be able to relate to Suzanne's desire to take care of others, she also reflects on how this need should be turned towards ourselves as well:

I had often been thinking about what I need to do in this situation that would be fair and ethical to others. And when I hit forty, I started taking a look and saying, "wait a minute, what do I need to be doing here for me?" We go through this world... there are lessons we're learning and there are things that we're trying to achieve. And they often involve our equitable relationship with others and the environs around us. But we also have a relationship with ourselves. And we have lessons to

learn there. And have we been fair? And have we been ethical? And the things that we are so careful to apply to others, do we apply that to ourselves?

Not only does a fair and ethical relationship with ourselves lead to a better sense of well-being but, "by looking after yourself, everybody benefits. Because you're just that much better off, or a better person for it" (yoga student Marsha Miller). Experientially, the truth which Marsha is speaking, may resonate. When we are feeling exhausted, beaten up by life, out of sorts with ourselves, we have very little to give to others, and the self which we present is not always a particularly kind one. On the other hand, when we feel nurtured and buoyed up by life, we not only have more energy with which to give to others, we are able to give from a place of kindness rather than duty. While we may know this truth, tearing ourselves away from the work to be done to go and spend an afternoon hiking in the mountains, often feels like an impossibility, despite the benefits to soul and to work which will result.

The demands for productivity are strong in modern society. Marsha Miller related a particularly troubling example of this trend. She was called upon to work with some high school students who were enrolled in an extracurricular life skills class. She was very impressed by the motivation and the skill level of the students, but she said that

they were so goal oriented. They were all totally geared to what they're going to achieve in their future life. And I was left feeling that they're really missing a lot. They should be enjoying their [lives], focusing a little bit more on who they were now. They were so future oriented. It was quite scary.... I felt sorry for them somehow.

That young students are already hooked into the "pressure to be such achievers" and are "obsessed with the future" (Marsha Miller), suggests the continuance of ecological disaster as it portends another generation who feel that they are never doing enough, are always inadequate. Yet, that these students should be experiencing this pressure is understandable. We are measured by what we produce, and our value is judged accordingly. In her position in the oil industry, Roxanne claims that "the whole focus is

everybody has to be a star. There's just this constant focus on everybody, not just me, but how are you adding value? It's all money related."

Sam Barlow takes a more broad based view on Roxanne's experience by providing an analysis of corporate culture:

You measure people by their ability to make money. Are they competent at their ability to make money? And everything's measurable.... We're not looking at people who are more holistic in their integration of family life, community life, business life, feel really good about themselves - and they also make money. We're emphasizing people who make money and their abilities to make money.

The difficulty with the focus on productivity and earning capacity is that, for many people, it eventually feels flat. Several people whom I interviewed indicated their disillusionment with money and the emptiness which it brought. Their words echoed Johanna Fried's sentiments. She said that after working for awhile and being successful, she began to feel that "what I'm getting isn't worth what I'm putting out. And what I'm getting is money. And what I'm putting out is my life.... Money's rolling in, but I feel empty. I don't feel fulfilled in some way."

There seems to be evidence that, in society in general, people are trying to regain some control over the quality of their lives, to not be tied to the maddening pace of modern society and to value themselves and each other for more than their capacity to produce³⁷. Certainly, this was the case with the people who participated in this research study. Marsha Miller was learning to

do things like go for a massage or just take an afternoon off. That's something else that I've probably gained from the [yoga] class where she says to pamper yourself in effect. You don't need to feel guilty for taking an afternoon off and looking after yourself.

³⁷Witness the proliferation of books on simplifying one's life and the surge of interest in relaxation techniques.

For Kirsty Cochlin, indulging in a hobby about which she is passionate is connected directly to her sense of well-being as well as her ability to slow down:

I love taking pictures. So the other day I just grabbed my camera and went out and took some pictures. It made me feel so much better. Because otherwise I'd be thinking, "god, I really want to do that". Getting out and doing something you love. And taking the time to slow down and see something from a different perspective. Sometimes we're just rushing by everything. If we stop all of a sudden, whoosh, the world stops.

Sarah Connelly had lived a life governed by the belief that "you work. And you earn your vacation. And you only earn so long for having done so much. And then you have to go back. And you have to produce." But, in our conversation, she shared an epiphanal moment in which her connection to productivity changed:

After my mom's funeral, everybody's gathered around. There's family, there's friends, there's a ton of people. Somebody says, "so, if you knew you were going to die tomorrow, what would you do differently? If you had [an] unlimited 24 hours but tomorrow you were gone, what would you do?" There had to be 40 people there, maybe more, at this kind of wake. And you heard everything. "Oh, I'd spend more time with my daughter." "I would finish my university degree." Wonderful things like "oh, I would say sorry to my husband", or "I really would try to work on world peace". All these really earth-moving things. And it came my turn and the only thing I could say was, "I should have hung out on a beach more". I've spent my whole life working for other people. I should have just took [sic] a book and hung out on a beach or gone windsurfing or something. So I think that was a real moment to say, "whoa, wait a minute. All this stuff that you've been doing over this period of time, that's good stuff and it had value. But where are you now? Maybe you need to be doing something very, very different."

Joseph Meeker (2000/2001) suggests that the sense of play which Sarah is seeking, by definition, sets itself against productivity. "The most endearing thing about play is its

uselessness. Play exists for its own sake, and seeks no goals or objectives beyond itself" (p.13).

Interestingly, he, and other writers in a special issue of *Whole Terrain* devoted to "serious play", suggest that play and a comic relationship with the world embody a way of being which has strong kinships to an ecological perspective. "There is no choice between opposites in comedy, but rather an attempt to bring them together. The comic way is not to get even but to get along" (Meeker, 2000/2001, p.12). Comedy is "a way of acting according to the needs of the context and the tenor of the time. Comedy is a process that proceeds according to its own principles" (p.12). "Its desired result is an affirmation of all the parties, and a continuation of the processes they share together" (p.13). "An attitude of play encourages attention to the moment, rather than to the outcome or results. It evokes a willingness to open our carefully developed self-image to divergent possibilities, to participate in the sensuous stream of experience" (Olsen, 2000/2001, p.19). Play demands that we let go of control, and move more easily, more graciously, more humbly in the world.

But Meeker takes his assessment a step further, pointing out more troubling news for the goals of productivity and selflessness which have been discussed above. He suggests that

the work ethic has driven the dreams of conquest over nature.... It is an ethic that creates wealth and power, conquers human and natural competitors, feeds our egos, and leaves us stressed, distressed, and feeling empty at the end of most days.... It is precisely the work ethic that got us into this environmental crisis and it is doubtful that the same ethic will lead us out. (p.13)

Meeker supports the demand for self-nurturance discussed above when he states: "bears... are more likely to play when the salmon are running" (p.13). If we only play when there is "enough freedom so that individuals can choose how to behave, and feel free to use some mental power for imagination rather than always coping with threats and dangers" (p.14) then our overworked, overexhausted, overstressed society is not likely to

move lightly and easily and playfully through life. Yet, Meeker suggests, it is just this playful way of being which is required for ecological sustainability.

As Meeker indicates, this sense of play or what he calls the comic spirit is especially important for environmentalists. Those people who set their lives to work on behalf of the environment, are often not playful people. Their work ethic is strong, and they too are caught by the bug of productivity. "Chang[ing] the world to make it better" (Sam Barlow) is serious work, and burn out is rampant.

The seriousness of this task creates conflict for environmentalists who also believe in the themes of this chapter: the importance of play, self-care, gratitude, a recognition of beauty, being in the moment. Not only is it difficult for environmentalists to balance these two seemingly contradictory ways of being, but to Meeker's mind, they are doing themselves and their work a disservice by "honor[ing] Apollo and Dionysis while ignoring Comus, who might be, in the long run, more important to them" (p. 11).

Both Sam Barlow and yoga student Cassie Cartwright invoke the spirit of Gandhi to help them wrestle with this pull between standing strongly for beliefs and resisting oppression, and living joyfully. For Sam, as an active environmentalist, Gandhi's sense of playful resistance is particularly meaningful:

There's definitely a benefit to being an environmental educator and having a sense of humour. And not getting so serious that the world's going to end. Because a form of the world is probably going to end.... But it's finding that balance between almost a sense of purpose and yet also having a sense of humour. I'm sure Gandhi had a huge sense of humour.... Gandhi's walk to the salt, where he walked to the sea to take back the salt.... it wasn't a sense of martyr, tragic hero. There's some creativity in there.

Being playful and playing are not necessarily the same thing. Playing is an activity. Being playful is a way of meeting life. It is impish and mischievous. It stirs things up. It dresses up, trying on new costumes. It embraces magic, and is full of mystery.

Johanna Fried speaks fondly of the sense of magic which her mother brought to life when Johanna was a little girl:

Life was very magical.... She would do lots of things that would center around us as kids, that were just lovely things to do. I still remember we'd go on bike rides and we'd decorate the bikes.... We didn't just go on a bike ride by ourselves but she would be with us decorating bikes and then we would all go.... I still remember on weekends, on Sundays, instead of going to church, we would all go out to the mountains or just go roaming in the hills somewhere with a picnic. And then always built a fire somewhere. Collect rocks and what not. And have a little picnic.

This meandering sense of time and the sense of wonder and magic which was brought to even an ordinary, everyday task such as going for a bike ride, embodies the sense of play which "seeks no goals or objectives beyond itself". Meeker (2000/2001) claims that "the disappearance of play from our lives is usually experienced as a significant loss" (p.14). Gary Whitlow suggests that this craving for playfulness may be "why Shakespeare is still so wonderfully popular.... He's full of magic and mystery and witches and all hell does break loose in Shakespeare. That's in part what we've lost - that playfulness, the magic."

What would be so appealing about situations where "all hell does break loose"? I suspect that our attraction has much to do with our need to control throughout the rest of our lives. Having to hold the world together and know everything with certainty is exhausting and stressful work. Much as we fear a loss of control, we also seem to crave it. Magic and play and mystery allow us to be taken out of the centre, to be swept up in the momentum of something which is beyond us. "The structure of play absorbs the player into itself, and thus frees him from the burden of taking the initiative, which constitutes the actual strain of existence" (Gadamer, 1960/1989, p.105).

Creative expression similarly takes us outside of ourselves and outside of the locus of control. Craftsman Tobias Kaye (1999) suggests that "each wood, each tree and each part of each tree has its own penchant towards a particular form. Therefore, listening to the

wood and finding the voice of the wood are fundamentally important" (p.19). Similarly, the sensuous feel of fabric, the rich hues of oil paint, the curve of the line of a Japanese ink drawing: all have their own demands and all call us into their truths. When writer's block hit me with deadlines looming, my friend Carolyn, a movement therapist in New Orleans, prescribed dance. "You have to shake up your regular thought patterns", she suggested, "and we do that best by allowing ourselves to get lost in something which we don't control. With dance, the music calls the shots and we have to respond to its rhythms, rather than enforcing our own control."

Suzanne Young also wanted to be "free[d] from the burden of taking the initiative" and, like Gary Whitlow, she also turned to Shakespeare for this task. But for Suzanne it wasn't magic that she was seeking, but romanticism:

Maybe some people do find science inspiring and totally soulful. And I do get a lot out of it. But I do think that it's too rational and it's lacking some sort of aaaaah. There's no romanticism in science. And that's something I miss sometimes. It doesn't sweep me off my feet like reading Shakespeare does.

Being swept off her feet by Shakespeare, as with Johanna's sense of magic in her childhood, speak to a way of being-in-the-world as much as they speak to a certain event. That is, Shakespeare is also read as intimidating, incomprehensible, dull and confining. Bike rides are also modes of transportation or methods for achieving fitness. Suzanne had to *allow* herself to be swept away. Johanna and her mother had to both be *willing* to get caught up in the moment and revel in the delights of the world.

The fact that delighting in the world is a matter of choice, points to an essential insight which zen buddhism offers. We should infuse each moment with a sense of gratitude for the wonders of life which we are witnessing and experiencing. Each moment can be looked to with wonder and delight. Each moment can acknowledge the beauty around us. Zen suggests that we should strive to be mindful, attentive, fully present and in the present. Johanna Fried put it this way: "When you attend to something, it becomes better.... The attention itself is love. It's an act of love." I believe that her equation of

attention with love underlies the zen attempts to "wash dishes joyfully" (Hanh, 1991, p.26) or to wash the lettuce "one leaf at a time, in silence, cultivating the attentive mind" (Kaza, 2000, p.42). Being mindful, even when undertaking the most simple chores in life adds a sense of quality and care which permeates our being. "If you pay attention to quality in your life then it takes on a whole different level of meaning. And that's connected to the zen idea that there's enlightenment to be had in the mundane" (Randy White).

Paul Fleischman (1997) in his collection of biographies entitled *Cultivating Inner Peace* tells the extraordinary story of Nyogen Senzaki, "the first person to transmit *Zen as a way of life* to the Western world" (p.170):

During World War II, Senzaki was imprisoned with ten thousand other Japanese-Americans at Heart Mountain, a desert camp in Wyoming.... With characteristic humor, he referred to ten thousand Japanese 'guests' of the American government, and wrote:

*Evacuees who follow Buddha, learning contentment,
Should attain peace of mind
Even in this frozen desert of internment...
They can admire only the gorgeous sunrise
Beyond the barbed wire fence...*

He wrote of his three-year internment as an opportunity to practice compassion, and to "face the world with equanimity" in a "snowstorm of abuse". (pp.171-2)

This degree of compassion and equanimity can be problematic for people as well. Yoga student Cassie Cartwright particularly struggled with this image. "If your philosophy makes you accept things even though they're unjust, then it's wrong. And why should you be happy in the face of injustice? So I think there is a place for dissatisfaction and unhappiness". Cassie's comment points to a very important issue related to this chapter's theme.

How can we live in gratitude and joy, and see beauty in the world around us, when as indicated in several places in this dissertation, there is so much ugliness in our modern

lives? Both Cassie and Roxanne Hillman spoke of their pain in watching life unfold around them:

Generally I think that I'm very pessimistic about the world. I feel that there's something wrong with the way things are. For instance, Chretien says our economy is strong. When you think of all the young people who are unemployed and people who all their lives are only able to get part-time jobs with very low wages. Things like that I find very oppressive, distressing. (Cassie Cartwright)
I definitely acknowledge that I'm a sensitive person.... If there's a lot of homeless people on the streets, that bothers me. I think a lot about stuff like that.... I couldn't keep it all at bay because I'm not that kind of person.... I do take it in. (Roxanne Hillman)

So then, what does one do? How do we attempt to live gently and graciously, with attention to joy and beauty when the world seems to frequently refute that vision? Roxanne had several ways that she tackled this problem:

It's kind of keeping up the force field to keep the negative, that you don't want out. Because I'm fairly open to [the negative]. If somebody I care about is having a problem, I let that in. Instead of maybe keeping a distance. You can still care about somebody, but kind of keep that at a distance. But I get really caught up in feeling. And if you're doing that a lot, it builds up. You have to put in a lot of energy.

I feel like I have to hide at home or I need time by myself. I think that's my way of letting go of [the negative]. I need to be by myself and away from those things, to kind of recharge or get back some energy, so I can cope with that stuff.

I've definitely tried over the last couple of years to recognize when I need my space or some peaceful time.... Or do something you enjoy that helps you relax. So I go out less than I used to. It's kind of a choice because I know that it will stress me out. Go out every night and I just can't do it. Or I choose not to do it now because I need that sense of peace. Or I do more gardening on the weekends.... I find that a really useful hobby for me to get back to the earth.

Sometimes I don't want to know what's going on out there. All the violence and just all the sick things that are going on. It's overwhelming and I want to take a step back from that. So yoga's a reprieve for that. It brings you back to a sense of peace, that things are right with the world.

[Yoga classes] kind of brought me back in tune.... I definitely feel centered when I come out. And then the challenge is to remain centred. Or to have the tools to help centre yourself when you go off balance again.

It's definitely a challenge. But I guess a beacon is a good word. You can always think about it and bring yourself back. Or at least acknowledge that that's where you want to be, even if you can't get there. It's a process. And as long as I'm on the process, working on that process, it has value. And it's going to have benefit to me. Because you can't be there all the time. But you can try to be on it.

In Roxanne's comments, there are several lessons which were echoed by the majority of the educators and many of the students in this study. At times, it's important to block out the negative, not let oneself take on others' problems or take responsibility for their healing, spend time by oneself, be self-aware, make choices on behalf of one's own sense of peace and centredness, choose activities which are nurturing, have people or situations in one's life which reflect the positive in the world and have the tools to bring oneself back to centre when one gets off track.

There are three points in these comments which I think are particularly worthy of emphasis. First, within an ecological way of being, the end point and the way of achieving the end point are one and the same. One achieves a life of peace by living peacefully. One achieves a sense of self-nurturing by nurturing oneself. Not only is there is no means-ends split here, but there is no easy way forward to "achieve" the rewards of ecological living. One simply has to do the hard work of living kindly and gently and openly.

This work leads to the second point. Roxanne suggested that "the challenge is to remain centred". Ecological living is a process. "Once you find the light, it's not like you just stay there. It's not like 'I found it. Now I don't have to do anything.' The goal is to

stay in it" (Lindsay Naylor). The challenge is always to bring oneself back on track. As the tools to recentre are learned, and with practice and experience, the deviations are less frequent and their amplitude is less dramatic. But living ecologically always requires vigilance and work to bring oneself back on course when living pulls us away from centre.

Third, Roxanne points to the necessity to put blinders on and make active choices to shut out the negative. Other ecologically-oriented people concur with this necessity. Lindsay Naylor says, "I've edited out of my life those people that make me feel that competition, that material world. I think I've edited those people out of my life, so I don't have to encounter that very often." Randy White suggests that "you only talk about [your ecological beliefs] with people who give indications that they might understand".

What underlies all of these comments is the necessity for self-protection. But what is not so obvious is how painful the necessity to put up barriers is for people who believe in openness and care and living from the heart. For people who want to be open, self-protection is not an inherent or even a comfortable way of being. When Johanna Fried mentioned the importance of vulnerability, I asked her how she protected herself from being wounded by people who weren't so sensitive or situations where vulnerability might prove problematic:

JP: Is it an openness to the world that we're seeking?

JF: That's very much been my journey. Not so much an openness to the world, but an authentic openness of myself to the world. So first opening to who I am at my deepest, most vulnerable place. And opening to the world from there.

JP: How do you protect yourself?

JF: Awareness. It's the only protection.... In that awareness, knowing what's appropriate, what's not appropriate for me in this situation.

JP: So opening to that vulnerability doesn't mean always being in that state?

JF: Exactly. Knowing when it's appropriate and when it's not appropriate. Who it's appropriate with, who it's not appropriate with.

JP: When you put layers on top of that vulnerability because you're with people that you don't feel it's safe with, does that feel at all like lying, selling out?

JF: No, it feels like wisdom. It's having the wisdom to know when to protect myself, when to look out for myself. It's like having a martial art at your disposal.... When you're being attacked, you have something at your disposal that you can kick back if you need to. And that's very much part of the spiritual process. If you need to, to know that you can fight back however that presents itself. And however that fits for you in terms of your own temperament. But to know that part of this process is self-protection.

The sense that self-protection is an inherent part of ecological living is not something which is found in the ecophilosophical literature. An ecological way of being can seem to be about "sing[ing] kumbaya and hold[ing] hands" (Frances Glenn). Certainly, such a way of approaching the world has been called "touchy feely" (Rocky Stewart). Previous chapters have shown that there is courage and strength required for openness, gentleness and softness. Compassion should not be confused with weakness, as Olivia Arentine's boss, seemed to think. But my point here is not to dispute the touchy feely image of an ecological way of being. Rather I am suggesting that in so far as ecologically-oriented people would like to live from a place of openness and vulnerability and sharing, there is also a need for self-protection.

Not only is an ecological way of being not simply about holding hands and singing kumbaya, but it is also not only passive. That is, in this chapter, I have been attempting to show what it would mean to take pleasure in the world. Many of the ways which I have suggested are gentle ways, ways in which one is more a witness than an active participant, ways in which one develops a sense of peace and quiet and centredness.

But for participants in this study, perhaps the most important way in which they found a sense of pleasure in life was to be deeply engaged in the wonders of the world. Having a sense of fascination and a thirst for knowledge was an inherent part of their relationship with the world which wove through both their private lives and their sense of

self as educators. Emma Applegard spoke of the work which she was doing with her grade three students; and the way that she, herself, got pulled into the work:

I found rocks absolutely fascinating when I looked at every rock as it's own story and mystery. It's an incredible story of power and change. So you can take themes like change and pattern and evidence. It doesn't matter if it's handwriting, you see patterns in it.

For Emma, this desire to engage deeply in the world and look at the relevance of ideas for our own lives is the goal and the soul of education:

Education is about something, is for something.... I just have a lot of love and respect for learning, so I didn't want to trivialize it. There's just too much I've enjoyed in that to ever make it mundane. The question that underlies my thinking which I come initially to curriculum and then certainly when I'm working through it is, "what has this to do with making meaning, making sense of our lives and our world and our place in it?".

From an educator's perspective, it can often seem that students don't share this sense of fascination in the world. Jamie Crowe said that for some of her students, "there was just nothing, no thirst there, and nothing that they really wanted or cared about it seemed like. Very apathetic." When education student Jonathan Krendal spoke to his instructor, Lindsay Naylor, about his wish for more discussion in class, she commented, "yes, and I have some students who [are] resistant to it". Jonathan "could see that too. If you have students who aren't willing to pick up the conversation if you leave it off, you really can't leave off the conversation. You have to keep talking."

The discussion between Jonathan and Lindsay points to a very important and problematic aspect of ecological education. No matter how fascinating the work is, it can't get off the ground if students aren't willing to engage. Ecological education is not about teachers doing a song and dance act to entertain students. Rather, all parties have to come to the table with a desire to dig deep and work and follow their interests in the world.

Educators are frequently finding, as Lindsay did, that students don't enter the classroom with a desire to be actively involved or to stretch themselves:

I'm trying here and I'll do what I can. But I wasn't going to exhaust myself if they weren't willing to give back. I guess that's something I expect from classes. If I'm giving my energy to them, I want it back.... I said that to the grade eights several times that "I find you draining. I find I try to talk to you about things that are on an emotional level and nobody responds or you respond with a flip remark. And so, if that's how you want to keep things on a very superficial level, then that's how we'll keep things." (Jamie Crowe)

This problem of apathy becomes more complicated. In the interviews, the educators were not the only people who felt a sense of passion and awe about the mysteries of the world, nor were they the only ones who wanted education to concern itself with relevance and meaning for our lives. Kirsty Cochlin lit up as she spoke about the many ideas which she had learned in class, and the ways in which she found her new knowledge bursting into her life outside of school:

When I took this course on rivers, we learned all about the rivers. And so then as I was riding along the bike path, I would notice all these examples of what I'd been taught. So it just shows that you can find this in your environment.

In high school when you learn about the intestinal tract, they don't teach you about the intestinal tract of a dog. They teach you about the intestinal tract of a human.... All of a sudden the dinner time discussion turns to "this is what's happening to my food right now". And your parents and sisters and brothers are all revolted. But you're totally fascinated because you're like, "yeah, I know what's happening. There's little acids in there and they're working on the food and then it goes down". And so you're learning it. Then when you're sharing your knowledge with everybody else at the dinner table, you're relearning it all again and you're reminding yourself.

Take a subject like geography. Now you think, "how is that related to me?". But it really is. Because we went on these field trips and we got to see all these things and we got to see them in our own environment. And so now when I drive along the highway, I'm the best interpreter for my entire family. I'm giving them this little tour on the highway.

But Kirsty complained vehemently that educational moments which have meaning and relevance and fire her up are few and far between. She hungered for knowledge and felt that her teachers just wanted to get information across in the most easy and efficient way possible and didn't really care about whether students formed any relationship to that learning.

Normally my classes, the teacher stands up there and they lecture.... They don't ask for your opinion and they don't really care. They've got a curriculum to teach and that's what they're going to do. And they always assume that you don't have anything of value to add. Because you are in that class for a reason. And that reason is to learn. And so none of the other things that you possibly learned before could actually have an impact on the class.

Kirsty's words of dissatisfaction with the schooling which she received were echoed again and again by the students whom I interviewed, particularly the undergraduate students. James Davidson made an interesting distinction about the types of learning which he had encountered in university:

In most of the other courses that I've taken, there's been learning *for* the assignments. And in this one, there was more learning that came *from* the assignment. It's a fine distinction, but in this one, I actually learned and I thought while I was doing the assignment, and it was actually a vehicle for growth. Whereas most of the other ones, like the typical kind of paper you write in class, you learn whatever content and you do the paper, and there's not a whole lot of opportunity to get yourself involved in it and to learn *from* it.... I found myself

thinking a lot more in this class and taking a lot less [sic] notes, which I think says a lot.

From the perspective of wanting to live life fully and be deeply engaged, it is problematic that James hasn't had many school experiences which enabled him to learn and grow from the work. But, his experience of school learning as an enterprise in which engagement is only for the sake of completing an assignment, is not unique.

One of the students from my elementary science methods class commented at the end of the year, "until this year, I didn't know that school had anything to do with the world". Her comment saddened and surprised me. Coming from someone who was about to become a classroom teacher herself, her comment was also somewhat frightening. What kind of education did she intend to share with students?

But perhaps she was right. Maybe school does have nothing to do with the world. A grade six student of my acquaintance was recently doing a science assignment. He had it all complete except for the last question with which he was struggling. He told the teacher that he couldn't think of a response to this question and was wondering whether it was necessary. The question? List five ways in which this work can be applied in your life.

The teacher should be commended for at least having an awareness of application. But why are students required to make a fit between the work and the world? Why does application come after the fact, and why is it separate from the learning? Why does the work not stem from the world and why is application not inherent within the studies? This student's experience seems to lend credence to the idea that school learning has nothing to do with the world.

We seem to be at an impasse. Students want to be engaged and are frustrated with teachers who just want to transmit facts. Educators want to engage students in the work and are frustrated with students who are apathetic. So where does the disengagement arise?

I think that the answer may return us to the question of speed. If we're racing from topic to topic, then there is no opportunity to stop over ideas or engage deeply. All that we can do is "get through" the curriculum. If the task ahead is to just get through as

expediently and efficiently as possible, then we can only skim over the surface of ideas. When all the work becomes superficial, then nothing truly is of interest, and we don't wish to stop over ideas.

So we find ourselves in a circular situation. By not taking the time to stop over work, we make the work into something which is not worthy of being stopped over. If students and teachers have learned this style of education, indeed if they have learned that the purpose of education is to quickly assimilate facts, then perhaps we have bred into education the lack of engagement which we are witnessing. Perhaps, it becomes impossible to conceive of proceeding otherwise.

Jamie Crowe speaks of one of her co-workers:

He's on such an agenda. "I have to get this done by such and such a time, otherwise I'm not going to get through the curriculum". And I don't think like that.... I was more like a river meandering. And instead of maybe doing science, we'd spend a whole class discussing what we could do to make this better. Or a whole discussion about what was it we wanted to work towards.

Emma Applegard too had "less value placed on covering and skimming and surfing what may be thought of as this bed of facts than [on] meandering... through them and seeing what they connect with". This meandering enabled Emma to stop over ideas when topics arose in class which grabbed the students' interest. She recalled

a student [she] had in grade three... looking at Treaty Number Seven. And saying, "why would the First Nations people ever have agreed to it?". Well, what a wonderful question. And he wasn't then prepared just to read and say, "the leaders of this nation and that nation met and they signed it" and we're on to the next. That was like, "hey, stop". Or even as we go, that whole honouring the treaties and the whole idea of treaties, how relevant in our lives today.

Emma despairs that "Alberta Ed is filling curriculum. It's just getting more and more immense all the time. And asking you to cover more and more material". With the

increasingly greater expectations for content knowledge, stopping over ideas becomes more difficult.

Education student Neil Herzog believes that it is not only the density of the curriculum which is so problematic in cutting off a sense of fascination in the work, but the sense of power which teachers give to the curriculum:

The curriculum word... really bothers me.... Partially it bothers me because so many teachers are intimidated by it. And I hate seeing someone being intimidated by something that they have quite a bit of control over. It is prescriptive. But it's also very flexible, that curriculum. But I see a lot of teachers as if this certain activity isn't in the curriculum ... then they'll shy away from it.... And that happens a lot in classes where people will be planning an activity in a group. And someone has a great idea. But then they say, "OK, how does this fit into the curriculum?"

Perhaps the density of the curriculum and the fears of diverging from it, are also creating problems at the university level. Both Kirsty and James mention that professors discourage students from asking questions. The implication, at least for Kirsty, seems to be that asking questions takes time away from teaching the material:

They abstract the information to try and make it easier to teach. Or so they don't have to answer questions. In several of my classes, they go, "I've got this material to teach. Don't ask questions." And you're thinking, "why? It doesn't make sense."

For James, the reasons that students shouldn't ask questions was less clear. There seemed to be a perception that seeking clarity or desiring to go deeper was a nuisance to the professors:

We learn probably from the start of our university that you're probably going to get shut up pretty quick if you ask questions in class. And profs tend to not want to be bothered by questions.... If it can be answered in two minutes at the beginning of class or two minutes at the end of class, then they're okay. But otherwise, don't ask it.

If time is the issue here, then there are large questions about the purposes of education and the design of courses which need to be asked. If the problem is lack of interest on the part of the professors then perhaps they too are losing any sense of fascination in the world by working in a system which is focused on expediency, and which doesn't allow them to stop over ideas.

When we can only treat ideas superficially and can't stop over them to engage in their implications, then the danger arises that we can become complicit in what Sam Barlow and Emma Applegard term "lookism". We have the look of taking on an idea, but because we don't deeply understand its intricacies, we end up betraying the topic.

Emma recounted a story of going through an interview for a teaching position. At the time, the "generative curriculum" was the latest educational buzzword. In the interview, Emma was asked for her definition of "generative curriculum" but it became clear that there was a particular definition which was being sought. The interview panel was wanting Emma to take up the generative curriculum in an ungenerative way. That is, according to Emma's interpretation, the school wanted the look of being generative but didn't deeply understand, or at least, didn't deeply embody, what generativity might imply.

For Emma, more critical than the betrayal of a topic's integrity, is the way that skimming our way through education betrays the students:

I work with teachers, not even talking rookies, that simply look at, "I've got to get from A to B and do it as expediently as I can". I can't come to that because you're working with real lives in a real world. It isn't going to be these facts that are going to save us. So instead of going from A to B, I just, at the onset, have to think of what is the truth that could lie in here, knowing that those may change. What meanings are possible? Again, what is the connection to their lives?

For James Davidson, it is not only the density of the curriculum or the need to rush through material which is flattening out the topics which are taught. James also points to the difficulties of assessment:

When you're learning the stuff for a multiple choice exam then you're *trying* to memorize it. You're not trying to think about it. It sounds really bad but that's exactly how it works. You've got a job to do and that job isn't to actually learn any of it. The job is to memorize it.

Ecological educators suggest, as does Carson in the quote which opened this chapter, that a sense of wonder is an essential component of a life well-lived. If education is only a job and that job is to memorize facts, then we have stripped the world of its vibrancy and taken the passion out of life.

James' view of education as a job finds its place in a worldview which values productivity and efficiency and sees educational purposes as contributing to these goals. And so we have come full circle to ask again whether we should learn to "polish off a novel in [our] lunch hour" or savour an evening with a magazine which enables the world to open up and sparkle. The response of ecological educators is clear, but their response requires a reconsideration of the purpose of life to reestablish some sense of pleasure and participation in the world.

CHAPTER SEVEN - GEOGRAPHY OF SCARS

What aspired to be whole has met damage face to face, and has come away wounded. And so it loses interest both in the anesthetic and in the purely esthetic. It accepts the clarification of pain, and concerns itself with healing. It cultivates the scar that is the course of time and nature over damage: the landmark and mindmark that is the notation of a limit. To lose the scar of knowledge is to renew the wound. An art that heals and protects its subject is a geography of scars. (Berry, 1990, p.7)

In the preface to this dissertation, I stated that the doctoral study *Against the Current: Ecological Education in a Modern World* has two purposes. The original intent of the work was to uncover the challenges of ecological education for both students and teachers. The interviews and subsequent data analysis which explored those challenges formed the heart of the empirical study. But due to the nature of the work, arising from a foreign worldview, a second purpose arose: assisting the reader with entry into an ecological worldview so that the challenges of students and teachers could be more clearly understood.

This chapter summarizes the findings of the empirical aspects of the study. The results of the empirical study will then be taken up into the larger cultural discussion in the final section of the dissertation.

In order to summarize the findings, there are four tasks which must be undertaken. First, I will mine the narratives of the three previous chapters to pinpoint and briefly discuss the challenges which ecological education evoked for students and teachers³⁸. Second, I will turn attention to the question of resolution. What could healing mean within the context of this study? Third, I will outline the unintended findings of this study: those outcomes which were not part of the information which I was seeking but which

³⁸The challenges for both students and teachers, as well as the territory of love and healing, are much broader than will be discussed in this chapter. The entire data set for these four territories is shown in Step Seven of the data analysis outlined in Appendix B2. This chapter will discuss the challenges which arose as a response to the three themes of Chapters Four through Six only.

nevertheless add to the body of knowledge related to the study topic. Fourth, I will discuss directions for further research suggested by this study.

Study Findings - Challenges of Ecological Education in a Modern World

As has been stated throughout this study, developing a deep understanding of the challenges of ecological education which arise for both students and teachers, requires that we look at those challenges through the eyes of the study participants. Carr and Kemmis (1986) suggest that

the behavior of human beings... consists, in the main, of their actions, and a distinctive feature of actions is that they are meaningful to those who perform them and become intelligible to others only by reference to the meaning that the individual actor attaches to them. Observing a person's actions, therefore, does not simply involve taking note of the actor's overt physical movements. It also requires an interpretation by the observer of the meaning which the actor gives to his behavior.
(p.88)

While the attempt to understand actions from the actor's point of view is always valuable, when dealing with a foreign worldview, interpreting actions through the actor's eyes becomes essential. This necessity can be more clearly seen if we think of an ecological worldview in the same way that we would view any foreign culture. While it is possible to chronicle the actions of a foreign culture, detailing customs and outlining beliefs, this procedure has two problems. First, unless we can momentarily suspend our own worldview, then the actions which are chronicled will be interpreted through an inappropriate lens. Second, foreign actions will have a tendency to seem "odd" or "quaint" unless we can get into the skin of the people involved. That is, it is necessary to reach down into the level of our shared humanity so that we can realize how, given the circumstances in which another culture lives, given their history, given their environment

and their beliefs and their societal structure, we too might act or perceive the world in the same way.

I have attempted throughout this study to provide a glimpse inside an ecological worldview so that the reader who is unfamiliar with this perspective will have a context for interpretation. When turning our attention to the findings of this study, it is necessary once again, though in this case more explicitly, to interpret actions through the worldview from which they are generated: an ecological worldview on the part of the teachers, and a modern worldview on the part of the students³⁹. In other words, when study participants express a sense of woundedness or challenge with ecological education, their interpretation will be treated as representing their truth, whether or not the situation would be challenging for another person in the same circumstances.

The wounds and challenges of ecological education are sometimes one and the same. For example, a statement such as "human beings are measured according to their ability to make money", suggested by study participants in Chapter Six, could be interpreted as a wound of modernity or a challenge of an ecological perspective. Those people living within an ecological worldview could view this statement as a wound - an indication of the lamentable state of current society which doesn't value humans (and by implication, other species) for anything more than their monetary value. From the perspective of students encountering ecological education, the comment could indicate a reason to not embrace ecological perspectives. That is, if we are valued according to our monetary worth, any situation which takes us away from productivity (such as slowing down, taking care of oneself, enjoying a hobby, meandering through life) reduces our measurable worth and is not viable. The difference between these two perspectives depends partly on one's priority in life, and partly on one's interest in problematizing or accepting at

³⁹The divide between teachers and students is actually not as clear-cut as this sentence indicates. I began this study with the belief that I would be dealing with a direct clash between ecological teachers and modern students. In actuality, the situation could be characterized more as a common journey towards ecological understandings than as two groups at loggerheads. While there were tension points, the boundaries were much more blurred, and there was much more flux and flow across those boundaries.

face value, any given societal value. In the next section, I attempt to discuss each wound / challenge in the category of best fit, realizing that some of the issues which are discussed would fit well under either category.

After the wounds and challenges of ecological education, I have included two sections which are related to the difficulties of ecological education in a modern world but belong more to the meeting place of the two cultures than to one group or the other. "Areas of Contestation" looks to the difficulties of intercultural communication: the different ways in which the two groups interpret common experiences. "Uncertain Pathways" points to the dilemmas which are raised by the attempts to engage in ecological education in the modern world: those challenging questions which require time before the path ahead becomes clear.

Wounds

There are three broad categories of wounds which were encountered by the ecological educators. These categories are (a) wounds related to the dominance of modern culture, (b) wounds related to the perceived demeaning of humanity, and (c) wounds related to internal conflict.

Dominance of Modern Culture

For ecologically-oriented educators, the sense that modern perspectives held a privileged place within society, with the right to determine what constituted validity and to hold power over others, was one of the highly problematic aspects which they encountered with living and teaching ecologically in a modern world. That is, in Chapter Four, it was not the understandings and beliefs of a modern perspective which ecological educators railed against, but rather the place of power and dominance which these beliefs held within North American culture.

There is a subtle distinction which must be made here by asking, "does a dominant culture necessarily have to be a dominating culture?" That is, the dominance of modern

culture is a fact within North America. Indeed, as Norberg-Hodge (1991) and Shiva (1993) indicate, this way of thinking is becoming a global monoculture. But, the words of the study participants don't seem to suggest that this dominance is, in itself, problematic, but rather it is the dominating sense of modernity which they find particularly troubling.

Ecologically-oriented people spoke of the sense of being ridiculed, dismissed, marginalized, isolated, silenced and shut down by modern culture. They spoke of the demand to prove the legitimacy of their own beliefs and to justify themselves. They suggested that they felt invalidated and devalued for living out ways of being which were contrary to modern perspectives. They spoke of the overt and covert, sometimes external and sometimes internal, pressure to act in ways which weren't in keeping with their own sense of self, in order to fit within modern society. All of these indicate a culture not only of dominance, but of domination.

It could be asked then, if modern ideals formed the dominant belief system but allowed room for other perspectives, honouring a diversity of ways of perceiving the world, would modernity be as problematic and would it cause the same sense of wounding to ecologically-oriented people? Further questions then arise. Is there something inherent in modern beliefs which make it "almost impossible to encounter another culture sympathetically and on its own terms" (Ray & Anderson, 2000, p.70) from within modernity? Or is domination an inherent part of being a dominant culture regardless of worldview⁴⁰.

Whether or not it would be possible for modern perspectives to allow room for other perceptions of the world, ecologically-oriented people indicate that this openness does not currently exist. Being silenced and marginalized and devalued would be a painful reality for most people. This pain is not specific to ecologically-oriented people. But there are

⁴⁰Bookchin's work in Social Ecology has pointed out the hierarchical and dominating nature of a vast number of cultures throughout history. See, for example, Bookchin (1982). Furthermore, some of the study participants suggested that ecophilosophy or ecological education itself, can take on forms of domination.

several reasons that ecologically-oriented people are specifically troubled by this sense of "power over".

First, as was discussed in Chapter Four, one of the major themes which run through ecological educators' lives is the desire to live according to one's own truth. A perspective which demands compliance or which devalues alternative perspectives, makes the realization of this fundamental value and priority extremely difficult.

Second, as was indicated in Chapter Five, ecologically-oriented people value relationship and community and connections. They wish to take their place within the web of life. Being ostracized and marginalized, therefore, undermines a second fundamental value.

Third, as was discussed in reference to the ecological lens in Chapter Two, ecological educators wish to honour actions which sustain, affirm and add meaning to life. The act of devaluing or dismissing or ridiculing a fellow human being is painful to ecologically-oriented people, not only because they are the recipients of these actions. It is also painful because of what these actions indicate about the actor and about society in general. That is, an act which demeans a fellow human being is an act which demeans humankind, and is an indication of a decreased sense of humanity within the actor. This behavior then is particularly troubling to ecologically-oriented people because it reflects to them a world which is in a state of sickness⁴¹. The pain of witnessing a degraded state of humanity leads to the second wound experienced by ecologically-oriented people.

Demeaning of Humanity

If ecologically-oriented people value integrity, compassion, dignity, courage and honesty⁴², then existing in a society where these values are betrayed, can be quite painful.

⁴¹This state of sickness is not a fact of modern culture, but is the way that modern culture appears to someone who understands the world through an ecological lens. This perspective was discussed in Chapter Two in the section entitled "Severing our Earthly Vocal Cords".

⁴²Chapter Two indicates that these values form an important part of an ecological worldview as suggested within the ecophilosophical literature. Appendix B2 indicates the importance of these values to study participants.

Study participants indicated several situations in which they felt dismayed, bewildered and depressed by the degraded sense of humanity which they were witnessing within society.

In Chapter Four, students indicated that they felt shot down and shut down to such an extent that they found it preferable to defer to authority than to take the risk of putting something of themselves into their work and pursuing their own interests and beliefs. From an ecological perspective, this shutting down of potential and of self-worth is a form of demeaning of humanity.

In Chapter Five, ecologically-oriented people experienced pain witnessing the ways in which we mistreat each other in modern society. Roxanne Hillman indicated her sense of dismay about the lack of manners in society, and suggested that, at times, she preferred to hide herself away, rather than face "all the bad things out there". For a way of viewing the world which values connections, the ignoring or breaking of connections through the mistreatment of others, is highly problematic.

Finally, in Chapter Six, ecologically-oriented people indicated dismay at the fact that we often measure human worth according to the ability to make money. Furthermore, they suggested that money and productivity and efficiency frequently replace dignity and self-worth and relationship as goals in life. Ecologically-oriented people are troubled by the quick pace of modern life which doesn't allow for depth of thought or nurturance of being to take place. The difficulty with tolerance and self-acceptance indicated by some of the yoga students is also troubling when viewed from the perspective of a worldview which believes in the dignity of all life. Finally, the lack of "thirst", the sense of "apathy" which some of the ecological educators perceived in their students is troubling when viewed from a perspective which believes in the richness and beauty and fascination of the world in which we live.

Internal Conflict

Ecological educators experienced many internal conflicts with an ecological way of being. These conflicts appear to arise for four different reasons.

First, ecologically-oriented people are also modern people. That is, the majority of people raised in North America are raised with modern beliefs and with a societal structure which supports these beliefs. Even in so far as ecologically-oriented people reject these values, they are still influenced by them and live out the push-pull of these two ways of being. Sam Barlow's preference to live slowly and simultaneous self-deprecation because he valued slow living was an indication of this type of internal dissonance.

Second, within ecophilosophy itself, are conflicting perspectives which create internal tensions. This type of conflict surfaced in Neil Herzog's claim that, on the one hand, he wished to honour diversity but on the other hand, he didn't wish to honour ways of being which he found to be destructive.

Third, internal conflicts arise because living ecologically demands ways of being which, at the same time, are in conflict with ecological goals. The discussion about self-protection in Chapter Six was an example of this tension. Ecologically-oriented people wish to live authentically and openly and with a sense of vulnerability. But living in such a way also necessitates being self-protective. But being self-protective could be perceived as antagonistic to the goal of being open and valuing relationship and connections.

Finally, internal conflict arises due to a lack of knowledge about how to proceed. Ecologically-oriented people are living out a way of being for which there is no blueprint and no role models within a modern context. They are trying to find ways to proceed but these ways are not always apparent. There is much trial and error, much feeling one's way, and much being stymied by challenges. These sorts of conflicts are discussed later in this chapter in the section, "Uncertain Pathways". The uncertainty of the direction can lead to a sense of vulnerability and frustration both as a human being and as a teacher trying to guide others on an ecological path.

Truth of Wounds

The challenges which students encountered with ecological education were related to the ways that societal structure and their own prior training worked against the ideas which frame an ecological perspective. Due to these factors, students experienced a sense of discomfort, fear or lack of interest in an ecological approach. In particular, the challenges revolved around (a) fear of taking ownership for oneself and one's own work, (b) discomfort with ambiguity and uncertainty, (c) discomfort with the slow pace and gradual unfolding of ecological education and (d) lack of encouragement or experience with engaging deeply in the world.

*Taking Ownership*⁴³

In Chapter Four, ecological educators were eager to help students to find their own voice, find their own vision in the world and pursue their own interests in their learning. Educators wished to help students to feel empowered to stand strongly for their own truth. But, in Lindsay Naylor's words, "[students] hated that. They hated that. They kept trying to figure out what is it that I really wanted".

Students indicated that they have been well socialized into following and being led. They wanted to understand what the teacher wanted because they believed that they would be shot down if they did work that was otherwise. In so far as students were consciously deferring to authority, they seemed to be motivated by a sense of pragmatism. That is, they wanted to pass a course and doing so required them to bend to the teacher's will. While they didn't talk joyously or energetically about this version of education, they seemed resigned to living it out.

⁴³The desire to have students take ownership for their work could, in fact, appear to fit within a modern belief system rather than an ecological perspective. That is, a sense of ownership could arise from an interest in individualism and autonomy, independence and freedom which are cornerstones of modernity. It appears, however, that the interest in ownership is arising here from a different impulse. The intent of following personal truths is not separate from community or without responsibility to community or without acknowledging the interdependence of the various beings whose truths are being pursued. The intent here is to honour life through honouring the diverse expressions of creation.

Much of the deference to the teacher was not undertaken consciously though. Students seemed to suggest that they were programmed to follow and hadn't considered doing otherwise.

When students in either group (those who were consciously or unconsciously deferring to the teacher's expectations) were asked to follow their own path and explore their own interests, they had two responses⁴⁴. They were either uncertain about how to proceed, or they were frightened at the prospect. The fear stemmed from many sources including fear of failure, fear of being shot down by the teacher and fear of standing alone.

The goal on the part of educators, then, to help students to find their own voice is far from problem-free. Work is required to help students to overcome conditioning, to reassure them and provide a sense of safety and to help develop the skills of questioning, critical thinking and self-reflection.

Living with Uncertainty

Ecological education is based in an understanding of the world which suggests that learning happens through doing. We can't know ahead of time where we will end up or how to get there. There is a responsive, constantly adaptive relationship between the learner, the teacher and the world. In Emma Applegard's words, "you don't have the map in front of you when you start".

Students resisted this form of education, in part, because they didn't understand this process as being educative. Many of the students were looking for a training model of education where there were defined goals and objectives; where they were told which information they were responsible for, were provided with the information and were expected to assimilate the information by the end of the course. Within this frame of reference, a form of education which goes "around and around and around" (Liam

⁴⁴There were students such as Neil Herzog who were delighted to have the chance to follow their own interests, and indeed would have done so, even without being granted "permission". My focus here, though, is on the problems which ecological approaches created for students.

Mattheson) and in which one has to have faith that learning will take place, did not appear to be educative. Since the students were not accustomed to this form of education, they had difficulty with accepting that learning was taking place or that ecological education provided a valid way of knowing.

Even in so far as students could accept that a form of education was taking place, they felt great discomfort with the approaches. They talked about ecological education as scary, as a risk, as requiring faith. They suggested that they experienced a sense of vagueness about goals and uncertainty about whether they would learn or not.

To a certain extent, the students' lack of comfort with the ambiguous, non-linear path of ecological education is related to the issue of ownership discussed above. That is, students were frustrated that the teacher wouldn't tell them what was required of them or how they should proceed. The desire to defer to authority and the desire to be provided with a definitive way to proceed to reach predetermined goals, both seem to arise out of the need to seek assurance in a world in which one doesn't feel very secure. That is, because there is a lack of comfort and stability within, there is a seeking outside for those anchors which will provide a sense of safety.

In Chapter Two, I suggested that this quest for certainty is the work of the twentieth century and beyond. In keeping with this dissertation's focus on the ecological self, this seeking out of certainty could be seen as "a response to *Fremdheit*, the condition of being no longer at home in the world" (Weinsheimer, 1985, p.4). Weinsheimer suggests that "method... aims to redeem this loss by substituting itself for the kind of understanding that is not reflective knowledge because it understands everything in advance by belonging to it, before knowing and its methodical regulation come into play" (p.5).

What Weinsheimer is describing seems to be similar to the students' response to ecological education. That is, in order to not feel insecure, students are seeking method or in this case, technique and a predetermined pathway. But their attempts at reaching security are based in a substitutive form of knowing which has already accepted the fact that a schism has been created between the self and the world.

Ecological educators don't seem to be suggesting that security is not valuable. Rather they are suggesting that in order to reach security, we need to turn our attention to mending the schism. That is, attempts at pinning down direction more and more strongly will not provide the security which students seek. As Weinsheimer (1985) suggests, "method famishes the very craving for homecoming that it is designed to satisfy" (p.5). Instead of holding on to the reins more tightly, it is necessary to let go and find our place back in the world.

As Sarah Connelly suggested, the task of "letting go" is frightening. It requires a leap of faith. She was willing to undertake this process only because she had reached a point in her life where nothing else was working. Yet she admitted that she expected that letting go "was going to be horrible". I believe that this is the deeper underlying dilemma which is occurring when students are frustrated with the ambiguous, meandering nature of ecological education. There is a fear of letting go of the reins because the students don't want to live without any sense of security and the substitutive form of security is the only type which they have experienced.

Slow Pace

Students were frustrated with the slow pace of ecological education. They suggested that they couldn't slow down because they needed to be productive. There was both societal and internal pressure to be accomplishing many tasks, and slowing down worked in opposition to this demand. Students suggested that life around them was spinning quickly and were unsure how to slow down in the midst of the rush. They also suggested that they had many commitments and obligations and were concerned about letting people down if they didn't maintain the rush of modern life.

Furthermore, students were frustrated with the length of time which ecological education takes to unfold. They wanted to learn facts and assimilate knowledge. Ecological education is a form of knowing with which one has to sit for a long time for understanding to develop and internalization to take place. Again, the pace of modern life didn't allow the

students the luxury to take this time, nor did they feel comfortable, at least initially, with stopping awhile over ideas.

Engagement in the World

Students and teachers came into conflict over the notion of engagement in the world. Both groups concurred that the world is a wondrous place and that they were happiest when they could proceed with a sense of awe, curiosity and fascination. This way of being-in-the-world is in keeping with one of the underlying themes in ecological educators' lives: the desire to be "surprised by joy".

The students suggested, however, that living in such a state was difficult because they had gone through many years of schooling in which engagement wasn't valued. They suggested that "getting through the curriculum" was the priority in classes and so, students ended up believing that school has little to do with the world around them. Students suggested that teachers don't typically engage students, develop relationships to the learning or permit the asking of questions. The majority of their educational experiences consisted of the teacher as expert, presenting a series of dry facts which the students needed to learn in order to pass a test.

From an ecological perspective, this study finding is particularly troubling. Teachers have indicated that their students appear to be apathetic and have little interest in learning. But if the educative process itself (the density of the curriculum, the priority given to getting through the curriculum, assessment methods used) is creating this sense of disconnection from learning then, as educators, we are doing exactly what Chet Bowers (1993b) warned against. Bowers suggests,

if the thinking that guides educational reform does not take account of how the cultural beliefs and practices passed on through schooling relate to the deepening ecological crisis, then these efforts may actually strengthen the cultural orientation that is undermining the sustaining capacities of natural systems upon which all life depends (p.1).

That is, ecological educators suggest that deep engagement in the world is one of the essential aspects of a life well-lived, a life which is able to resonate with ecological understandings. If, through our efforts to provide a good education to children, we are cutting off their ability to deeply engage, then schooling itself becomes complicit in the ecological crisis. If environmental sustainability is a goal, this study finding could point to a reassessment of educational goals and practices. I believe, however, that rather than a large scale reassessment, students' concerns point more to the need for each teacher to be mindful of the importance of engaging the students in the wonders of the world as they prepare and teach their classes each day.

Areas of Contestation

Throughout this dissertation, I have spoken of ecophilosophy and modernity as two cultures with different assumptions and priorities. The clash of these cultures underlaid many of the wounds and challenges of ecological education for study participants. In this section, I would like to turn attention more specifically to the problem of intercultural communication.

I spoke explicitly of the challenge of intercultural communication in Chapter Four when discussing the problems of assessing the actions of ecologically-oriented people with a modern lens. Compassion was viewed as weakness; questioning was viewed as challenging authority; discussing difficulties was viewed as vulnerability and lack of self-confidence; developing positive relationships with students was viewed as self-serving. Each of these misinterpretations is indicative of the different meaning which ecophilosophy and modernity give to the same behavior.

Many other differences in cultural interpretation became apparent throughout this study. For example, while both groups refer to the word "obligation" and seemingly define the term in the same way, ecologically-oriented people attach a positive connotation, and modern people, frequently, attach a negative connotation to this term. The two groups give

the same meaning and the same connotation to the term "pleasure", but the activities which constitute pleasure may differ, as may the acceptability of taking pleasure in life. While both groups desire security, they believe that it is reached in opposite ways: by holding more tightly to control for a modern perspective, and by letting go of control for an ecological perspective.

The human relationship with time is understood very differently within the two groups, perhaps reflecting even larger cultural differences. The modern desire for speed and to fill every minute may be attributable to the focus on personal or generational time. That is, within modernity, time is measured according to our own lifespan. The ecological desire to move slowly and savour moments may be connected to the cosmic sense of time; the idea that there will be time enough to accomplish what's important because the ecological conception of time extends beyond one's own life time.

Whether intuition can be trusted or not, whether knowledge comes from within or from authorities, definitions of usefulness and relevance, the purposes of education, notions of selfishness and selflessness, criteria of validity and legitimacy, the value of play, notions of freedom and limits and responsibility, human purpose and the human place in the universe are all areas of contestation between the two cultures.

This list is only partial and only reflects some of the cultural differences in interpretation which arose from this one study. Taking the next step in understanding the challenges of ecological education in a modern world requires developing an understanding of the ways in which the two cultures view the issues listed above, as well as understanding the historical and cultural emergence of these perspectives.

Uncertain Pathways

Several difficult questions emerged in this study, raised explicitly by study participants and implicitly by their struggles. For example, while I have suggested that ecologically-oriented people believe that it is important to follow their own truth, educator

Lindsay Naylor questions. "what does it mean to live in truth? What happens if your truth is wrong? How do you know? And why is that important?"

Such complex questions don't move quickly to answers or to resolution. But if we truly wish to realize the possibility of ecological education, then it is important to consider these sorts of questions and to keep them open until we can find a way through. Some of these challenging questions are listed below:

How do we open to other people's truths when we find those truths to be distasteful?

Is helping students to take ownership for their lives and their work implicitly asking them to defer to the teacher's belief in ownership? What if they aren't interested in this path?

How do we know when our truth has validity beyond ourselves?

How do we teach in a way that supports a shift to an ecological perspective without forcing an ecological perspective on others?

How do we get through the curriculum and teach in a way which honours the unfolding of the topic and students' interests and real life complexities?

Since by definition, ecological education does not have a blueprint for ways to proceed, how do we teach educators and education students to teach in an ecological manner?

If we "cannot be constrained by [conventional] criteria of validity" (Skolimowski, 1981, p.26) how do we know when work is valid?

If we are seeking student engagement in the work, how do we know when they are engaged, and how do we tell them what engagement looks like?

How do we disconnect and slow down when life is not slowing down around us?

How do we live in an ecological manner (e.g. living slowly, being open and vulnerable, extending compassion) when we are living in a culture which will take advantage of people who live in such a manner?

How do we playfully engage in serious work?

How do we live in acceptance and compassion but not tolerate injustice?

How do we live in gratitude for beauty when we are surrounded by so much ugliness?

How do we assess student work in ways which are open to their own emerging sense of self and own engagement in the learning?

The path forward with these questions will only become clear given enough time. The way to proceed, at this point in time, is slowly and carefully, mindful of the obstacles and with an earnest attempt to not gloss over the complexities.

Beyond Challenges to Resolution

As was mentioned at the end of Chapter Three, the territory of healing within this study holds two purposes. First, healing addresses the wounds of ecological educators by asking, "how can one live in the face of the wounds discussed above?". Second, healing addresses the challenges of students encountering ecological perspectives for the first time, by asking, "what procedures would help ease the process of understanding and / or embracing an ecological way of being?"⁴⁵.

The study findings do not provide a direct correlation between methods of healing and the specific wounds and challenges discussed above. That is, methods of healing emerged through the interviews. But since, at the time of the interviews, data analysis had not yet occurred and, therefore, the specific wounds and challenges of ecological education had not yet been pinpointed, the methods of healing were not raised as a direct response to the wounds discussed above.

⁴⁵Here I diverge from the academic purposes of this study, and focus on the pedagogical and environmental purposes, as indicated in the dissertation preface. That is, understanding the challenges of ecological education is a value-neutral proposition from an academic perspective. However, as this study is also based in a desire to improve the possibility of environmental sustainability and based in the belief that ecological education holds the potential to help with this endeavour, then easing the process for embracing ecological perspectives is one of the purposes underlying this work.

Healing the Wounds

Aldo Leopold (1966) has suggested that one of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise. (p.197)

While Leopold is referring to the wounds which an ecologist sees scarring the landscape, his comment is equally relevant to the wounds which an ecologically-oriented person sees scarring the mindscape⁴⁶ of modern humanity. How does one go about living in a "world of wounds"?

In the opening quote to this chapter, Wendell Berry states that, once wounded, we can no longer abide the esthetic or the anesthetic. That is, we don't wish to numb ourselves to the pain or to pretend that there is only beauty and kindness in front of us. Instead, he suggests that we need to confront in ourselves and in the world the truth and the pain of the wounds, maintain the knowledge which the wounds have provided and learn how to live in the face of the unlivable. Once wounded, we are thrown out of innocence, out of the puer state (Hillman, 1965). The goal of healing is not to return to the territory of love as we once knew it, but to find a way to enter that territory, both wiser and more deeply human for the scarring.

Wounds have many pedagogical functions. We can come to know the wounds and look to them as our lessons, our guides. We can embrace them as signs which point to the tangles which need to be worked through. Befriending the wounds fits well within the ecological view of the world. For example, in Chapter Five, study participants suggested that letting go of control meant coming to a state of acceptance for what befalls us; letting

⁴⁶The vocabulary of this sentence is derived from David Orr's (1992) assertion that "landscape... shapes mindscape" (p.130) which is discussed in Appendix A2.

go of the expectation that the world is supposed to be always pleasant, always perfect: and finding growth through the pain.

There are many ways to reframe the notion of woundedness to look to the lessons which it holds. First, we can look to the wounds as a source of worldly truth. For example, while it is not pleasant to watch the demeaning of humanity, we can ask about why this demeaning is happening. What is there about current societal conditions which has landed us in a situation where connections can be dishonoured? Seeking answers to these sorts of questions enables us to look beyond a quick reaction to the pain to the deeper issues which need to be addressed.

Second, we can look to the wounds as a source of truth about our own perspectives. That is, pain is contextual and situational. What to one person is abhorrent, to another is simply a matter of course. The difference in response is related to our own histories and interpretations. In Chapter Four, when Sam Barlow discussed his concerns about being a black robe priest of deep ecology, he was expressing a concern which only can arise within a worldview which believes that it is incumbent upon each individual to create change in the world for the betterment of society. While this view is in keeping with the goals of environmental education and critical pedagogy, it is also based in an anthropocentric view of controlling and managing the world. The reconceptualization of this wound requires seeking different ways to conceive of our role as educators.

Third, wounds can point beyond ourselves to larger archetypal journeys⁴⁷. For example, relationships of domination and silencing have been played out throughout time and across cultures. What can we learn about the human condition by looking to the wounds at the ecological / modern divide as indications of the larger human story? Conversely, what can we learn from other situations in which this story has been played out which will help us to live better in the face of the ecological / modern divide?

⁴⁷Jung's (1968) work in archetypal psychology has been taken up by contemporary scholars such as psychologist James Hillman (Moore, 1989) and theologian / philosopher Thomas Moore (1992).

For the educators in this study, the wounds of ecological education do not represent pain which will dissolve away. Nor is their goal to make the world pain-free. Rather they need to find a way to go on, doing the work of their heart, within a "world of wounds". This study suggested that there are two ways to live with the wounds. First, the educators can, as discussed above, reframe their own view, finding ways to understand the world which don't result in woundedness. Second, they can shore themselves up, ensuring that they are supported when they must face the wounds.

Reframing their Role

There were three principal ways that ecologically-oriented people suggested that they could reframe their beliefs about their role in order to avoid some of the wounds which arose. In Chapter Four, Johanna Fried suggested that she was no longer ambitious for her students. Rather than trying to convince them of the changes which could be made in their lives and the contentment which they could achieve, she backed off to let students find their own way in their own time. In so doing, she eased her sense of having to take responsibility on her own shoulders for the students' destiny.

In Chapter Six, Roxanne Hillman offered a similar suggestion. She claimed that she found it easier to deal with all of the negative in the world when she created a sense of boundaries. She needed to find ways to not take on other people's concerns as her own and not feel responsibility for their difficulties. While she still wanted to be empathetic, she couldn't allow herself to get drawn in to other people's struggles.

Also in Chapter Six, Sam Barlow suggested the need for play as an environmentalist and educator. He suggested that it was necessary to find a "balance between ... a sense of purpose and ... a sense of humour". Sam, along with writer Joseph Meeker, suggested that the serious nature of environmental work can result in the work being taken up in a serious manner, which in turn can lead to inner turmoil, burnout and an undermining of the intended goals. Finding a sense of play in the work was important to

help the educators live in a manner in which they could open to the joy and beauty in the world.

In each of these cases, the reframing which took place helped the ecologically-oriented study participants, not to ease the wounds of modernity, but to ease their own internal conflicts. Those conflicts were related to their sense of responsibility for holding the world together and their need to create change. In other words, when the educators follow their own advice and attempt to let go of control, they find that their way in the world is eased, and they are more likely to achieve their goals of self-acceptance, self-nurturing and finding joy in the world.

Gathering Support

In the cases where reframing is not possible, ecologically-oriented people needed to acknowledge the existence of the wounds and find a way to live in their midst. In Chapter Six, Roxanne Hillman listed a variety of ways which helped her to live in a "world of wounds". She suggested that she tried to put up barriers to keep the negative out, ensure that she took time for herself, choose activities and surroundings which helped her to relax, engage in practices which helped her to keep centred and surround herself with positive people who reinforced her worldview.

The two methods for surviving in the face of wounds which arose most frequently within the interviews were (a) having a strong community of support, and (b) spending time in nature. Both nature and community seemed to provide ecologically-oriented people with a place of refuge, a place where they saw the values which they held dear reflected back to them. In other words, the wounds created by the dominance of modernity and by the demeaning of humanity were made bearable if the ecologically-oriented people found a place where the world could be otherwise, where they could see ecological values being lived out.

Being able to spend some time in such an environment was restorative as it provided ecologically-oriented people with a place where they could be themselves, a place

of homecoming and belonging and a sense of reassurance that there was beauty in the world. In other words, finding such places was imperative so that the ecological educators could (a) live out their inner truth; (b) live in a state of connection with other people and with the more-than-human world; and (c) find joy and beauty and pleasure in the world. If the educators could find places where these three essential goals in their life could be lived out, then their strength was restored and they were able to face the wounds of the modern world.

Easing the Challenges

Study participants suggested many ways to ease the process of ecological education. This diverse list is included in Appendix C3. There are three points which were raised many times throughout the interviews and which are worthy of a slightly more detailed mention.

Age and Life Experience

Participants suggested again and again that age, maturity and life experience were factors which helped them to embrace ecological perspectives. In part, being older meant that the students had more self-confidence and were more able and willing to live with uncertainty. The stronger sense of self also meant that older study participants were more likely to follow their own path and own vision, and less likely to defer to other perspectives especially when those other perspectives were in opposition to the world as they had come to know it. Since they had lived through some of the ups and downs of life, they were more willing to take risks with the knowledge that they could bounce back and that there was life after failure.

Equally important to the self-confidence gained with age, was the sense that the world which is reflected back to someone who has some life experience is more in keeping

with the world of ecophilosophy⁴⁸. Those people who had gone through some of the hard knocks of life were less likely to have an idealistic vision which they imposed on the world, and were more likely to relate to the world as they found it to be. They were more willing to acknowledge that they only had limited control and to let go of the illusion that they could make the world in the shape of their choosing. They valued relationships more strongly. Having lived through their own foibles, they were more willing to extend compassion to others. There seemed to be a sense of acceptance which had arisen which was attributable partly to the wisdom of experience and partly to the exhaustion of fighting.

Having suffered the shattering of some dreams and illusions, older study participants were more likely to take a hard look at themselves, be self-reflective, and question their priorities in life. They were less anxious about accomplishment and more concerned with living peacefully. Their lives were less about becoming and more about being. The desire to take care of themselves, to slow down and to find joy in the world, therefore, took on more importance than the desire to be productive.

This finding is interesting in the light of the tendency of environmental education to focus on the young⁴⁹. This study suggests that middle age is a time at which shifts take place which make consideration of an ecological perspective more likely. In casual conversation with ecological educators outside of the parameters of this study, it has been suggested that early childhood education theory and adult education theory have much more in common with ecological education than does K-12 teaching practice.

Other educators have suggested that students seem to be receptive to ecological perspectives in elementary school and then again in graduate school, but the time of

⁴⁸Extrapolating from this statement, it is possible that the world which is reflected back to a young person is more in keeping with the world of modernity. On the other hand, a person with little life experience may be more likely to accept the version of life into which they have been socialized which, in the case of twenty-first century North America, is typically a modern view.

⁴⁹Certainly some work has been done in adult environmental education. See North American Association for Environmental Education (1994). But the vast majority of existing environmental education programs are aimed at school children. Outdoor school programs are typically designed for fourth, fifth and sixth grade students.

adolescence and early adulthood (junior high school, senior high school, undergraduate university education) are times where modernity is embraced most strongly. As this time of self-definition is a time of great uncertainty, perhaps students of this age need the security of modern beliefs in order to feel a sense of safety in amidst all of the turmoil of their lives.

There are two suggestions to which, I believe, this study finding points. First, the design for ecological education programs for the junior high to undergraduate age group would necessarily be different than the design of programs for an older age group. That is, whereas the middle age and older group would have some receptivity to ecological approaches, teachers of the younger students would likely encounter some forms of resistance. The goals, content, expectations and methods of ecological education programs would therefore be quite different for these two student populations.

Second, this study finding points to the importance of developing programs for older adults and engaging them in the ecological education process⁵⁰. This group tends to be far beyond their formal schooling. The design, marketing and context of such courses would, therefore, need to take into account their specific life realities.

Educators' Walking the Talk

The second idea which surfaced frequently as a method to ease the process of understanding and acceptance of ecological education by students was related to the qualities of the teacher. As mentioned in Appendix C3, there were several qualities which students sought in their ecological teachers such as a sense of care and compassion and being well grounded in and knowledgeable of the literature of the discipline.

Most importantly, the students suggested that they needed to know that the teachers were "walking the talk" of ecological education. Teachers who walked the talk were better

⁵⁰The point of this suggestion is not to develop programs which preach to the converted. Rather, when there is a receptivity to ecological approaches, deeper exploration of ideas can occur. Also, students of this age would be more likely to (a) seek out ecological education approaches as a reflection of their own understanding of the world, (b) benefit from programs which help them to live in the world as they have come to know it, and (c) have experiences to share which would deepen the educational process for the entire community of learners.

role models of ecological education, helping students to understand the ideas more deeply. Such teachers also developed a sense of trust in the students which enabled students to believe that ecological perspectives did offer a possible way of living and made students more willing to take risks in their own lives.

Beyond all of these reasons, there was the realization that ecological education offered a way of being-in-the-world. Rather than teaching content knowledge or helping students to develop a skill, ecological educators were offering a way of living. Students' desire for integrity and authenticity required that teachers weren't simply talking about ecological perspectives but that they "followed [their] true beliefs" (Mary Simon) and were engaged "on [their] own journey" (Sarah Connelly).

This study finding holds within it some difficult and important messages for ecological educators. One of the ways in which we can help students with ecological education is by undertaking our own work in our own lives. That is, as well as developing effective ecological educational practices, ecological educators need to engage in the work of living lives of integrity, compassion and humility in which we follow our own truth, live in a state of connection with creation and take joy and pleasure in the world. Turning our attention to this hard work in our own lives may be one of the most helpful ways to assist students on an ecological path.

Small Steps

Finally, students suggested that the understandings of ecological education needed to be developed slowly and over time. James Davidson suggested that "bringing in something each day helped us to [take risks] in baby steps.... Little steps help". Sarah Connelly suggested that those ways of taking up ecological education which are not too far removed from modern perspectives or which draw on modern understandings were more easy to accept than ways which were far distant from modern ways of seeing the world. In helping her clients to consider alternative forms of health care, she suggested that,

we're a visual culture, so visualization's okay. Acupressure, acupuncture, certainly hypnotic technique. Concrete [methods]. It seems like there's a lot of steps that people have to go through cognitively and emotionally before they're willing to go into something like yoga or tai chi. It's a very passive form, seen from our culture anyway.

Liam Mattheson and Neil Herzog also suggested the need for a slow transition.

"Maybe you need some objectives to start bringing in this ecological teaching. Maybe you need some guidelines. And then gradually change. Instead of the big shock to the system" (Liam Mattheson).

I wonder if the best way to [work] with something that you want to be ambiguous and you want to be emergent is to give them expectations of how you interpret ambiguity.... If something's completely ambiguous, you might not get much done.... I wonder if there has to be a leading thread of some sort at the beginning. (Neil Herzog)

All of these students, and particularly Liam and Neil, are pointing to, what I believe to be, an essential consideration when proceeding with ecological education. The concerns which students have raised throughout this study must be taken seriously. Their need for guidelines and structure must be taken up as their truth and treated with compassion. Ecological education which has the potential for success, I believe, needs to take into account these student concerns. That is, ecological education in a modern world needs to take into account the wounds of the educators and the challenges of the students and to treat these difficulties as truth when determining how to proceed. The importance of finding ways to honour the truths of ecophilosophy and modernity forms the basis of discussion for Section III of this dissertation.

Incidental Learning

While the intent of this study was to uncover and come to understand the challenges of ecological education for students and teachers, in the undertaking of the research, several findings emerged which were not sought. This section briefly highlights those study contributions which were not specifically related to the challenges of ecological education.

Ecological Self

The ecological self is not, in itself, a new idea within the ecophilosophical literature. This dissertation's playing out of the ecological self departs from and adds to the existing literature in two ways.

First, this study gives the ecological self a central place in both ecophilosophy and ecological education. That is, this dissertation suggests that the turning away from the ecological self has contributed in a profound way to the environmental problems which we encounter today. The work then suggests that one of the important purposes of ecological education is to help students to reconnect to the ecological self.

The other unusual interpretation regarding the ecological self within this writing lies in the suggestion that the two aspects of the ecological self - that truth is found within, and that opening to truth aligns us with the more-than-human world - are actually one and the same. Many sources suggest that turning to inner truth aligns us with the truth of the world. In this dissertation, however, I am suggesting that inner truth *is* the truth of the world. That is, because we are ecological beings, following our own deepest truths is necessarily following the truth of the world. The challenge of discerning between truth and delusion is ever-present. But in so far as we can find our way through these complications, I am suggesting that following inner truth is the most profoundly ecological behavior in which we can engage.

Ecological Lens

In Chapter Two, in attempting to identify when we are acting in alignment with the ecological self, I suggested that ecological actions "sustain, affirm and add meaning to life". This definition gives rise to the notion of the ecological lens. Looking through the ecological lens means asking the question, "does this action sustain, affirm and add meaning to life?". This lens then provides a criterion for discerning when we are living ecologically.

The importance of the ecological lens is that it can be carried to a wide variety of circumstances and used to judge the ecological ramifications of a wide variety of situations. For example, I suggested that taking the ecological lens to the issue of educational technology would provide a new ground for discussion which would enable educational technology to be assessed not only for its pedagogical and technological merits but also for its ecological implications.

The ecological lens enables us to carry on the activities in which we are already engaged, but gives us a way to assess these activities from an ecological perspective. In so doing, the radical transformation in worldview which ecophilosophy suggests can be undertaken without a radical restructuring of society⁵¹.

Ecological Method

In Chapter Three, I outline an ecological way to approach research. The ecological method, like the ecological lens, provides a criterion of discernment to assess whether we are on the road to ecological living. In drawing a parallel between the topos of geographic topography and the topos of a topic, the ecological method turns to the way that a naturalist comes to know the land as a model for becoming knowledgeable about a topic. The ecological method suggests that there are four steps in coming to know topos: (a) opening

⁵¹Some ecophilosophers would suggest that the hierarchical, centralized structure of society is, in itself, problematic and that what I am suggesting here is, at best, a half measure and, at worst, selling out. I believe, however, that if the structural change is necessary, it will occur of its own accord as we each learn to embrace ecological understandings in our own lives.

and listening, (b) reading the signs, (c) learning about the place and (d) learning to care for and about the place.

In this dissertation, the ecological method was used in making decisions about how to proceed with the empirical research. I believe that this method can have more broad applications, both in research in general and in the process of education, as a way to acquire knowledge while honouring the voice of the earth.

A Life Well-Lived

The empirical study has suggested that, according to ecologically-oriented people, three strong threads weave through an ecological life. An ecological orientation requires (a) connecting with and following one's own truth, (b) understanding oneself as embedded within the web of life, and (c) living with an attitude of gratitude for the beauty of the world and taking pleasure and joy in the world. These three life characteristics and goals add further criteria to the ecological lens and the ecological method in determining when we are living in line with ecological understandings.

Suggestions for Further Research

The research study *Against the Current: Ecological Education in a Modern World* represents an initial inquiry into the challenges of ecological education in a modern world. This study provides some baseline information about the difficulties which arise at the encounter point of ecophilosophy and modernity from the perspective of those people (typically students) who are encountering ecological ideas for the first time, and those people (typically educators) who are attempting to live and teach ecologically within the context of modernity.

As an initial study, the findings of this research point to several additional studies which could be undertaken in order to understand more fully the challenges of this place of encounter. First, the areas of contestation which were outlined earlier in this chapter could

be more fully explored to understand the different cultural perspectives of ecophilosophy and modernity. This research could involve a literature review of the cultural and historical roots of the modern and ecophilosophical interpretations of time, pleasure, obligation, freedom and limits to name just a few concepts which were understood differently by the two cultures. Survey research could supplement this work to explore on a larger scale the meaning which is given to these concepts by people in a variety of demographic groups. If we come to understand how these concepts are understood and interpreted within ecophilosophy and modernity and we understand the roots of the interpretations which have arisen, we will have a basis to more fully understand the issues of contestation which arise at the cultural boundary, and thus have a way to ease intercultural communication.

Second, practitioner-oriented studies could be conducted to apply the ecological lens to a variety of situations. For example, how would we teach the Alberta elementary curriculum in a way which "sustains, affirms, and adds meaning to life"? Or, how would current environmental education programs be altered if they were viewed and assessed through the ecological lens? Curriculum development, implementation and evaluation would arise directly from this line of inquiry. Through undertaking this work, educators could start to uncover ways in which we could live ecologically in the work in which we are currently engaged, taking into account the challenges raised through this study.

Third, the notion of the ecological self could be explored more fully. That is, if as has been suggested in this dissertation, a connection with the ecological self is of importance in improving human-environment relations, then what interventions would increase the chances of this connection? Why do some people experience a strong sense of resonance with the ecological self and others do not? Do creative approaches help to foster a connection? Does formal schooling create a sense of disconnection? This line of inquiry points to many studies which could each explore one factor which may possibly encourage a connection with the ecological self.

Finally, the boundary decisions which were made in order to maintain the focus of the study at hand, precluded the exploration of ideas which touch on but weren't central to

this study. Those surrounding ideas could be taken up in further research studies. In particular, developing a deeper understanding of the process of cultural change, and the process of intercultural communication would help to ease the process of ecological education in a modern world. As well, problematizing some of the assumptions of ecophilosophy and investigating the validity of the claims of ecological education would help shape future direction by determining which aspects of ecological education are most worthy of further development. Placing these investigations within a larger pedagogical context by, for instance, exploring parallel and supporting forms of education could allow a deeper well of ideas from which ecological education could draw.

Before contemplating further research, however, it is necessary to tie up the loose ends of this study. This chapter has outlined the findings of the empirical research. This study, however, has had a secondary component: the laying out of an ecological vision for society. If, as the ecophilosophical literature and Section I of this dissertation suggests, an ecological worldview holds the promise of improving human-environment relations, and if, as this empirical study and Section II of this dissertation suggests, living life through an ecological lens, and, specifically, educating through that lens, gives rise to many challenges for students and teachers alike, then how are we to proceed? Section III of this dissertation turns to this question by asking what the next steps should be in living and teaching ecologically in a modern world. The next step is not taken up as a question for further research as it has been in this chapter, but as a question of how to live in the face of the knowledge which this study has uncovered.

SECTION III - COMING HOME

CHAPTER EIGHT - LIVING BETWEEN DREAMS

Western civilization as a whole now finds itself between dreams. In the true meaning of the word, it is a time of *crisis* - with all that implies of both extraordinary danger and opportunity. For there is nothing to guarantee that we will be able to remain long enough or deeply enough in front of the unknown, a psychological state which the great traditional *paths* have always recognized as sacred. In that fleeting state between dreams, which is called "despair" in some Western teachings and "self-questioning" in Eastern traditions, a man is said to be able to receive the truth, both about nature and his own possible role in the universal order. Throughout the ages, the hidden psychological methods of the ancient traditions have operated to guide people in that state between dreams where a man can begin the long and difficult work of self-investigation leading to transformation. (Needleman, 1975, p.3)

Section I of this dissertation suggested that homecoming - returning to the sense of belonging in this world and returning to a way of being in which we are able to listen deeply to the call of the earth and to our own ecological self - is the ultimate destination of ecological education. In Section II, study participants made it clear that the journey ahead is not a simple one. Needleman's words which open this chapter resonate on so many levels for the work of homecoming which we have ahead of us.

First, he suggests that what is crucial in these times, is the ability to "remain long enough or deeply enough in front of the unknown". Wendell Berry (1983) echoes these sentiments when he says, "these halts and difficulties do not ask for immediate remedy: we fail them by making emergencies of them" (p.205). In response to the challenges which have been laid out in Section I and II of this dissertation, we cannot jump to solutions which will transform educational practice in the classroom this Monday morning. We need to sit with the problems, to allow them to "seep in" (education student Liam Mattheson) and percolate. Practical implications will arise, but they will take time, and they will require us to "not know" for awhile.

Second, Needleman points out that the condition which in eastern cultures is viewed as self-questioning, in our own culture is viewed as despair. With the quest for certainty which underlies our modern lives, it is not surprising that we see a time of self-

questioning as a time of despair. But the implications of that perception are very problematic. If we view "not knowing" as despair, then we are all too tempted to abandon the path, to jump to facile solutions or engage in the "lookism" which so disturbed some of the ecological educators in Chapter Six. With this attitude, it is no wonder that ideas don't hold or are not engaged in deeply. We wish to quickly remedy the situation of despair, to move beyond it to a place of comfort.

Third, Needleman suggests that we are living between dreams. While his intent is for us to move from the dream which has been dominated by scientific thinking to a more holistic dream, I like the sense of in-betweenness. Study participant Gary Whitlow suggested that

if we're going to take part of our soul, our heart and soul, which is based on this Cartesian view of knowledge-making, the mechanical view of knowledge-making, and remove it from our soul, our being, you're lopping off half your body. And doing exactly what you're accusing everybody else of doing. You're not changing the paradigm.... There's no advance if you simply want to replace. A lot of postmodernity for me is just still modernity. We're still locked into mechanical, largely paternalistic ways of looking at things.

Rather than banishing one dream to grasp onto the next, thereby "lopping off half [of the] body", there are advantages of staying between dreams, suspended as it were. In ecology, an ecotone, the zone where two ecosystems meet, is the place of highest productivity. Gaining "information" from both regions, diversity and complexity increase and greater richness occurs.

The purpose in this chapter is to remain between. I am not seeking ways to reinvent the world in an ecological image. Tempting though such a pursuit would be, I think that it is imperative for ecological educators to work out an ecological way of living in the actual world in which we find ourselves. It is the terrain under our feet, thorny or rocky or hard-packed though it may be, which deserves our tender care and attention. Rather than

imagining flights of fancy, I want to understand better how we can bring ecological understandings into the work which we are doing today, tomorrow, right now.

In order to undertake such work, we need to be able to find ways to embrace "both-and" (Sarah Connelly, Jessica Frennay). We need to honour the realities of the modern world *and* the realities of ecological ways of being.

Liam Mattheson suggests just how difficult this process of both-and is:

If you sit me down with a topic and let me write about it without having to discuss any concrete knowledge anywhere, and just let me philosophize, I love it. If I have to do a research paper, it's not as enjoyable but I don't mind. It's interesting to learn stuff. But as soon as you say, "get your mind around this great big idea and address it but use evidence supporting your argument", that makes it very difficult. It just was choppy. It feels like two worlds are colliding.

I suspect that his difficulty arises because we are entrenched in dualistic thinking. We can turn our attention towards an ecological worldview only by turning our back on a modern worldview. But not only does either-or mean losing all of the wonders which modernity has brought, but we are also less likely to turn to ecological ways of being if they require giving up everything which feels known and comfortable and secure. Could it be possible to "get your mind around this great big idea and address it but use evidence supporting your argument"? In other words, is there a method of rigour within a method of engagement? I think that there must be, just as I think that there must be ways to live ecologically in the circumstances in which we presently find ourselves. I believe that the task ahead of us is to find our way through to both-and.

The ecological method described in Chapter Three, and the ecological lens, described in Chapter Two were both attempts at living both-and. I will begin this chapter by revisiting those concepts to see if they can provide any hints for how to proceed.

The Ecological Method

When Tom Brown, the interview transcripts, demands for academic rigour, my ecological heart and my stubborn nature conspired to develop the ecological method, it was not with the intent of creating a demonstration piece. Yet upon reflection, it seems that the working through of the ecological method fulfills this function by providing a way of enacting ecological living within a modern world.

This research takes place within a modern institution (academia) where there is the expectation and the demand for modern perspectives (method). Inserted into this environment is a study which is based on ecological principles and a researcher who wishes to honour those principles. How can the two come together so that the modern demands are met, yet ecological integrity is not betrayed?

It is not the ecological method per sé which is of interest here. Rather I would like to briefly turn attention to the working through of the tensions which eventually gave rise to the ecological method. In this process of working through, we may glimpse ways in which one might live ecologically in the modern world.

The process began with a belief that the world does not have to operate according to the tenets of either-or. Initially, I experienced the academic demand / ecological integrity tension as a strong push-pull. I could turn in one direction and see academia calling to me: the demands by which I would be measured. I could turn in the other direction and see the work of my heart which refused betrayal. These territories did not and would not both come within focus at the same time. But I believed that they could be brought into the same picture if I could find the right frame.

The discovery of that frame required all of those qualities which the ecological method highlights: time, faith, openness to possibility, listening, caring, willingness to stay awhile. What ultimately provided a way in were not procedural changes but attitudinal shifts.

As discussed in Chapter Three, I began to realize that there *was* method in my approach. Method, I concluded, referred to a series of reasoned decisions about how to

proceed in order to collect the most valuable data to develop, enrich or open up the topic at hand. My difficulty was that my method had appeared transparent to me. I had to excavate underneath instinct to realize that I had followed procedural steps. And, I had to look around me to become aware of "otherness". That is, the procedures which I had followed were chosen amongst many possibilities and were chosen with reasons in mind.

The second shift is more difficult for people who have been hurt by the oppressive nature of modernity. I had to trust that the academic demand for method was not a desire for closure. Academia was not wanting to confine, to control, to crush my heart and stomp on my soul. I was not being called upon to fit myself into some inappropriate frame: I simply needed to describe *my* frame. In qualitative research, the issue of replicability of method does not arise. The process of description, then, has other purposes. Through describing procedures taken, a researcher is called upon to think through each step, making sure that each aspect of the research was purposeful, appropriate and well-executed. This descriptive process also points out steps which were not well thought out and can turn a researcher back to the work to make it tighter, more accountable.

The academic demand and the ecophilosophical demand actually share some of the same goals. Both wish to ensure rigour, accountability and integrity. Both strive for excellence. Both promote the careful thinking through of perspectives and the undertaking of actions which are aligned with those perspectives. Both seek the pleasures and the obligations of hard work and discipline. Both demand something of us: that we set standards high, and step up to the plate to meet the demands of the world.

There is much common ground here. But finding that common ground meant getting over my fears and anger with academia and modernity. It required trusting, moving beyond "we" and "they", to believe that "they" can perhaps be interpreted in a kinder light. Living ecologically in a modern world in the context of the ecological method required finding commonality and easing up on preconceived notions of divisiveness. This task required an internalization of the understandings of the yin and yang: that ecophilosophical

understandings can be found within modernity, and modern desires can be found within ecophilosophy.

The Ecological Lens

The ecological lens arose as a response to a very difficult question: If our purpose is to live according to inner truth, how do we know when we're aligned with that truth? How do we separate delusion from authentic resonance?

From an ecological perspective, it should be remembered, the reason for turning towards inner truth is that through so doing, we will be connected into a way of being which coheres with the rest of creation. We are living from a place of inner truth, therefore, when we are engaging in actions which "sustain, affirm and add meaning to life". Once this criterion was pinpointed, the concept of the ecological lens could be used as a touchstone by which we could judge whether we are connected to the ecological self, and whether we are acting ecologically.

The notion of the ecological lens put to rest another concern which had been articulated by several of the students whom I interviewed. There was a perception arising, and not an inaccurate one, that ecological education was concerned with self-growth and self-discovery. Students believed that there was value in that process, but didn't see how it connected with content dense classes. I didn't want to believe that learning content and ecological living were two different, mutually incompatible pursuits, nor did I want to relegate ecological understandings to feel good classes of self-discovery. There had to be a way that ecological understandings could form the foundation for any content, that we could find a way through to both-and. The ecological lens seemed to provide a way to take up any subject matter from an ecological perspective.

I was given the opportunity to put the ecological lens to the test, when a local elementary school invited a series of speakers to talk to their staff about ecological education. This school had decided to adopt the concept of the web of life as their umbrella

for organizing educational experiences for the following year. I decided to entertain what it might look like to take up the web of life theme through an ecological lens⁵².

I suggested that an ecological approach to a unifying theme of this nature would involve a four step procedure. First, we need to ask, "what do we mean by the web of life?". The concept encompasses a large spectrum of ideas ranging from a cognitive understanding of literal interdependence (we depend on trees for our survival) to a deeply embodied sense of being-in-the-world (understanding ourselves as embedded within creation). Typically, when people speak of the web of life, they refer to connectedness and interdependence. If the intent for this school was to highlight interdependence, what is it that they were wishing to connect? Did they want to integrate subjects, create a sense of community among staff, break down boundaries between school and community, or a myriad of other educational possibilities? The first step in taking up the web of life in an ecological manner is to define the ground and to understand its boundaries.

The second step is to ask, "why do we believe that organizing educational experiences under the theme of the web of life is valuable?". The constant wave of shifting educational priorities creates a climate where it's possible for educators to latch on to current trends in education without understanding their depth of meaning or without determining whether they actually believe in their merit. The web of life could be a wonderful organizer for educational experiences. But if a theme was only taken on because it was trendy, and wasn't well thought out, the living out of that theme could cause more harm than good for the topic, the staff and the students.

If staff didn't think deeply about what their intentions were with this theme, then they could end up betraying the understandings which underlie the web of life, and damaging its integrity. If there wasn't clarity and consensus about intent among staff, then they could have difficulty knowing where to aim and frustration and confusion could

⁵²On the surface, it would appear that the web of life theme was already an ecological topic. But as was mentioned in Chapter Two, ecological topics can be taken up in unecological ways. I wanted to determine what it would mean to explore this theme through the lens of ecological education which was emerging from my research.

ensue. The attempts to reach a non-existent target would by necessity be random, thereby potentially creating chaotic, intermittent stabs at understanding for students. Cohesion would be difficult to achieve and the purpose of a unifying theme would, thus, be undermined.

These first two steps provide the groundwork, the foundation from which educational experiences can be built. They define the parameters of the work. Once the parameters are understood, then each staff member has the freedom to explore, to dream and to vision, with secure knowledge of the ground on which they are working.

Step three then moves from work done by the staff as a whole to visioning done by individual teachers. This process would vary from teacher to teacher: some would journal; others would create maps and schema; others would delve into their favourite resources. Some would dream wildly; some would plan carefully. The outcome of the visioning process would be as diverse as the processes taken.

The object, however, is for each teacher to engage by him or herself and for him or herself in the idea of the web of life. When the "web of life" was first mentioned, what was the image which came to teachers' minds? Can they play with that image to understand how it might work its way into the classroom? What are their priorities in creating connections? What are the non-negotiable aspects of their vision: those aspects which, if ignored, would betray their sense of integrity? What inspiring ideas come to mind which cause them to feel a sense of excitement about their work? This visioning process is based in the idea of opening and listening to the world in the sense that gut reactions, intuitions, images are taken seriously and trusted as containing truth. Little sparks of intrigue are followed to see where they might lead.

Step four moves from the individual level to a small group process. Depending on the organization of the school; team teachers, community or division staff would meet to determine how the individual visions can be merged and can be played out in the specific context in which they are teaching. How can the inspiring dreams of each teacher be met and their integrity honoured? Where are the non-negotiable points, and where can people

bend? How can slight modifications in interpretation meet the needs of more than one teacher? Finally, how can the visions be lived out teaching this particular curriculum, with these particular students, with these specific resource limitations and time constraints, in this specific classroom space?

This four step procedure to work through a unifying theme is neither conceptually nor logistically challenging. The steps are quite straightforward. Yet undertaking this process enables many benefits to emerge. First, administrators are provided with a way to ease the tension between providing direction for the school yet enabling professional freedom for the teachers. Second, a method of accountability is set up which is respectful of an individual teacher's values, beliefs and temperament. That is, teachers should be able to answer to how their work meets the school's objectives and fits within the school's vision, but they are not required to live out that vision in a uniform manner which is restrictive of their own style. Third, teachers know the ground on which they are working, so their work becomes something which they can stand for and stand by and to which they can commit themselves. Fourth, diversity of expression is allowed to flourish. Since each teacher is able to honour and be true to his or her own practice, pride develops while creativity flourishes. Fifth, an administrator's role in assisting with professional development becomes clear. In so far as teachers are having difficulty in arriving at a vision, an administrator can draw them out and help them to find their own voice, without feeling threatened that individual voices will undermine school direction.

From an ecological perspective, there are several benefits to this approach. Most significantly, and already stated several times, the teacher's identity is honoured. In not being confined to living out a particular model of "educator", a teacher can open to who she truly is and what he truly believes. In so doing, s/he walks a path which leads to the ecological self and which affirms life. Theoretically (albeit not always in actuality) since no one teacher is threatened by the imposition of another's approaches and since each teacher feels honoured for who she is, teachers can listen with more compassion and interest to

different expressions of the vision. The potential opens up for respect to grow and community to develop.

Finally, the topic (in this case, the web of life) is treated with dignity and integrity and can be explored to its full depth and richness. Understanding is developed among staff (and later students) about what the concept means and what fullness of possibility it engenders. Rather than skittering over the surface of a theme, the staff has chosen the ground which they will inhabit, and can settle deeply into the work, to explore it fully and honour it well. Within the parameters of the school vision, multiple interpretations and expressions are allowed to come to life as students and teachers explore the nooks and crannies of the various directions in which the work leads.

Underlying this four step procedure is the question, "how can ecological understandings be lived out within educational practice?". What approaches to pedagogy, planning and curriculum development can be taken which will honour the truth of the inhabitants and the integrity of the topic? How can we affirm life rather than closing it down, and open to the ecological self as we carry out the day to day tasks which educational work demands? The answers to these questions are quite simple, but they require a repositioning of priorities so that the work is constantly viewed and assessed through an ecological lens.

Setting the Stage

The examples of the ecological method and the ecological lens, with their tentative excursions into both-and approaches, can be mined for many lessons. First, living and teaching ecologically within a modern world demands that we look for commonalities. In undertaking this search, we are called upon to have some faith and to move beyond divisiveness. Besides trust, this process requires creativity and a belief that the way that things always have been done is not the only way that things can be done. Research method can be defined more broadly than the ways in which it is typically conceived. We

can find enough space within method for ecological understandings. When ideas are opened up to multiple interpretations, there is room enough for everyone. The work of ecological education demands that we each find our own space within a topic.

Clearly defining parameters enables us to find our own space, as became apparent in the "web of life" example. In being clear about the ground on which they are working, the sense of insecurity for teachers and the sense of threat to administrators could be removed. With the parameters in place, teachers could feel free to play.

The importance of boundaries in creating openings has significant lessons for ecological educators. In Chapter Five, students spoke about the lack of structure and definition in ecological education. Perhaps ecological educators need to be more aware of defining boundaries, not only to increase student comfort, but because through knowing the ground, we are freed up to explore.

The first two steps in working through the web of life theme, were not only setting parameters. They were also engaging in a process which emerged with the ecological method as well. In both instances, there was an attempt to arrive at the essence of definitions. What does method mean? What is intended by the phrase, "the web of life"? Through peeling back the layers of cultural interpretations to get to the barebones of a definition, we arrive at the fundamental, non-negotiable essence which places its demands upon us. In looking to skeletal meanings, rather than fully fleshed cultural interpretations of concepts, we can re-enflesh the idea with multiple interpretations which can embrace and encompass ecological understandings. Deconstruction to find essences, and then reconstruction to honour individual truths.

The desire to honour the integrity and the truth of an individual is paramount in both of these examples. I was not willing to betray the integrity of ecological understandings, though I was willing to find a path towards reinterpretation so that academic demands and ecological understandings could both be honoured. Likewise, the procedures used in the web of life example have at their heart a desire to honour the truths of the teachers on staff.

Finding ways to honour those truths and have cohesion of vision was the challenge which arose.

Finding commonalities, providing structure, seeking essential definitions, honouring individual truths ... the beginning of a pathway to living ecologically in a modern world.

Opening the Conversation - Good Work

The ecological method and the ecological lens may help us to find a way to live between dreams. But more important than these techniques for living both-and is the ability to "remain long enough or deeply enough in front of the unknown", to "become one with the knot itself, til it dissolves away" (Snyder, 1969b, p.91).

In this penultimate section of this final chapter, I would like to consider what such a way of being would be like. How can we engage in the kind of conversations which will lead us home? How can we hold open tensions, allowing both the truths of modernity and ecophilosophy to sit there together for awhile, to become acquainted, to merge and blend and find new combinations of meaning?

I was so humbled by the very complex, very challenging, very insightful questions which the students whom I interviewed were asking of themselves, of me, of ecological education. They were not dismissing this form of pedagogy out of hand, but were speaking quite candidly about the problems which it evoked for them. In this section, I would like to highlight one of those tensions and hold it open towards possibility.

The dilemma of defining good work was not a concern which I had brought to the table, nor did the question arise from the research participants. It was a topic which just seemed to be there between us, again and again and again. The dilemma was as follows: if we are to eschew standards and guidelines, to throw out pre-defined templates by which we judge, then how do we know when we're doing good work? What do we listen to? What serves as our guide?

In Chapter Five, we heard how disconcerting it was for students to not have clear guidelines. They wanted to know what they needed to do to "get an A". When pressed though, the students had very clear ideas of what constituted "good work":

After completing the exercise, I knew that there was some personal growth happening. There was learning going on. I'm doing things for a large amount of personal growth.... I try and engage myself and I think having done that, I was satisfied that I had filled the requirements.... I have a certain amount of pride. There's a lot of people that do the bare minimum. And I'm just not happy with that. So if I feel proud about it, then I know that it's fine. And it's fine with me. So that's fine as well. It has to be. (Neil Herzog)

If you know you're putting quality into something and it's interesting to you, then I think that's [what] it comes down to. Then you don't care what the teacher thinks. You did a good job and you like it. And hopefully they'll see that. (Suzanne Young)

Now as far as whether I think it's a good job or not, I just get into it when I'm writing. And I can feel that I'm hitting stuff. I can just feel that the paper's flowing: the work is good, I'm touching on stuff that's being discussed in class. And by the end, if I'm feeling good about it, I'll nail a good closing paragraph and I'll be, "yes, that's an A". And I don't know really how to describe that. It's just a feeling. (Liam Mattheson)

I knew the kinds of things that she saw as valuable and I knew the kinds of things that she was seeing as shallow and uninteresting. When people would take an article by Wendell Berry and just talk about it on a really superficial level, talk about his ideas exactly as they were presented, not sort of process them at all. Just taking stuff at face value. (James Davidson)

In these examples, the students are providing wonderful, rich definitions of good work. As intangible as the concept is, they know when they have hit upon work that is

good. In their comments are also signs of ownership and engagement: intellectual attitudes which students claimed to find difficult.

Why then, does the question keep surfacing: "what do I need to do to get an A?". Why were students so frustrated when they weren't given a template to guide their work? I suspect that there are many issues at play here, some of which were discussed in Chapter Five.

But there is one issue which I find particularly troubling. If we let go of guidelines and structure and templates, then we have to rely on our own judgment of quality. And I am seeing the signs all around that we don't have much faith in ourselves or in our abilities to discern.

These signs are apparent in the recent propensity to create blanket rules for society which are out of all proportion to the situation. So, for example, when a recent high school field trip ended in disaster, the Calgary Board of Education curtailed all field trips. To not do so, to not have a rule which we apply broadly, would mean that we have to judge on a case by case basis⁵³, and we don't seem to trust that we know how to make that judgment. It is easier to determine procedures ahead of time and to hold to them in all situations, then to exist in that uncertain place of discernment.

The point here is not to suggest that the Calgary Board's decision was inappropriate anymore than to suggest that having standards or guidelines for assignments is incorrect. The point is, that if we wish to live in an ecological manner, and honour both-and, we have some very thorny questions ahead of us. We can't wave around rubrics to help us slot student performance, hoping that these measures will somehow provide comfort and security. Nor can we eschew standards, leaving students to their own sense of turmoil, and with the impression that all work is acceptable.

⁵³There are many factors at issue here, related to concerns about litigation, wanting equal treatment for all, fear of making mistakes, a desire to appease conflicting interests and the existence of too large of a population to make individual assessments. I don't wish to paint the situation as simplistic. At the same time, I do believe that many of these types of issues wouldn't arise if we had some faith in our ability to make distinctions and make decisions.

In the last chapter I suggested that there were many such questions which were raised explicitly by the study participants and implied by their dilemmas. The discomfort of living with uncertainty gives rise to the tendency to shut down the questions when the way forward is not apparent. I don't know how we make judgments of work if we wish to remain open to diversity and to honour the individual path of each student. Although I can intuitively sense when a student has thrown themselves into an assignment, I couldn't tell somebody else what signs to look for, nor could I inform students ahead of time exactly what good work would look like. But this difficulty does not mean that the attempt to open to the student's path and to encourage them to engage deeply should be avoided. Nor does it mean that we should just give in to what seems easiest and provide multiple choice exams and rubrics of pre-determined standards if they aren't appropriate. Nor does the lack of a clear way forward mean that questioning how to proceed is an unworthy endeavour.

There are important, rich and tangled questions which are raised when we attempt to live between dreams. Their answers are not simple or readily apparent. But by evading and denying the questions, we close down the possibility to move beyond either-or to both-and. When Snyder (1969b) suggests that we should "become one with the knot itself, til it dissolves away" (p.91), I don't think that he is offering a pretty turn of phrase or a quaint idea. I think that he is telling us exactly how to proceed.

In our interview, I asked yoga teacher Johanna Fried what she did when an issue was raised in class which she didn't know how to take up. She said,

I just stay with it. I don't act and I don't shut it down. I just let it sit somewhere - in myself, in that other person, and wait and see what comes of it. And sometimes things wait for a very long time. And sometimes they just on their own find their path. It's like it melts away. It's just not there [anymore].... Or if I get an intuition that I need to act on it, then I will. But until I get that, I'm getting better at knowing when my voice is saying, "oh you should be able to do something about this now". And it's like, "oh, there's my rescuer in action again". Just be quiet for a moment.

And then maybe sitting in meditation or washing dishes or walking or driving is when I get a glimpse.... And then I'll act from that place.

The answers to which we jump for the sake of resolution or closure alone often don't land us in the right place. They aren't deeply grounded nor do they arise from deep wisdom nor do they respond to the intricate subtleties of the situation. But if we can find a way to wait and listen, to quiet the urge to find immediate solutions, then over time and often without our intervention, the knot does dissolve away and answers do arise which take into account both-and. Those answers are the type which, I believe, we are seeking when we attempt to engage in ecological education in a modern world.

Reinhabitation

Homecoming, as interpreted within this work, means finding a way to live between dreams, to allow ecological understandings to flourish within the modern world in which we live. As with a connection to one's inner truth, reinhabitation is not a destination but a process. We do not arrive home, breathe a sigh of relief, put our feet up and, feeling safe and secure in our homecoming, ignore the world around us. Rather, reinhabitation requires us to live artfully, mindfully, vigilantly and lovingly. Homecoming both enables and requires us to live in a state of grace, moment to moment, continuously working through the challenges which such a way of being entails.

This study points the way home, not by providing answers to the complex questions raised throughout this dissertation, but by suggesting the nature of the conversation which needs to take place and outlining some of the particular challenges which need to be faced. The dilemmas of the study participants have pointed to considerations which we need to take into account on that journey home. I have only added suggestions about the tenor of that journey and the ways of proceeding which may help us to honour both modern and ecological truths and thereby find a way to live between dreams.

Nowadays, yearning to reclaim a sense of wholeness, some of us tend to disparage that movement of separation from nature, but it brought great gains for which we can be grateful.... Now, harvesting these gains, we are ready to return.... Having gained distance and sophistication of perception, we can turn and recognize who we have been all along. Now it can dawn on us: we are our world knowing itself. We can relinquish our separateness. We can come home again - and participate in our world in a richer, more responsible and poignantly beautiful way than before, in our infancy.

(Macy, 1991. pp.13-14)

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APPENDIX A - BEING PLACED, FINDING OUR ROOTS

Appendix A1 - Ecophilosophy and the Ecological Self

While this dissertation is rooted in the ideas and literature of ecophilosophy, throughout this work, I use the ecological self as a reference point rather than the more broad understandings of ecophilosophy. In this essay, I would like to describe the relationship between ecophilosophy and the ecological self (both historically and ideologically) and to explain my reason for focusing on the ecological self.

Although lacking a name and not organized into a field of study as such, ecophilosophy came onto the scene in the late 1960s. In the aftermath of Carson's *Silent Spring* (1962), there was a burst of concern, energy and new work which was conducted in the environmental field. This work was predominantly but not solely scientific and technological in nature .

A handful of writers wished to look to the deeper, underlying causes of the "environmental crisis" which Carson had made so apparent. Rather than questioning how we were despoiling our home, or what the effects of such damage would be, they were more concerned with questioning what it was about the way in which we understood the world which would lead us to such decidedly unecological behavior.

The most noted and earliest essay in this genre was written by Lynn White Jr. (1967) who looked to the judeo-christian underpinnings of our disregard for nature. This controversial essay was followed by a variety of contemplative, speculative articles in the field, the most notable of which was Moncrief's (1970) redirection of White's argument in which he suggested that "the forces of democracy, technology, urbanization, increasing individual wealth, and an aggressive attitude toward nature seem to be directly related to the environmental crisis now being confronted in the Western world" (p.511).

Ecophilosophy as the term for the endeavour in which these scholars were engaged did not emerge until 1973 with the publication in *Inquiry* of a lecture given by Arne Naess, the "father" of deep ecology. In this brief, seminal essay, Naess distinguishes between the shallow (elsewhere referred to as reform) versions of the ecology movement and the deep ecology movement. In this essay, "The Shallow and the Deep, Long Range Ecology Movement: A Summary", he suggests that:

in so far as ecology movements deserve our attention, they are *ecophilosophical* rather than ecological. Ecology is a *limited* science which makes *use* of scientific methods. Philosophy is the most general forum of debate on fundamentals, descriptive as well as prescriptive. (p.99)

Naess' portrayal of ecophilosophy put it squarely within the larger field of environmental philosophy which aimed to use philosophical principles to understand the human-environment relationship⁵⁴. This version of ecophilosophy was rooted in a contemplation of nature, using ecology as a model for human action, and was directed towards a reconsideration of the human-environment relationship specifically.

Since that time, ecophilosophy has become a separate though related field of study from environmental philosophy, rather than a subset of the larger discipline. These changes have occurred for several reasons. First, environmental philosophy began to concern itself more and more with the development of an environmental ethic for appropriate human-environment relations, and thereby became, although not by definition, at least in practice, synonymous with environmental ethics.

Second, the philosophical aspect of ecophilosophy became, over time, more generic. That is, rather than referring to an application of philosophical principles to ecology, ecophilosophy began to refer to any approach to environmental concerns which believed that "the source of the environmental crisis lies not without but within, not in

⁵⁴Environmental philosophy, in turn, was a subset of the larger field known generically as environmental thought. This field included any contemplation of the human-environment relationship. Progenitors of ecophilosophy such as Thoreau and Leopold could be said to be engaged in "environmental thought", but so too could most eastern and western philosophers. Consideration of the human relationship with the natural world arises in one form or another throughout the history of philosophy.

industrial effluent but in assumptions so casually held as to be virtually invisible" (Evernden, 1993, p.xii). In this sense, the work of ecophilosophy was *philosophical* in the broadest meaning of that term, but it didn't rely on the techniques and tenets of *philosophy* to conduct its work.

Third, ecophilosophy no longer concerned itself with the explicit study of human-environment relations. Although still concerned with the amelioration of environmental conditions, the causes were seen to be more diffuse and often quite distant from the human conception of nature itself. Rather than our views of nature and our relationship with the natural world being the sole locus of concern, our understandings of knowledge making, human purpose and the good life were all seen to have impacts on our treatment of our earthly home. Environmental conditions then could come to be seen as a "crisis of character and of culture" (Devall & Sessions, 1985, p.ix)⁵⁵.

Through these two shifts in ecophilosophy, away from philosophical techniques and away from an explicit study of human-environment relations, the boundaries of the field have become softer, more fuzzy, more generous. On the one hand, the field has taken on a more poetic, spiritual tone, which enables Drengson (1988) to provide a lovely definition for ecophilosophy as "the loving pursuit and realization of the wisdom of dwelling in harmony with one's place" (p.xii). On the other hand, the field has become more radical, serving not only to throw into question western culture's view of and relationship with nature as is suggested in the basic principles of deep ecology (Devall & Sessions, 1985, p.70) but to render controversial and contentious, all of the basic ontological and epistemological assumptions embodied within the western, industrial paradigm.

This shift in orientation of ecophilosophy is, I suspect, more an apparent one than an actual one. Indeed, Naess (as cited in Fox, 1995) in a 1986 article, writes,

⁵⁵See Appendix A2 for a discussion of the ways in which ecological education has taken up the environmental crisis as a crisis of culture in Chet Bowers' work and a crisis of character in Wendell Berry's work.

the deep ecological movement tries to clarify the fundamental presuppositions underlying our economic approach in terms of value priorities, philosophy, and religion. In the shallow movement, argument comes to a halt long before this. The deep ecology movement is therefore "the ecology movement which questions deeper". (p.102)

This desire to question deeper and look underneath value priorities has a strong cultural flavour to it which is akin to the later, more broadly defined, renditions of ecophilosophy. The apparent broadening of the field is, I believe, attributable to ecophilosophical ideas being taken up by scholars from a variety of disciplines⁵⁶, thereby moving beyond the discipline of philosophy which underlies Naess' work.

* * * * *

As mentioned in Chapter Two, the ecological self emerges from that form of ecophilosophy known of as deep ecology. The conception of the ecological self within deep ecology focuses very strongly on the idea of interconnectedness and on human identification with the more-than-human world.

From the perspective of someone concerned about the deterioration of the natural environment, this human identification with nature is important for two reasons. First, "no moral exhortation or dogmatic statement of environmental ethics is necessary to show care for other beings - including rivers or mountains - if our self in this broad and deep sense embraces the other being" (Devall, 1988, p.43). In other words, we will automatically act out of care and responsibility to the more-than-human world if we understand ourselves as connected.

Second, in identifying ourselves in such a manner, we necessarily arrive at the very humbling and very critical insight that we are not at the centre and we are not in control. We begin to understand ourselves as part of Indra's net. We thereby gain back our human place in the world and regain a sense of limits. By relinquishing our place at the centre and

⁵⁶See footnote 11 in the preface to this dissertation.

relinquishing our place of control, our actions are once more based in an understanding of and respect for ecological integrity.

The ecophilosophical literature is less explicit about the second aspect of the ecological self which I described in Chapter Two: the notion that "the more coherent one becomes within oneself as a creature, the more fully one enters into the communion of all creatures" (Berry, 1990, p.11). That is, the sense of turning towards inner truth is implicit in the concept of Self-realization, but in the working out of this idea, Naess (1987), and Devall and Sessions (1985), focus more on the end-goal of Self-realization than on how to achieve this state.

There are moments where the desire to turn to inner truth reaches articulation as in Naess' conversation with David Rothenberg (1993):

AN: The goals well understood by people are pleasure, happiness, and achievement. There is no requirement of tremendous population, tremendous buildings, or tremendous consumerism in order to have maximum pleasure, happiness, or achievement.

DR: So if you teach people how to articulate their goals in life, they will find that they're much more in line with the rest of natural creatures and plants and animals?

AN: Yes. ... I talk about total views rather than philosophies. Views about who you are, your deepest wishes, your obligations, and your relations to others.

(p. 135)

The desire to elaborate inner truths is also apparent in the epistemological assumption inherent in ecophilosophy that personal knowledge is at least as important, if not more so, than expert knowledge. The turn to inner truth as an explicit goal within ecophilosophy, however, originates from two sources: one intentional and one incidental.

Ecofeminism, by drawing parallels between the domination of women and the domination of nature, sets itself a project which is at once human and environmental. Ecofeminists are more overtly trying to heal a human pain as well as an earthly pain than are their deep ecology counterparts. Their task, therefore, is the nurturing of the self *and*

the nurturing of the earth. This work is, indeed, seen to be one and the same as Petra Kelly (1989) indicates in her foreword to a collection of ecofeminist essays entitled *Healing the Wounds*. "The struggle for disarmament, peace, social justice, protection of the planet Earth, and the fulfillment of basic human needs and human rights are *one* and indivisible" (p.x). A deeper concern for human well-being is thus a priority alongside a concern for improvement of environmental conditions . Turning towards personal truths and fostering what best sustains those truths is a way of nurturing the wounded souls which are of concern to ecofeminists.

This desire to turn to inner truths has also found a backdoor into ecophilosophical literature due to the prevalence of ecophilosophers (particularly deep ecologists) who are also buddhists. Thus, Snyder writes frequently of turning to the truth within, but whether this interest derives from his buddhist training or his deep ecological inclinations is impossible to discern. Here's Snyder from several different sources:

[The Great Subculture] has taught that man's natural being is to be trusted and followed; that we need not look to a model or rule imposed from outside in searching for the centre; and that in following the grain, one is being truly 'moral'. (1969a, p.115)

The other part of [poetry]... has to do with bringing us back to our original, true natures from whatever habit-molds that our perceptions, that our thinking and feeling get formed into. And bringing us back to original true mind, seeing the universe freshly in eternity, yet any moment. (1980, p.72)

Ego itself is a reflex of ignorance and delusion that comes from not seeing who we "truly" are. Organized society can inflame, pander to, or exploit these weaknesses, or it can encourage generosity, kindness, trust. (1990, p.92)

In short, ecophilosophy is interested in exploring the philosophical understandings which underlie our relationship with the environment, to articulate those understandings which have led to the deterioration of human-environment relations, and to explore alternative understandings which might be more environmentally benign. The ecological

self finds its place within ecophilosophy through deep ecology's attempt to broaden human identification to include the more-than-human world, through ecofeminism's attempt to heal the human and earthly wounds of domination, and through the influence of the buddhist notion of Buddha nature (see Chapter Two) on ecophilosophical writers.

My turn away from ecophilosophy towards the ecological self has less to do with intellectual or ideological disagreements with ecophilosophy, and more to do with lived experience⁵⁷. As part of the work which I undertook to "prepare the soil" for this research study, I engaged in, what turned out to be, a very foolhardy and instructive endeavour. I decided that I wanted to take on the ideas of ecophilosophy, to attempt to live them out in my own life. If, after all, I was suggesting that ecophilosophy provided a way of understanding the world which was advantageous, then didn't I need to know what the reality of that way of being was? If I was suggesting that others should live through an ecophilosophical lens, didn't I need to do so myself?

So, I attempted to understand myself not as an autonomous individual but as interdependent, always in relation. I attempted to let go of control, to allow myself to embrace ambiguity and uncertainty, and live fully in the flow of the universe. I fought my own notions of and desires for freedom. I attempted to be open to diversity and entertain all possibilities. I tried to subdue my own inclinations towards rational approaches, and to treat all ways of knowing as equally valid.

I can only describe this process as attempting to climb outside of one's own skin while it is still attached to nerve and sinew. I constantly felt confused, at odds with myself. In pain, full of angst. I was always berating myself for not quite "getting it". I felt like I was trying to grab something which I knew to be out there shrouded in fog, but which I never actually could have grabbed at all because it had no material body. Vertigo armed with teeth is, perhaps, the best way to describe the sensation.

⁵⁷While I do have philosophical disagreements with ecophilosophy's emphasis on intellectual argumentation as a tool for transformation and the implicit suggestion that ecophilosophy is a replacement for modernity, my turn towards the ecological self is not based on these intellectual disagreements, nor do I have arguments with the actual tenets of ecophilosophy.

Explanations for my difficulty are in themselves elusive. It is not that I was trying on a way of viewing the world which was anathema to me. It is not even that I was trying on a way of viewing the world which was challenging because it conflicted with the deeply held assumptions with which I had been raised. It is more that trying on a way of viewing the world is in itself an impossibility. We simply don't come to know the world through intellectual ideas. Lived experience, embodied concepts, intuition, are the deep sources for the type of knowledge which colours daily action.

As painful as this experiment was, it taught me an extremely important lesson which turned me away from ecophilosophy towards the ecological self. I can't provide a set of ideas for students, a set of assumptions about living; establish them as "truth": demonstrate their importance and expect this process to assist with the embodiment of those ideas. The ideas of ecophilosophy are essential in so far as they help point out the hidden assumptions of a western worldview, and provide an alternative set of ideas to discuss. But they do not provide a lens for living. That lens emerges from deeply experienced truth and that truth can only be found by turning within.

Furthermore when we start from the vantage point of inner truth, the ideas of ecophilosophy arise naturally and are lived out quite matter of factly. Drengson (1980) suggests that

each of us knows in our bones that the world is not a machine. Nor are our bodies mechanisms. Computers are neither intelligent nor conscious. Poetry is as significant as mathematics. The most valuable things in life cannot be measured or quantified. Both friendship and genuine community are necessary for the development of whole human persons. Nature is not some alien monster that opposes us, that we must conquer. (p.230)

If we turn within and can truly acknowledge our experience of the world then we realize that we "know in our bones" the understandings which ecophilosophy puts forth. "By moving inside to the core of our experience - and working out from there" (Glazer,

1999, p.1), we come to understand the ideas of ecophilosophy in ways that would be impossible if we never allowed that turn within and kept discussion on an intellectual level.

In placing my focus on the ecological self, there is a concomitant suggestion that the environmental problem has different roots and causes than ecophilosophy suggests. As ecophilosophers see the worldview of modernity as the cause of environmental deterioration, so they see the birth of modernity in the seventeenth century as the point of time at which society departed from a connectedness with nature, and as the root of our current malaise⁵⁸. As discussed in Chapter Two, focusing on the turn away from the ecological self as the catalyst for environmental deterioration, places the historical emergence of "the environmental problem" at the end of the nineteenth century.

My interpretation of environmental problems as set forth within this dissertation supports ecophilosophy's foundational notion that the "source of the environmental crisis lies not without but within" as it supports the philosophical tenets of ecophilosophy itself (ecocentrism, interdependence, holism). In focusing on the ecological self, however, the cultural and pedagogical road to recovery diverges from ecophilosophical approaches.

⁵⁸Some ecophilosophers suggest that the rise of christianity created the conditions which enabled our relationship with the natural environment to deteriorate (Turner, 1980; White Jr., 1967). Other writers in the field suggest that our turn towards agriculture 10,000 years ago, was the point of departure from a healthy human-nature relationship (Quinn, 1992). The vast majority of ecophilosophers, however, suggest that our disconnection from nature occurred with the onset of the scientific revolution.

Appendix A2 - Ecological Education and the Ecological Self

Historical Emergence

Ecological education, most simply construed, is education which emerges from the concerns and shares the goals of ecophilosophy. In other words, ecological education is rooted in the notion that "solutions to the grave environmental crisis require more than mere reform of our personal and social practices.... [They] require a radical transformation in our worldview" (des Jardins, 1997, p.202). Ecological education aims to help students to consider the problematic assumptions which underlie a western worldview, and to explore alternative perspectives. Furthermore, ecological education aims to embody the principles in which an ecological worldview is rooted.

Ecological education came to prominence in the 1990s, nearly three decades after the birth of the modern environmental movement⁵⁹. That ecophilosophy should eventually find its way into the field of education is not surprising. As an institution which is charged with the responsibility for cultural transmission (Hurn, 1993) and reproduction (Apple, 1990) new forms of cultural understanding would inevitably make their way into the school system both as disruptive influences and as alterations to the transmission "database". As a potential site for transformation (Fien, 1993; Graveline, 1998; Marino, 1997), ecophilosophy would seek the support of schools in teaching change. As a scholarly enterprise, the field of education is effected by new forms of cultural critique and scholars

⁵⁹There has never been an attempt to map out the history or geography of the field of ecological education, nor is it my intent to undertake this project here. I have chosen 1990 as the birthdate of ecological education on the basis that the vast majority of publications in the field date from on or after this point. There certainly were educators considering these ideas at a much earlier date as with Sessions' comprehensive article in 1983, or McInnis' (1972, 1973) writing a decade earlier. Furthermore, because ecological education shares assumptions and approaches with many other forms of education, the ideas of ecological education were found in the literature at even earlier dates (Arendt, 1954; Dewey, 1938; Whitehead, 1929) though not related to ecological concerns per sé. Finally, since ecological education is also an attempt to return to the ways in which education naturally arises in the world (a child learning at his or her parents' side, apprenticeship forms of education, or the experiential and spiritual learning of indigenous people), ecological education could be said to predate schooling itself. As with ecophilosophy however, while the ideas may have been in existence for a long time, ecological education didn't emerge as a field with discernible boundaries until the 1990s.

in the field would take up and elaborate these interpretations as would scholars in a variety of disciplines.

While all ecological education emerges from the tenets of ecophilosophy, the interpretation of those ideas, the area of focus and the pedagogical approaches vary widely from one ecological educator to the next. Below, I have provided an outline of the major theorists in ecological education and their pedagogical focus. Following this discussion, I have outlined the typical sites in which ecological education can be found.

Surveying the Landscape

Cultures of Schooling, Schooling of Culture: The Implicit Curriculum - Chet Bowers

Chet Bowers, one of the earliest and most prolific writers in the field of ecological education, in the introduction to *Education, Cultural Myths and the Ecological Crisis* (1993b), states very succinctly the thesis which underlies his work:

If the thinking that guides educational reform does not take account of how the cultural beliefs and practices passed on through schooling relate to the deepening ecological crisis, then these efforts may actually strengthen the cultural orientation that is undermining the sustaining capacities of natural systems upon which all life depends. How our cultural beliefs contribute to the accelerating degradation of the environment... is the most fundamental challenge we face. All other social and educational reforms must be assessed in terms of whether they mitigate or exacerbate the ecological crisis. (p. 1)

In this statement, Bowers articulates the two themes which I see running throughout his writing and teaching. First, western cultural beliefs are instrumental in the degradation of the natural environment. Second, those cultural beliefs are encoded in all aspects of our day to day life and are therefore continuously acted upon and promoted even when they are quite transparent. Bowers concerns himself, primarily, with the encoding of cultural beliefs in our thought patterns and language, paying particular attention to the

metaphorical nature of language (1993a, chap.2; 1993b, chap.4). He also looks, however, to the ways in which cultural understandings form the implicit curriculum (Eisner, 1985, chap. 5) which is taught both through the curricular artifacts which educators choose and through the patterns of classroom communication in which we take part (Bowers and Flinders, 1990).

The role of education in the amelioration of the environmental crisis, therefore, is to make explicit the cultural assumptions which are embodied in our day to day interactions and speech, problematize these assumptions, and offer alternative views which are based in more environmentally-benign assumptions (such as indigenous perspectives). While Bowers is concerned with the processes of learning, his goal is to raise those processes up to the level of consciousness, and make them the subject of discussion. Through doing so, cultural assumptions become topic, and ecological education takes place through educational content.

Education for Sustainability and the Environments of Schooling - David Orr

David Orr, the other dominant writer in the field of ecological education also concerns himself with the content of educational programs. He questions the subject matter which needs to be taught in order for students to learn to live sustainably. Orr (1992) suggests that education for sustainability will ultimately rest on six foundational ideas:

1. All education is environmental education.
2. Environmental issues are complex and cannot be understood through a single discipline or department.
3. For inhabitants, education occurs in part as a dialogue with a place and has the characteristics of good conversation.
4. The way education occurs is as important as its content.
5. Experience in the natural world is both an essential part of understanding the environment, and conducive to good thinking.

6. Education relevant to the challenge of building a sustainable society will enhance the learner's competence with natural systems. (pp.90-2)

In practice, Orr's work focuses most strongly on the physical environments of schooling. His purpose seems to be two-fold. First, in suggesting that "landscape... shapes mindscape" (1992, p.130), Orr is not referring only to natural landscapes. He is also concerned with the landscape of education and particularly higher education institutions as Weston (as cited in Roszak, 1992) describes them:

I think it is not surprising... that much of the environmental ethics offered by contemporary philosophers is very often the most abstract, wholly intellectual construction.... How many times I have walked to my evening classes watching the blazing Long Island sunset, only to lose sight and thought of it as I am pulled into our windowless lecture building - even as I plan to discuss the values of nature! But what the literature offers fits the building, not the sky the building hides. (p.311)

Orr's groundbreaking project at Oberlin College in Ohio, is an attempt to offer a building which embodies environmental integrity. He has designed the environmental building at this college to be a place in which students have a moment to moment connection with the natural processes of their existence.

But the point here is not only aesthetics or only an alignment of physical space with mental space. Rather Orr is concerned that "students taught environmental awareness in a setting that does not alter their relationship to basic life-support systems learn that it is sufficient to intellectualize, emote or posture about such things without having to live differently" (1992, p.91). This comment points to his second and perhaps more central concern with the physical environments of schooling.

Whether in the specially designed building at Oberlin, or on college campuses across the country, Orr urges educators to help students to undertake resource inventories of their schools, thus becoming more conversant with their ecological footprint (Wackernagel & Rees, 1996). If students can begin to understand where their water and energy come from, where their waste goes, which resources they are using up on a day to

day basis in schools, where those resources come from and what the impacts of using those resources are, then they will become more aware of their continuous relationship with and reliance on the natural environment. Furthermore, they will begin to learn sustainability practices which they can carry with them to inform the rest of their lives.

Through developing an understanding of the natural sources of our existence, Orr accomplishes several things. He provides the functional skills of self-sufficiency which are frequently lacking today. Along with these skills, students develop a knowledge base about ecological technology, an understanding that there are alternative ways of living and an ability to question current practices. From an ecophilosophical point of view, Orr's methods also dramatically alter a student's relationship with the natural environment. A student who is tending to the greenhouse which acts as a wastewater treatment plant for the college, learns to live with nature in a give and take relationship, rather than being in control of nature or being in the position of central importance. An ecological mindset is thus developed through the technical and scientific work.

Character of Education - David Jardine

Jardine⁶⁰ concerns himself with the mood and tone of education, and their effects on our ecological mindset. He is concerned that the skitterish nature of modern education - running from topic to topic, only skimming the surface of ideas, never slowing down or going deep, a sense of "pedagogical hyperactivity" (Jardine, 1996, pp.47-55) - produces a mindset and a way of being in the world which is decidedly unecological. He suggests that the character of education needs to change if we wish to develop a more fine sensitivity to the world, an ability to live more deeply, thoughtfully and ecologically.

⁶⁰While Jardine is rarely included in the genealogy of ecological education, his work offers a strong contribution to the field. I believe that his omission from the field has two causes:

1. Being a Canadian educator places his work more on the margins of ecological education which is taking place predominantly within the United States and United Kingdom.
2. His self-identification as a philosopher rather than an environmentalist places his work outside of the knowledge of most scholars in the field of ecological education.

Jardine turns to the rhythms of nature as a model for pedagogical mood and pace. Perhaps, he suggests, through embracing the cyclic, meandering, hushed and clamorous tones of nature, we will, in turn, embody an environmental ethic.

But Jardine is not primarily concerned with the effects of pedagogy on sustainability. As an interpretive philosopher, he is interested in reading the signs which lay deep within pedagogy. He looks for eruptions of the wild in children, in teachers and in our work together, suggesting that the wild aspects of self are inescapable, as they are always and already within us. Jardine points to these signs of life in the curriculum as he points to the signs of ecological disaster within educational work, helping educators to develop deeper knowledge of the ways in which we live out a sense of connectedness or disconnection within our daily lives in schools.

Education of Character - Wendell Berry

While Jardine is concerned with the character of education, Wendell Berry is concerned with the education of character. Although he's not an educator per sé, Berry's (1977) suggestion that "the possibility of the world's health will have to be defined in the characters of persons" (p.26) has profound pedagogical implications.

How do we teach in a way in which the child, the teacher, the educational community, the topic and the earth are respected and have a sense of dignity? How do we, through the discipline of education, come to understand our place in the world, a place which is "limited by responsibility on the one hand and by humility on the other" (Berry, 1983, p.55)?

Through pointing to these questions, Berry's work suggests a pedagogy which embodies an ecological way of being through its demeanor, through its respectful attunement to subject matter and through the pedagogical relationships which are lived out in the classroom.

Through this brief outline of the work of Bowers, Orr, Jardine and Berry, it becomes apparent that ecological educators interpret the demands of ecophilosophy in different ways. As a result, not only does the content of ecological education differ from one educator to another, but ecological education moves beyond a subject area to be a way of understanding and living out the goals, content, methods, implicit messages, tone and character of pedagogy.

The Practice of Ecological Education

In 1999, the first book on ecological education practice was published⁶¹. In *Ecological Education in Action*, Smith and Williams provide write-ups on a variety of ecological education programs at both the K-12 and higher education levels. They suggest that ecological education is based in the following goals:

1. Development of personal affinity with the earth through practical experiences out-of-doors and through the practice of an ethic of care.
2. Grounding learning in a sense of place through the study of knowledge possessed by local elders and the investigation of surrounding natural and human communities.
3. Induction of students into an experience of community that counters the press toward individualism that is dominant in contemporary social and economic experiences.
4. Acquisition of practical skills needed to regenerate human and natural environments.
5. Introduction to occupational alternatives that contribute to the preservation of local cultures and the natural environment.

⁶¹Bowers' (1995) book, *Educating for an Ecologically Sustainable Culture*, contains one chapter entitled "Educational Models of Community and Environmental Renewal", in which he describes three ecological education programs. The book as a whole, however, is more concerned with the theoretical underpinnings of ecological education.

6. Preparation for work as activists able to negotiate local, regional, and national governmental structures in an effort to adopt policies that support social justice and ecological sustainability.
7. Critique of cultural assumptions upon which modern industrial civilization has been built, exploring in particular how they have contributed to the exploitation of the natural world and human populations. (pp.6-7)

This recent attempt to define the field and provide models of practice does not imply that ecological education programs didn't exist before 1999. Rather, ecological education has existed outside of the purview of mainstream education for a couple of reasons.

First, many ecological education programs take place within specialized institutes which are only known to those people who actively seek out this information and are already connected into the alternative media in which such programs would be advertised. The Institute for Deep Ecology Education, for example, has been offering summer workshops in the field for a number of years. Similarly, the Teton Science School in Wyoming has offered summer programs for teachers on place-based learning.

Second, ecological education programs tend to operate on a grassroots level. That is, one teacher in one school who is interested in one aspect of ecological education will develop a program or take up an ecological approach to teaching within his or her own work. As such, there is no cohesive vision nor uniform approach to ecological education. The central focus of an ecological education program at one school would not even be a topic of consideration for another program. Ecological education, therefore, resists becoming a movement. This situation is not problematic in itself, but it implies that there is less of an ability to systematize or conceptualize the field, and therefore the amount of writing about the field within educational and academic circles is reduced.

Furthermore, because of the grassroots nature of the movement, courses and entire programs exist without the knowledge of anybody outside of the individual school.⁶² There

⁶²For this reason, the publication of *Ecological Education in Action* was a very important event which may indicate a turn in the field. No longer do ecological educators have to do their work in isolation, reinventing the wheel for each new program. Rather, they can begin to learn from each other's work and share ideas.

is a proliferation of work in the field, but very little communication through which educators can become aware of each other's work.⁶³

Ecological education also occurs in specialized schools such as the Petrolia School, a tiny, community school in California (Smith, 1995). On occasion, programs are developed which are not tied to any one school and therefore have broader distribution and currency. The Foxfire program (Wigginton, 1985) is the most widely known program of this type. Common Roots is a smaller example of a program which has left its initial ties with one school to provide a program which has been implemented in schools across the United States. Beginning with an elementary school in Vermont, the Common Roots program bases the entire K-6 curriculum around the school garden, thereby "reconnecting schools to the cultural and natural heritage of their community" (Food Works, 1995).

In 1997, a group of educators at the University of Calgary met to discuss the potential of ecological education for the local context. Initially the group's goal was to explore the possibilities of establishing an environmental charter school in Calgary. Quite quickly, however, the meetings turned into a thinktank in which the group explored values and philosophies, attempting to pin down the essence of what ecological education could look like. The result, outlined below, is a wish list for ecological education:

I. Values which Underlie Education

1. True to World - depth and meaning; questioning; facing reality; complexity; real work
2. Connections - relationships; interconnectedness; community; elders / ancestors;
integration
3. Joy in World - sacred; joy and pleasure; wonder and intrigue; appreciative; exploration;
following interests

⁶³Alternative education publications such as *Paths of Learning* are helpful in informing educators about alternative programs including ecological programs. The Place and Community discussion group on the internet also reveals much work that is being done by individual educators in the field. Please see the reference list for information on both of these sources.

4. Nurturing - honouring students; safety, support, compassion; respectful; listening to each other, to earth; counteracting alienation - belonging
5. Knowing Where Are / Being Fitting - importance of place; contextualized; local; subjects as placed; responsive to situation
6. Conscious Living - slowing down and listening; simplicity; mindful
7. Rigour - discipline, hard work; commitment to topic and each other; knowledgeable
8. Empowerment - confident in own abilities and voice - practice skills; decision-making capabilities; risk-taking
9. Self-Understanding - self-discovery; reflection
10. Diversity - honouring truth of other ways - creative expression, etc.: honouring student experience
11. Character - wholeness; humility; integrity; non-harmful; responsibility; ethics not rules
12. Learning and Teaching Process - learning on-going; discussion / dialogue; congruence between process, language, method and goals, means and ends; education not commodity or business but human

II. Teaching Approaches

1. Work in Community
2. Ritual and Ceremony
3. Time Outdoors
4. Community into Classroom
5. Real Work Projects - Learning through Living
6. Apprenticeship / Mentor
7. Service to School, to Community
8. Community Meeting / Guest Speakers

III. Educational Content

1. Conceive of School Subjects Ecologically

2. How to Deal with Challenges, Ambiguity, Uncertainty
3. Live Simply
4. Understanding Cultural Assumptions - Critical Thinking - Questioning Worldview
5. Understanding Roots and Responsibility to Them
6. Experience Other Possibilities / Belief Systems
7. Political - Civic Virtues - Democratic Values
8. Self-Sufficiency / Sustainability Practices
9. Direct Connection to Life Sources
10. Studies of Environment

IV. Program Structure

1. Integrated Subjects
2. Multi-Aging
3. Assessment and Testing as Learning Opportunities
4. Blocks of Uninterrupted Time

V. School / Educational Environment

1. Ecological Infrastructure
2. Discussion and Dialogue in Decision-Making
3. Teachers Committed to Continued Learning, to Conscious Education and to Working through Educational Challenges as a Community

Ecological Education and the Ecological Self - Theory

My own version of ecological education has been influenced by all of the educators listed above (Bowers, Orr, Jardine and Berry) and also by the fields of buddhism and the work of Thomashow (1995; personal communication 1988-90) on ecological identity. As

with the field of ecophilosophy, my interpretation of ecological education does not turn its back on its roots but focuses more specifically on the ecological self.

My turn towards the ecological self within ecological education has a similar derivation to my turn towards the ecological self within ecophilosophy. That is, I was concerned that ecological education which is based on the more broad tenets of ecophilosophy had two possible avenues for practice which both seemed to be lacking in their potential to help students to internalize ecological understandings.

First, ecological education could engage in an intellectual conversation of the ideas of ecophilosophy. A critique of modernity, a presentation of alternative visions, an exploration of the implications of ecophilosophy could all enter into the discussion. While the teaching approach need not be presentational, and could in fact be quite experiential, the work would nevertheless remain on the level of the intellect. Embodiment of the ideas would be difficult and deep knowledge would, therefore, not likely emerge.

Second, the ideas of ecophilosophy could be taken on in a superficial way as part of pedagogical practice. For example, while LaChapelle (1988, 1994) provides deeply grounded reasons for the importance of ritual in daily life, ritual can be taken up in the classroom without a good understanding of the purposes which ground the practice. Similarly, place-based learning has become the most written about and practiced form of ecological education, but the writing about the purposes which ground pedagogies of place is highly unsatisfying. Romantic notions of place are provided rather than critically engaging in our relationship with our home-place. Mobility is typically seen as bad and locality as good, but these notions are rarely problematized. Why is learning in place and learning about place important? Without this critical conversation and pedagogical grounding, I fear that ecological education will just become the latest trend in education and will end up betraying the roots out of which it has slowly and strongly emerged.

At the same time, I believe that the reason that ritual and place, and other ecological education notions such as community, relationship, deep engagement, holism, authenticity and real-world connections are important is because they provide the conditions within

which we can most easily connect with the ecological self. For example, the importance of community does not lie, I believe, in a romantic notion of sharing and connection. Community is important because within a strong community, there is the support for diversity, the safety to pursue one's own vision, the sense of limits of expression and responsibility of action, and the resistances of conflicting visions which enable a good and true definition of self to emerge. A focus on the ecological self, therefore, doesn't deny the already existing notions of ecological education but enables them to emerge in a grounded way.

Ecological Education and the Ecological Self - Practice

Ecological education which focuses on the ecological self can take one of two forms. Most of the educators who were interviewed for this study engage in the first version of this work: attempts to connect students with their ecological self. As stated above, through encouraging a deep engagement with material (Emma Applegard), through encouraging relationships in the classroom (Jamie Crowe), through encouraging creativity and humour (Sam Barlow) and critical reflection (Lindsay Naylor), a connection to the ecological self is facilitated. Ritual, time spent in nature, and exposure to work which emerges from the ecological heart (profound writing, art, music) are other ways to encourage this connection.

My own work in the field is rooted in the belief that we are all, already, ecological beings, and that we only need to quiet the noise which distracts us from this realization of self. As with Johanna Fried's approach to education, therefore, my own version of ecological education focuses less on encouraging connections with the ecological self and more on discouraging disconnection from this profound sense of being.

These disconnections happen on a variety of levels. On a personal level we disconnect from the ecological self whenever we are dismissive of our true reactions to the world and engage in the tyranny of "should". On a philosophical level, there is a

disconnection when we impose conceptual frames onto the world which are in opposition to the way in which the world actually unfolds. For example, believing that learning must occur without failure, that life should be problem-free, that we should be in control of our destiny, are all philosophical forms of disconnection from our ecological self because they are based in a denial of lived reality. On a political level, disconnection from the ecological self occurs when assumptions which form our current political realities are accepted as given. For example, believing that we must learn more information at a faster rate, that we must become more technologically-literate in order to be competitive, or that school rankings are an essential indication of the efficacy of education, are all examples of buying into the political agenda whether or not it speaks to our own deep truth and sense of fulfillment in the world. Furthermore, disconnection through political means can occur when issues are raised to the level of debate but the issues themselves are premised on ecological disaster. For example, we can openly debate about the ownership of human genes or the benefits of genetically-modified food, but the debates themselves could be viewed as a turn away from ecological sanity. Finally, disconnection can occur on the professional level. In the case of education, these disconnections exist when we believe that all students leaving the classroom should have an identical understanding of a topic, or that knowledge can be transmitted and received and therefore information will be obtained in a given time period, or that only rational forms of knowledge are valid.

These examples are all dishonourings of the truth of our being, the way in which we actually experience ourselves in the world. Ecological education which strives to discourage disconnection from the ecological self, turns students back to their experience of the world again and again and again. The ideas provided above are right or wrong only in so far as they agree with or disagree with that experience. Developing a fine and accurate attunement for true experience of the world, therefore, is the groundwork of ecological education which is based in discouraging disconnections from the ecological self.

Appendix A3 - Ecological Education and Environmental Education

Environmental Education - A Brief Synopsis

In a 1987 article, Australian environmental educator Ian Robottom describes environmental education as education which is *about*, *in*, and *for* the environment (p.24). While this provides a good, broad definition for environmental education, I would argue that while environmental education can be *in* or *about* the environment, *all* forms of environmental education are *for* the environment.

This point of view can best be seen by turning to the United Nations Environment Programme documents which defined the field of environmental education⁶⁴. According to The Belgrade Charter of 1976 (as cited in North American Association for Environmental Education, 1996),

the goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones. (p.1)

Out of this Charter came the Tbilisi declaration in 1978 (as cited in North American Association for Environmental Education, 1996) which listed three objectives for environmental education:

⁶⁴These documents arise out of the first two international conferences on environmental education which attempted to define and lay out some common goals for the field. Environmental education, however, had been in existence in a variety of forms for many years prior to these conferences. Beginning with "nature study, outdoor education, and conservation education" (Federal Coordinating Council for Science, Engineering, and Technology as cited in National Environmental Education Advisory Council, 1996, p.3), environmental education has played a large role in non-formal education since the late nineteenth century through such organizations as the Boy Scouts. According to Goodson (1993), writing from a British context, environmental education made its way into the school system, emerging out of the three pillars of rural education, geography and biology, in the 1960s. In the United States, the National Association for Environmental Education (now the North American Association for Environmental Education) was established in the late 1960s providing a means for educators in the formal and non-formal sector to come together to discuss issues of concern and share ideas within environmental education. The establishment of their journal, *The Journal of Environmental Education*, in 1969, provided a forum for discussion for academics involved in the field.

1. To foster clear awareness of and concern about economic, social, political, and ecological interdependence in urban and rural areas;
2. To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment;
3. To create new patterns of behavior of individuals, groups, and society as a whole towards the environment. (p.1)

These documents clearly suggest education *for* the environment. While the practice of environmental education has taken divergent paths since these initial documents, work in the field has remained faithful to these original goals. The various approaches to environmental education which currently exist, I suggest, are all rooted in a particular understanding of the "environmental problem". With a desire to improve environmental conditions, each interpretation of the environmental crisis, has led to a different form of environmental education, as indicated in Table A1.

When viewed through this lens, ecological education can be seen to be a type of environmental education. That is, ecological education is rooted in a concern about environmental conditions and therefore is education which is *for* the environment. The particular emphasis of ecological education is related to its understanding of the root of environmental problems, that is, the underlying assumptions and unquestioned priorities of western culture.

Table A1.
Approaches to Environmental Education and their Underlying Assumptions

| Approaches to Environmental Education | Definition | Underlying Assumptions |
|--|--|---|
| Ecological Concepts | A study of the processes which govern natural systems. Includes study of such concepts as energy flow, cycles, diversity, community, interdependence, change and adaptation ⁶⁵ . | Humans would be less destructive of the natural environment if we came to understand our own embeddedness in the natural systems which govern this planet. A study of the ways in which ecosystems work, and the ways in which humans are dependent on and enter into those systems, will provide a greater sense of responsibility for maintaining healthy ecosystems. |
| Environmental Issues - Scientific Aspects | A study of the science of environmental problems or pollution incidents. Examples include learning about the chemical processes which create acid rain or ozone depletion or about the effects of toxic chemicals on a water system. | Greater understanding of the tangible facts of environmental problems will provide sound evidence of problems and will guide the search for solutions. |
| Environmental Issues - Social Aspects | A study of the social aspects of environmental issues, focusing on the complex and dynamic interplay of politics, economics and culture. This approach also concerns itself with the viewpoints, beliefs and interests of the various "stakeholders" who are involved in an environmental issue. | Through learning about the social aspects of environmental issues, students gain a more complex understanding of the issues and their embeddedness in larger social systems, as well as developing the skills and attitudes which are required to work towards solutions. |
| Outdoor Recreation | Development of the skills of outdoor recreation such as canoeing, skiing, hiking. | Through becoming actively involved in the out-of-doors, students will develop a sense of kinship with nature, and a desire to protect natural habitats. |

⁶⁵These particular concepts reflect the EC-DC-IC-A learning outlined in the Sunship Earth program (van Matre, 1979, pp.64-8).

Table A1 (cont.).
Approaches to Environmental Education and their Underlying Assumptions

| Approaches to Environmental Education | Definition | Underlying Assumptions |
|--|--|---|
| Natural History | A study of the components of nature including the study of plants, animals, geology, hydrology, atmospheric conditions, etc. | Greater knowledge of the components of nature will provide an entry way into a deeper relationship and greater affection for the natural world and will thereby develop an ethic of care for the planet. |
| Nature Appreciation | Creative and sensory experiences in nature. | Through developing an affective relationship with nature, students will feel a bond and a familiarity with the natural world which will increase their desire to protect natural areas. |
| Environmental Lifestyles | A study of the actions which individuals can take to live more lightly on the earth including recycling, composting, reduction of water and energy use, and alternatives to vehicle use. | Based in the belief that we are all complicit in environmental problems, and that each individual can make a difference. Seeks to help develop environmentally-conscious habits in day to day life. Popular approach over the past decade. |
| Advocacy | The study of methods to create environmental change through the political system. It aims to help students to voice their opinions on controversial issues and to understand the ways in which they can create change within a democratic system. Involves students with actions such as writing politicians or industry officials, boycotting products and developing educational campaigns to inform the community about environmental issues. | Based in a strong belief in the democratic process and in the belief that environmental problems must be addressed through public awareness and consequent systemic changes. Some educators believe that this controversial approach doesn't have a place within the school system while others believe that education and advocacy actually work at cross purposes ⁶⁶ . |

⁶⁶See Jickling (1991).

Yet, while ecological education and environmental education both begin with a concern about environmental deterioration and share the goals of environmental sustainability, their different interpretation of the "environmental problem" results in very different forms of education. Perhaps the simplest way to understand this distinction is through an analogy.

We can liken the degradation of the natural environment to the degradation of the health (emotional, physical, spiritual, intellectual) of a person who is involved with substance abuse. In order to move to a place of health, the addict must arrest his destructive behavior, that is, his use of alcohol or drugs. If, however, he only stops the behavior without exploring the conditions which have led him to the behavior in the first place, then he has not truly come to a place of health, and is likely to fall back into old destructive behavior patterns.

Environmental education focuses its attention on the first step of this process. Through providing more information, through developing an affective relationship with nature, through increasing an understanding of human embeddedness in natural cycles, environmental education hopes to wean society away from environmentally destructive behaviors. Ecological education, on the other hand, is concerned with understanding and working through the assumptions, beliefs, despairs and priorities which have led to the destructive behavior in the first place. This relationship is depicted in Figure A1.

Environmental education, therefore, focuses exclusively on the natural environment and the human relationship with nature. Ecological education, however, has far ranging concerns. At times, the content of ecological education may not appear to have any direct link to the literal environment.

Furthermore, since ecological education is a teaching method as well as a subject area, this method can be applied to any topic, some of which are not in any way related to environmental work. Finally, through the use of the ecological lens, discussed in Chapter Two, the aim of ecological education is to take up all aspects of life in an environmental

way. For these three reasons, environmental education may view ecological education as a betrayal of environmental work because its focus ranges far from environmental topics.

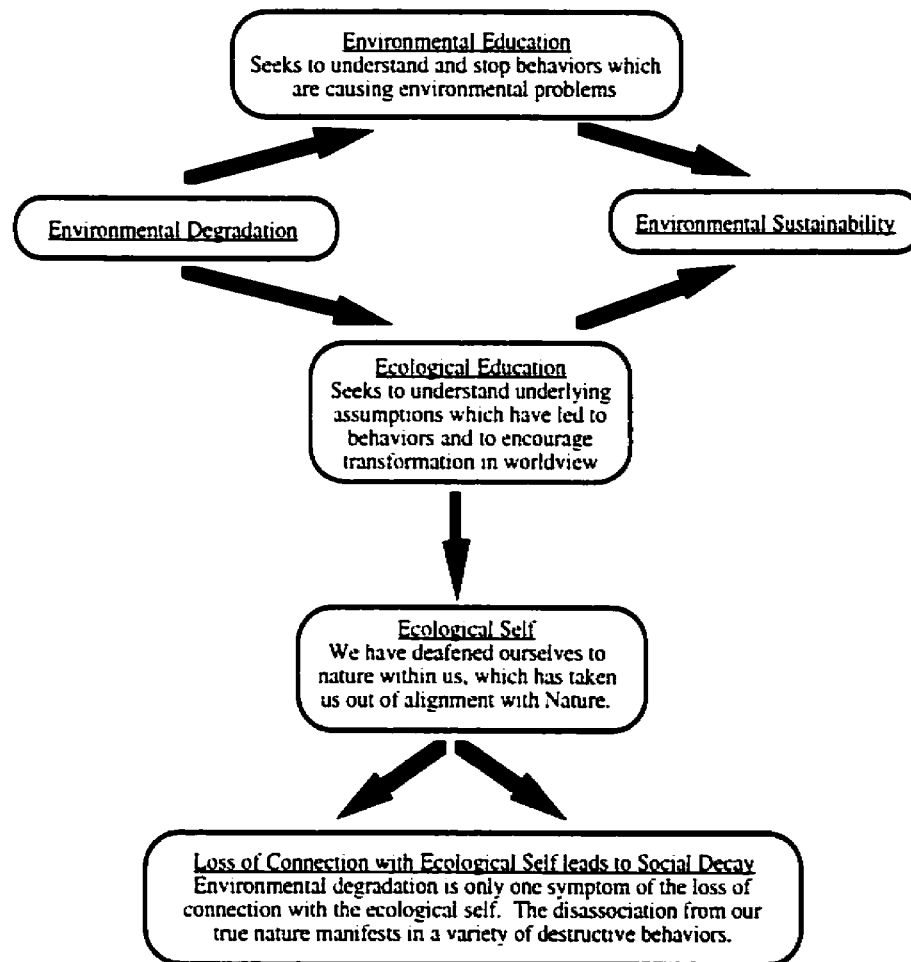


Figure A1. Relationship between Ecological Education and Environmental Education

Although both forms of education are interested in environmental amelioration, the work of environmental education is more immediate and short term. By focusing on underlying causes of environmental problems, ecological education is slower, more

difficult and takes longer. The alterations in behavior which ensue, however, are intended to be deeper and longer lasting.

While environmental education can think it strange that ecological education doesn't focus on nature *per sé*, and ecological education can consider environmental education as superficial in its read of the problem, the differences outlined so far, are more cause for confusion or misunderstanding than they are reasons for antagonism. There are, however, differences in belief which are inherent within these two types of education which have the potential to create tensions.

Environmental educators can believe that ecological education is unenvironmental because it may betray environmentally correct actions. For example, in Chapter Two, I suggested that ecological education uses the ecological lens to evaluate pedagogical concerns (curricula, teaching methods, activities) by asking the question, "does this approach sustain, affirm, or add meaning to life?". I mentioned that this question would cause us to change the ground on which the discussion of educational technology was based. But I also suggested that, for ecological educators, this lens is applied to all facets of life. What happens when this lens is applied to environmental activities?

Looking through an ecological lens, it is possible to suggest that recycling is less environmentally sustainable than throwing waste into the garbage stream. If recycling occurs only as a result of bullying; if the impulse to recycle arises only to assuage one's own guilt or to keep up with the neighbour's sense of political correctness; if sorting the items increases stress levels by adding one more task into an overly busy life, then the psychological deficit which is created may be more environmentally harmful than the increased waste load to the landfill. Through feeling beaten up and full of self-reprimand, the ability to experience joy in life and feel a sense of connectedness to creation may be diminished. While recycling is, all else being equal, a more environmentally-benign action, circumstances could cause it to be more detrimental. From an environmental education position, advocating recycling is always correct, and ecological education's suggestions otherwise would be seen as a betrayal of sustainable living.

As well as causing ecological educators to turn away from "environmentally-correct" behaviors, the ecological lens may cause ecological educators to turn away from the principles of good environmental education. For example, "good" environmental education tends to be activity-based, outdoor-oriented and experiential (North American Association for Environmental Education, 1996). Ecological education will use these methods when appropriate but not as guiding principles. From an environmental education perspective, ecological education is, therefore, not rooted in appropriate pedagogy. Ecological educators would counter that they don't hold tightly to any one form of education, but base their educational approaches in a responsiveness to the situation.

From an ecological education perspective, "environmental education sometimes seems to convey an understanding of the world which undermines the deeply relational, deeply sensuous immediacy of our lives as and with other Earthly beings" (Jardine & Pivnick, 1997, p.160). There are several concerns embedded in this statement.

First, through its interest in edutainment and activity, environmental education can be seen to skitter over the surface of topics, betraying the complexities of the world which ecological education attempts to hold open. Ecological education believes that honouring these complexities is necessary in order to deeply engage in and face the realities of life.

Second, through its reliance on moral exhortation and reprimand, environmental education may, at times, fail to "address the public with any conviction that human beings can be trusted to behave as if they were the living planet's children" (Roszak, 1995, p.2). In so doing, environmental education removes humans from the realm of creation and suggests that we aren't in fact ecological beings. Not only does this stance imply that there is no point in turning within because we will not find anything there which coheres with the rest of creation, but it implies that while we should enact generosity and care towards the rest of creation, humans alone aren't worthy of such treatment.

Third, environmental education often implicitly embodies many of the qualities of modernism which ecological education finds environmentally problematic. For example, in *Education, Cultural Myths and the Ecological Crisis*, Bowers (1993b) provides a critique

of the anthropocentrism which is found in school textbooks. The anthropocentrism which he, and other ecophilosophers, find problematic is found throughout environmental education writing and programs as well. For example, Metzger and Whittaker (1991) end their introduction to their environmental education text with this reminder: "Remember, this planet is yours - this planet is [your children's] - this planet is mine" (p.14). The sense of ownership and control conveyed in this statement is the sense of anthropocentrism which ecological education finds so problematic.

Finally, environmental education involves the work of "becoming", whereas ecological education involves the work of "being". From an ecological education point of view, the world changes just by honouring more strongly who we deeply are. One person after another turning within and living in a state of generosity and humility is all that is required for sustainability.

Environmental education, on the other hand, wishes us to become something different from what we are. It is no surprise that environmental educators who are looking for new approaches to the field turn their attention away from positivism towards critical pedagogy (Fien, 1993; Robottom & Hart, 1993). Environmental education sets for itself an agenda of transformation. Moving on, banishing the negative, overcoming our inclinations.

Ecological education, based in a more kind interpretation of humanness, sets for itself an agenda of being more wholly and clearly and truthfully and gently in place, where we currently are. Digging deeper, settling in, trusting the good.

From an ecological education perspective, environmental education attempts to cut off our roots, betray tradition and take us away from our truth. From an environmental education perspective, ecological education is passive and quaintly naive, not creating substantial change.

Currently, ecological education has not made a big enough splash in the field of environmental education for these tensions to surface. As the field gains prominence, however, environmentally-concerned educators will need to think and discuss, listen and consider, so that two fields of education which are so closely aligned and have the potential

to be mutually supportive, do not end up creating factions of discontent, arguing amongst themselves.

APPENDIX B - MAPPING THE JOURNEY

Appendix B1 - Consent Forms

Sample of Research Participant Consent Form (Student)

Research Project: *Meeting at the Boundary: Ecophilosophical Education in a Modern World*

Researcher: Janet Pivnick
 (403) 220-5636 (403) 277-2013
 jcpivnic@acs.ucalgary.ca
 Room 610, Education Tower, University of Calgary

Doctoral Supervisors: Dr. David Smith Dr. Lynn Bosetti
 University of Lethbridge University of Calgary
 (403) 329-2186 (403) 220-3175

This form confirms the consent of _____ to participate in the research project titled *Meeting at the Boundary: Ecophilosophical Education in a Modern World* conducted by Janet Pivnick, under the supervision of Dr. Lynn Bosetti of the University of Calgary and Dr. David Smith of the University of Lethbridge. This research project is part of a doctoral research study in the Graduate Division of Educational Research at the University of Calgary.

Please take the time to read this consent form carefully and to fully understand the nature of your involvement in this study. If you have any questions about the information supplied below, or would like more details on any aspect of the study, you should feel free to ask. If and when you are satisfied with the information provided and comfortable with being involved with this study, please sign both copies, return one to the researcher and keep one for your own records.

I. Study Purpose

As a response to eroding environmental and social conditions, many writers are proposing a shift in cultural assumptions from modernism to an "ecological paradigm" or "ecophilosophy". While such a shift in orientation has been *suggested*, society still operates within the bounds of modern, industrial ideals. Educators embracing the ideals of an "ecological paradigm" may find themselves at odds with current practices and understandings.

This study is based on the premise that much of what is suggested by an ecological paradigm is very much alive within modernism and needs simply to find its voice. If educators are to assist students with hearing this voice, then ecophilosophy can't be viewed as just a "good idea". The difficulties which arise for students encountering

ecophilosophical ideas for the first time need to be understood as do the challenges encountered by educators speaking across paradigms. This study aims to better understand both groups' experiences of "meeting at the boundary". By gaining a deeper understanding of the challenges on both sides of this educational relationship, educators may be better equipped to act as bridges between these two ways of understanding the world.

II. Participant Selection

Students to be interviewed for this study attended the classes of the educator participants. They have all been exposed to components of and versions of ecophilosophical education. Their instructors have recommended them as being articulate and engaging speakers on the challenges which they faced in being confronted with ecophilosophical ideas.

III. Nature of Participation

Signing of this consent form, commits you to one - one hour interview. This interview will explore your experiences of the particular components of ecophilosophical education in which you have taken part, e.g. specific assignments or activities.

The signing of this consent form indicates your agreement to the above time commitment only. If, however, additional conversations seem warranted and appropriate, and if they are mutually agreed upon, then the possibility remains open to continue the conversations. This possibility will be discussed at the end of the interview, and will require the signing of the addendum at the end of this consent form (below your signature). Any additional interviews will conform to the criteria agreed upon in this consent form with regard to participant rights, anonymity and risk reduction.

IV. Study Benefits

This study is of benefit to the educational and environmental community in gaining an understanding of the challenges of ecopedagogy. Through an understanding of the difficulties which arise for both students and educators engaged in this practice, educators will be better able to design programs which can open up the possibilities of an ecological paradigm for students.

Students participating in this study will have the opportunity to:

- voice opinions of educational processes;
- have their concerns taken seriously and have input into the development of future programs;
- gain a deeper understanding into their own experience and into the intent of the ecophilosophical education which they experienced.

V. Potential Risks and Methods Employed to Reduce these Risks

i) As students, participants may feel a sense of obligation to participate in this study or to provide positive comments about the ecophilosophical education in which they have taken part.

Please note that:

- Your participation in this study is strictly voluntary.
- Your involvement in this study will take place after course completion and after grades have been submitted.
- The objective of this part of the study is to understand *your* experience of ecophilosophical education. Teachers and curriculum developers can better design programs if they understand the *real* concerns and frustrations as well as the positive perspectives of the students who are taking part in these programs.

ii) Participants may have a concern that negative comments will find their way back to their instructor. Unintended breaches of confidentiality *are* possible, particularly if the educational practices in which the students have taken part are unique and identifiable with the particular instructor.

Please note that:

- Responses will only be shared with instructors in an aggregate form.
- All responses will remain confidential as per your instructions on this consent form.
- You may review transcripts and omit comments which are clearly identifiable with you or you may alter the identifying data.

VI. Anonymity / Confidentiality

Information obtained in the interviews will be used in two ways:

- i) the telling of personal stories related to the study topic;
- ii) as data sources to highlight the phenomena under question. This use of material could include brief quotes, aggregate information or the use of ideas which can lend deeper understanding to the topic.

It is understood that my requirements regarding anonymity will be respected in the manner specified below. (Please initial the statement which is appropriate for your participation):

- a) I DO NOT wish to remain anonymous. I would like to be credited for my responses and agree to full disclosure of my identity in i) information gleaned from the interviews; ii) brief quotes; or iii) the telling of personal stories discussed in the interview.

- b) I DO NOT wish to remain anonymous. I would like to be credited for my responses and agree to full disclosure of my identity in i) information gleaned from the interviews; ii) brief quotes; or iii) the telling of personal stories discussed in the interview AFTER REVIEWING the transcript for any material which will be directly quoted.

c) I agree to have personal stories told but I would like to maintain anonymity by the use of pseudonyms and the altering of any identifying data (gender, place of work, etc.). Please note that, while all attempts will be made to ensure participant anonymity, the telling of personal stories may be traceable to the participant.

d) I do not agree to have personal stories used. I would like information from my interview to be used only as a data source which may include the use of brief quotes. Pseudonyms will be used and identifying data will be altered in order to ensure anonymity.

VII. Participant Rights

I understand and agree that:

- My participation is voluntary and I have the right to withdraw from this research at any time.
- The researcher has a corresponding right to terminate my participation in this research at any time.
- I may reconsider this commitment and change it as I see fit by providing written, dated notice to the researcher.
- Anonymity will be respected to the degree and in the manner which I have indicated above.
- All interviews will be audio taped. The audio tapes will be kept in secure storage for the duration of the study, after which time, they will be erased.
- I have the right to review a transcript of my interview at any time after transcription has been completed. Changes may be made to the transcript in order to ensure anonymity.
- I have the right to refuse to answer any question during the interview process.
- I have the right to ask for further details about the study or the nature of my participation in the study at any time.

I understand that the results of this research may be used for publication and presentation to a variety of audiences. I understand that any subsequent use of the data will conform to the criteria agreed upon above. I agree to this additional use of the research data.

Your signature on this form indicates that you have understood to your satisfaction the information regarding your participation in the research project and agree to participate as a subject. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation. If you have further questions concerning matters related to this research, please contact Janet Pivnick at the above numbers. If you have any questions concerning your participation in this project, you may also contact the Office of the Vice-President (Research) (220-3381) or the Chair of the Education Joint Research Ethics Committee (220-5626).

I have read the consent form and I understand the nature of my involvement. I agree to participate within the above stated parameters.

Name (Please Print): _____

Signature of Participant: _____

Date: _____

.....

Interview Date: _____ Interview Time: _____

Interview Location: _____

.....

I agree to additional interview(s) requiring the following time commitment _____

and discussing the following topics _____

Signature of Participant: _____

Date: _____

Transcript Use Consent Form

Research Project: *Meeting at the Boundary: Ecophilosophical Education in a Modern World*

Researcher: Janet Pivnick
 (403) 220-5636 (403) 277-2013
 jcpivnic@ucalgary.ca
 Room 610, Education Tower, University of Calgary

Doctoral Supervisors: Dr. David Smith Dr. Lynn Bosetti
 University of Alberta University of Calgary
 (780) 492-0499 (403) 220-7512

I _____ (*print name*), have reviewed the transcripts of the interview in which I participated for the above named study.

Please check one:

_____ I agree to have any part of the transcript quoted or referred to within the study write-up (dissertation) and in subsequent presentations and publications related to the research.

_____ I agree to have the transcript quoted or referred to with the following exceptions:
 (*Please indicate the number of passages which you would like omitted: _____.*)

(Please enclose the transcripts with the passages to be omitted clearly marked. OR Provide a list of the items which you would like omitted, indicating the page numbers and beginning and ending words for each passage.)

_____ I have enclosed a list of the passages which I would like omitted.

OR

_____ I have enclosed the transcripts with the passages to be omitted indicated.

Signature of Participant: _____

Date: _____

Appendix B2 - Data Analysis and Sample Data

Below, I have provided a step by step outline of the procedures which were taken to analyze the data from interview transcripts to the final write-up of results in Section II of the dissertation. Sample data is included for each stage of the process. This appendix only describes the methods which formed part of the path towards successful analysis. The paths which were attempted and abandoned are described in Appendix B3.

Step One Method

The first step of data analysis involved going through the transcripts with a series of questions in mind. At this point, I wasn't looking for themes, but rather ways to divide the information into more manageable pieces.

The questions chosen emerged from the data itself. I read through sample interview transcripts to determine key questions which the conversations seemed to be answering. These questions were similar though not identical to the questions which had been in my mind when conducting the interviews. The questions for the teacher and student interviews are listed below.

Each question was given a colour code, and I went through the transcripts underlining the responses which were related to each question. I then conducted a computer cut and paste operation so that the comments for each participant related to each question were grouped together. A sample of these responses for one instructor participant and question, and one student participant and question are included below.

Questions for Teacher Transcripts

1. What is the essence of this person's path? What is their truth?
2. What are they trying to achieve? What does ecophilosophy mean to them?
3. What are their personal qualities or personal histories which have put them on this path?

4. What are their struggles?
5. What is helpful in the process? What were pivotal moments?
6. What are the aspects of society which are problematic?
7. What are the assumptions, language, lens through which this person sees the world?
8. What is their process, their practice, their work? What do they see their role and job as being and how do they go about achieving it?

Questions for Student Transcripts

1. What is their truth, their beliefs, their path, their experiences?
2. What is the lens through which they see the world - their underlying assumptions? What are their expectations / understandings of student / teacher / learning?
3. What do they see ecophilosophy as being? What are its goals? What is ecological education?
4. What do they find problematic about ecophilosophy?
5. What do they see as beneficial about ecophilosophy? What has the class given them?
6. What do they find helpful in coming to terms with ecophilosophy?
7. What are their personal struggles with ecological education?
8. What do they see as societal tension points with ecological education? How is ecological education different from traditional education / belief systems? What is problematic in mainstream society? What is difficult in living out ecophilosophy in mainstream society?
9. What did they enjoy about ecophilosophy?
10. What are the obstacles in the way of ecological education?
11. What is the work? How does ecophilosophy play out? What happens in the classroom? What doesn't help in the way its played out? How do they live out ecophilosophy?

Step One Results

Sample Teacher Data - What is the essence of this person's path? What is their truth?

- There's got to be more than this
- We started questioning
- See that everything isn't pure and holy and wonderful
- Why make a big show of it, you know?
- Why focus on that when this is all one needs
- There are big problems going to be coming. And why don't we wake up and kind of see what's going to happen
- Deeper river that was being culled that was saying, "OK I'm going for it, but I don't know why I'm going for it"
- There's got to be more to it than this
- I went more spiritual in my leanings
- How hard it is to raise oneself, if that's what we're here to do
- What got me off the ground was making the decision to want to, you know, get back up again on my own two feet. And not waiting for somebody to help me get off the ground on my own two feet
- What I'm getting, isn't worth what I'm putting out. And what I'm getting is money. And what I'm putting out is my life: "money's really rolling in, but I feel like empty". "Something's not, I don't feel fulfilled in some way". that in a more earnest way got me going on my spiritual path.
- It's kind of connected biological clock
- If I was here for more than to make money and live in a house and have a baby or whatever, like I wanted to know what that was
- The money although it wasn't fulfilling me, although my job was interesting and whatnot, there was a dimension of my being that wasn't being completely nourished by what I was doing and in my external life
- Continual working and training: you have a sense of what your capacity is and something is stopping it from being fulfilled. I knew I needed to address this
- Getting back to "what do I want to do?"
- I just want to know how my mind works
- Not so much an openness to the world, but an authentic openness of myself to the world. So first opening to who I am at I think my deepest, most vulnerable place. And opening to the world from there
- My intention is to be truthful with myself. That's my intention. And to live a life that is true (pause) to the deepest part of myself. That's my intention. (pause)
- By instinct, I guess now, is what I've started to trust.
- I have to do this 'cause I have to be honest to myself and my process in order to be able to. for you to be honest with yourself and your process.
- I have to make it my own. I have to use my own words for this now. it meant taking yet another step inside and trusting my own words; that really has started a whole cycle of trusting my own wisdom. What's always been there but I have always been seeking other teachers, and perspective, advice, direction; now it's time to also bring your own into it.
- I'm slowly trusting myself more: up until now it's been more what work do I have to do; where's the garbage; what needs to be fixed up; if things are livable, then the question becomes so now what kind of a life do I want to live?
- For me that's what's important in life, is to have that contact

- If I give it, then I'm being dishonest and unethical to the teachings. Because I'm giving something very precious to somebody that has no idea of what to do with it, how precious it is
- If I don't make it valuable and important as someone who's been through this process and this journey, if I don't make it valuable and important to myself, and precious, then what's it been about?

Sample Student Data - What do they see as societal tension points with ecological education?

- Even when I went into practicum this past fall, is things are very segregated.
- She had the schedule set out, and you would do math for 45 minutes. And then I felt really rushed to go on.
- The old perpetuation of a system that seems to be working. It's worked for ages.
- It seems like a lot of teachers want to plan for this subject and then plan for that subject.
- I think people can become conditioned to only think about the answers that they're giving. And we, I think we're really fact-based in, unfortunately when we teach kids. We're very interested in the facts. And that's why I, I don't agree with testing a lot of times. Because I think testing is only a gauge in time of where this kid is. And you're only using the things you want them to know, not what they might know about something else. It seems to only be a barometer in time, this issue of testing.
- So this kid here learns what you want him to learn. But this kid here has taken it a step farther and he's learned a whole bunch of other stuff. But yet this kid gets a lower mark. So now he's a "B" student, and this kid, 'cause he learned what you wanted him to learn, he's an "A" student. So why not have kids tell us what they learned? That would seem to be more interesting and indicative. And we preach about, about how we respect kid's individuality in that sense. But it doesn't seem to come true, or through. And these tests that we give kids in grade three, six and nine, they just drive me around the bend.
- I see children, as they're treated very homogeneously. But yet I see children as, it's all on a continuum. So if you take a grade three student, two grade three students, one could be functioning at a level we see as a grade five level. Another kid could be functioning at, like say what we call a grade two level. But we give them the test in grade three, or any test, for that matter. 'Cause he is nine years old. He is in grade three. And I don't see that as very healthy. I see them as moving along.
- A lot of things are done for efficiency purposes and time. And yet we're, some people are very unhappy with the school system. But so much is done for efficiency purposes. So there's a real contradiction here.
- If you take too much time teaching math, you're not going to have much time left for social. And I think that's, that's, that's really viewed like that.
- What I see is that a lot of kids that come out of schools, and I think the, the research can, or the current trends can obviously support this but. Kids aren't very good at social interaction. And us as people now that come through this scientific, modern system, are not very good at building relationships. If you look at divorce rates, child violence, you know, that sort of thing, those kind of trends tell me that we need to work less on facts, and more on relationships and how you can resolve a conflict. And that to me seems like the very root, the very base of what we need in society itself.
- It is prescriptive. But it's also very flexible - that curriculum. But I see a lot of teachers as: if this, this certain activity isn't in the curriculum, or where does it fit in the

curriculum?, then they'll shy away from it. it's a bottlenecking effect. And that happens a lot in classes where people will be planning an activity in a group. And someone has a great idea. But then they say, "OK, how does this fit into the curriculum?" Well, maybe it doesn't right there. But definitely it does as far as the development of the whole person.

- School rewards calm children. It rewards children who can sit in a desk for long periods of time, and take information in. It, what I'm getting at, is we don't reward certain types of personalities.
- We don't reward kids who are, who don't fit into the school the way we have it set up.
- They don't fit right into our system. And in fact we beat them down and we try to mold them into a different way. And we don't respect them very well.
- This whole issue of being respected for who you are in a class. That's been one of my biggest complaints about university. And it's not just big lecture theatres.
- Very seldom do you get respected for, for your beliefs and what not. And one of the, one of my biggest complaints about a university education is that, there's not near enough discussion. And that ties into your own belief system. You could slide through university and, I would almost believe that you could slide through university and not have to say anything in any of your classes.
- In its, in its realistic form, I think this can be quite radical, quite radically different than the classroom in today's school. I think that the big reason why people have a hard time hooking into this is this whole issue of giving up power. I think maybe that's why when someone's introduced to these ideas, I think a lot of people believe that they have to be the controlling factor in classrooms.
- People say kids are hard on other kids. Yeah, but where did they get that from? Like where did they get, I don't think people just grow up wanting to laugh at people that fail. I don't think that. I think it's conditioned.
- There's a lot of stigma put on failure. And so, like you said, failure effects the risk-taking.
- We curse teenagers for being poor decision makers. But we never give them the chance to self-direct or to make their own decisions.
- Hey, all through his life, you've made all the decisions for him. All his teachers have made decisions for him".
- Because they never get that chance, it never gets developed or conditioned so of course they don't want it, take that chance

Step Two Method

With the data grouped by participant and by question, it became apparent when a study participant attached importance to a particular idea. The idea would appear many times in different ways. These recurring themes were deemed to be the essential points for this participant. These essential points were grouped together by question, so that there was now a list of the critical ideas for the study group as a whole (divided according to student questions and instructor questions) related to each question.

Step Two Results

Sample Teacher Data - What is the essence of this person's path? What is their truth?

- There's got to be more to life
- Opening to the wisdom within and living out one's deepest truth
- Trying to maintain that inner core of truth and integrity
- And then trying to explore, flow, open around that
- Taking power back so people can be free
- Needing human contact, reaching out, relationship to stem the loneliness
- Placing yourself in the stream of continuity of life provides comfort
- Self-reliance so not susceptible to power abuse
- Sense of home in nature
- Accepting oneself / accepting others - working through the knots of relationships
- Living in a way that can feel proud of
- Resistance
- Opening to creativity
- Moving into deepening layers of resistance

Sample Student Data - What do they see as societal tension points with ecological education?

- People don't like change. This is different from what know.
- Used to being spoonfed. Now pressure's on you.
- Have to take leap of faith. Not safe.
- Systemic problems. Principals want concrete evidence of effectiveness. Fear for job.
- Afraid to take risks, try something new, look foolish.
- People will get burned because world's still competitive.
- Different from what used to. Hard to shift modes.
- People don't like difference.
- Places where desire for right answers, doesn't matter what else do. Personal not acceptable.
- Things are segregated.
- Just interested in facts.
- Only test what want kids to know, not what have learned.
- Treat people homogeneously. Learn differently and at different rates.

- Constrained by time.
- Box in subjects.
- Intimidated by and restricted by curriculum. So worried about how things fit.
- School only rewards certain types of personalities. Beat down others.
- No respect for who are.
- Requires giving up of power and control.
- Stigma on failure. So don't take risks.
- Don't give people room to self-direct, then angry that don't make good decisions.
- Competitive nature
- Bottom line approach. Will this make a profit?
- Assumption that there's a "right" answer
- Assumption that right answer comes from outside self
- Expert takes charge, takes control and tells others what is needed.
- Important thing is what makes money
- Desire to quantify and box things
- Desire for aggressiveness in business
- Everything's driven by making money
- Frenzy, busyness of life
- Self-focused. If it doesn't effect me, it doesn't matter.
- Insulated. Little human interaction.
- Unaware of our inner selves. Leads to stress.
- So future-oriented, fretting about goals, and not enjoying life
- Learn for exams, not necessarily interested in what learning
- External validation of what's acceptable.
- Expert knows what's right and makes decision for others
- Economically callous about others
- Knowledge that you don't care about, learn because have to get piece of paper
- Only one or two ways to be in society, difficult for people who see or learn otherwise
- People demeaned, victimized by others assuming power
- Supposed to be human computers, spewing out facts
- Only value GPA, not creative thinking
- Brainwashed to listen to authority, not follow own way
- Product oriented
- Evaluation based on deficiency and deferring to authority rather than strength based
- Education without relationships is way of future -> distance ed
- Consumerism
- Social marketing. Lifestyle forced on people.
- Nothing connected. Isolated boxes.
- People not valued. Just there to digest information from someone who knows more.
- Value abstract instead of how impacts people
- People hold strongly to own viewpoints and don't entertain others.
- Self-centred.
- Go along with status quo because it's easier
- Threatened by risk and change
- Rushing so fast don't actually look at things and think.

Step Three Method

Moving from the set of data in Step Two to a series of themes was not a simple task. Many of the abandoned paths of analysis described in Appendix B3 relate to this stage of the process. The method which finally worked involved cutting out each individual point which emerged in Step Two from both the teacher and student responses. The approximately 1500 slips of paper were put into a large envelope. I began to draw out ten percent of the data at a time, grouping like ideas.

After working with the first ten percent of the data, several groups of ideas emerged, and connections between these groups became apparent. After working with the next ten percent of the data, I had an entire intricate web laid out which showed groups of ideas, the threads which linked these various groups, and patterns which emerged among the groupings creating meta groupings. I pulled another five percent of the data to ensure that there were no major ideas which had been missed in the web layout.

With 25 percent of the data categorized, I was able to have a strong sense of the major ideas which arose through the interviews. This web of ideas is depicted in Figure B1. The thematic groupings which emerged were no longer divided according to teacher and student responses, but rather reflected the data set as a whole.

Step Three Results

See Figure B1.

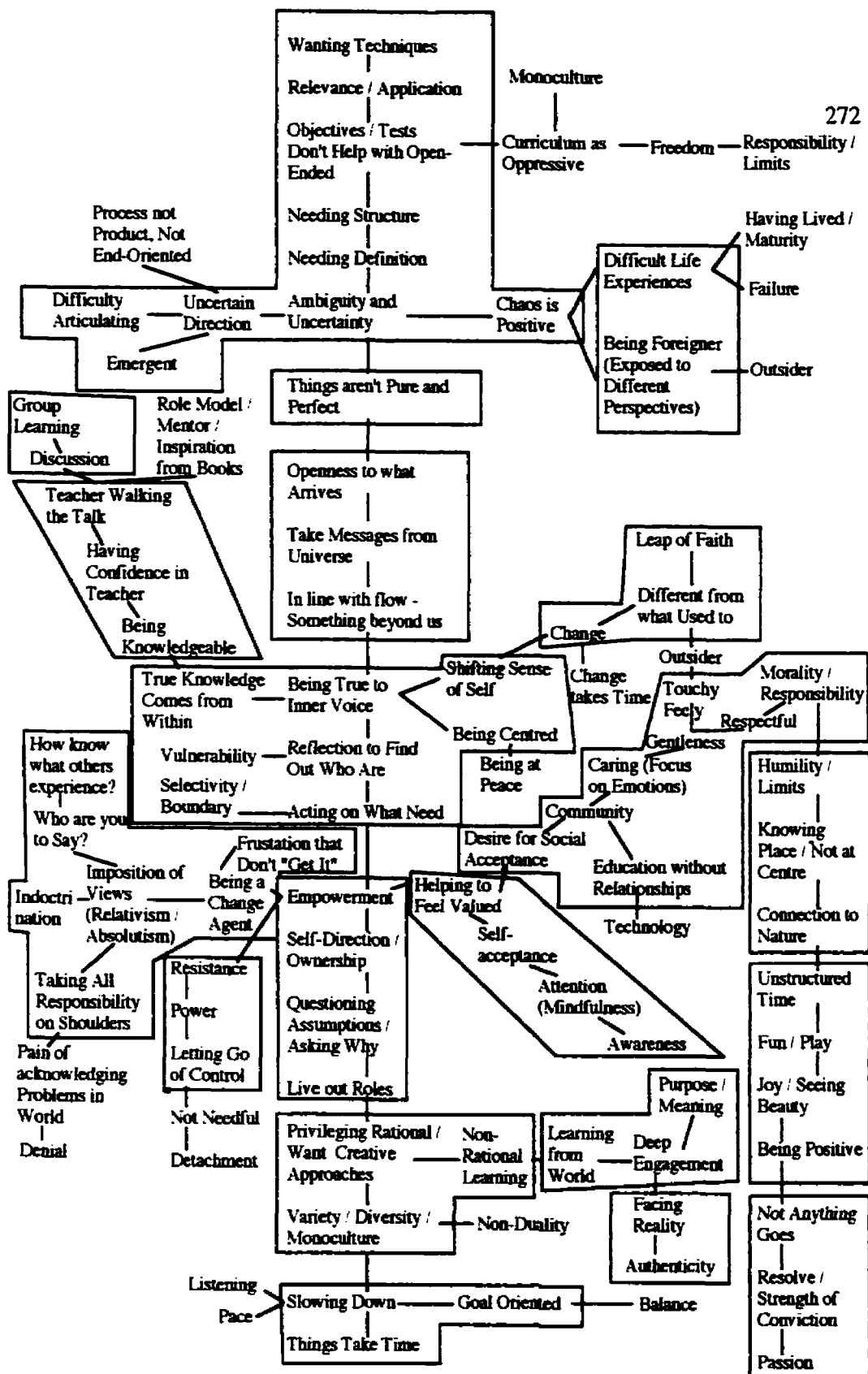


Figure B1. Themes Emerging from Transcripts showing Web of Connections

Step Four Method

The themes which emerged in Step Three were grouped according to similar ideas. These meta groupings are shown as enclosed spaces in Figure B1. Each of these meta groupings was provided with a label to describe their overarching concern. The meta groupings were then divided according to the Love - Wounding - Truth of Wounding - Healing categorization. That is, groups which reflected love of an ecological way of being and which described the benefits of that way of being fit into the "Love" category. Ideas which were a response to the sense of wounding which is experienced in attempting to live ecologically in a modern world became part of the "Wounding" category. Groups which spoke to the challenges with understanding and coming to terms with an ecological way of being and which outlined the reasons for these difficulties belonged to the "Truth of Wounding" category. Finally, groups which were concerned with ways to ease the transition to an ecological way of being formed the "Healing" category.

Step Four Results

Love

1. Passion and conviction in what is right to do:
Not anything goes: Resolve / Strength of Conviction: Passion
2. Gratitude and Appreciation of Life:
Unstructured Time: Fun / Play: Joy / Seeing Beauty / Exuberance -> Wanting Perfection: Being Positive
3. Experiencing Self as Connected into Something Larger:
Humility / Limits: Knowing Place / Not at Centre: Connection to Nature
4. Caring Attitude towards Others:
Desire for Social Acceptance: Community -> Education without Relationships: Caring -> Focus on Emotions: Gentleness -> Touchy Feely: Respectful: Morality / Responsibility
5. Caring Attitude toward Self:
Helping to Feel Valued: Self-acceptance: Attention -> Mindfulness: Awareness
6. Dealing with Real Life and Living Honestly:
Authenticity: Facing Reality
7. Meaningful Life:
Learning from World; Deep Engagement: Purpose / Meaning
8. Being in Touch with Inner Self:
Being True to Inner Voice; Shifting Sense of Self; Being Centred: True Knowledge Comes from Within; Reflection to find out who are -> Vulnerability; Acting on what need -> Selectivity / Boundary

9. Being Open to the Universe:
 Openness to what Arrives; Take Messages from Universe; In line with flow -
 something beyond us

Wounding

1. Struggles with Being a Change Agent:
 Frustrations that don't "get it"; Imposition of Views - indoctrination. who are you
 to say?. how know what others experience; Taking all responsibility on shoulders
2. Struggles with Power:
 Resistance; Power; Letting Go of Control (own power - ego-attachment)
3. Monoculture:
 Privileging Rational / Want Creative Approaches; Non-Rational Learning ->
 Intuition; Variety / Diversity / Monoculture

Truth of Wounding

1. Structure:
 Wanting Techniques; Relevance / Application; Objectives / Tests Don't Help with
 Open-ended Approaches; Needing Structure; Needing Definition; Ambiguity and
 Uncertainty; Chaos is Positive; Uncertain Direction; Emergent; Difficulty
 Articulating
2. Weed-Free:
 Things aren't Pure and Perfect
3. Ownership:
 Empowerment; Self-Direction / Ownership; Questioning Assumptions / Asking
 Why; Live out Roles
4. Time:
 Slowing Down; Things take Time
5. Change:
 Change; Leap of Faith; Different from what used to

Healing

1. Having Lived:
 Difficult Life Experiences; Being Foreigner
2. Sharing of Ideas:
 Group Learning; Discussion
3. Trust in Teacher:
 Teacher Walking the Talk; Having Confidence in Teacher; Teacher Being
 Knowledgeable

Step Five Method

Step Five involved a two part process. First, this step was an attempt to ensure that the themes chosen were comprehensive. I checked through the various ideas and tentative categorizations which had emerged over the course of my doctoral work to ensure that the final themes accurately represented the body of the work, and didn't simply represent the most recent findings. As well as scanning the entire set of transcript summaries, I looked through old notebooks, previous research proposals and dissertation outlines, course planning notes, articles written, presentations given, preliminary chapter notes, files of topic ideas, my candidacy paper, notes from supervisory meetings and earlier speculative categorizations.

After all essential ideas were added to the themes which had been identified in Step Four, there was a honing down process. I discarded any ideas which, while interesting, relevant and accurately representing participant concerns, weren't substantive enough to become part of the write-up of results. The final themes are provided below.

Step Five Results

Love

1. Ecological Educators Understanding of the World:
Standing for Values: Life's Purpose; Appreciation; Facing Reality; Knowledge from Within; Control is Not Possible
2. Value of Living Ecologically:
Feeling Valued and Accepted; Playing; Being Struck by Wonder; Feeling at Ease with Oneself; Being Placed in the Continuity of Creation; Connecting with the More-than-Human-World; Living in a State of Grace; Deep Engagement

Wounding

1. Monocultures
Powers which Oppress; Desire for Acceptance; Not Honouring Experience of World
2. Demeaning of Humanity
3. Not Being Heard
4. Understanding Our Role
5. Inability to See Otherwise

Truth of Wounding

1. Living with Uncertainty

2. Slowing Down
3. Ownership
4. New Territory
5. Comprehension
6. Actualization
7. Vulnerability
8. Contradicts Deeply Held Assumptions

Healing

1. Life Experience
2. Reframing Role
3. Seeking Understanding
4. Decoding Ecological Lens
5. Sharing and Discussing
6. Walking the Talk - Trusting the Teacher
7. Honouring Student Needs
8. Mythologizing Wounds
9. Facing the Truth of the Wounds

Step Six Method

With these themes in hand, I revisited the original transcripts and recoded them according to the Love - Wounding - Truth of Wounding - Healing categorization, and more specifically, according to the themes under each of these categories. The result was a series of quotes grouped together under each theme.

Step Six Results

Sample Data - Truth of Wounding: How do you live with uncertainty?

RH - security of having credentials / labels: "Or maybe it's just my insecurity about, now that I'm in a job that doesn't have a specific credential attached to it that, maybe I don't know something I should know."

LN - makes people uncomfortable to have unpredictable world - have to have confidence: "It made them feel uncomfortable that the world was unpredictable, that your intuition is a really valid way. You have to be pretty confident to say, 'what do you feel about this? Because I don't want to know what you know first. I want to know what you feel. You can think, but you've got to feel first. And then tell me what we know, what are the facts around this.' It's a different way."

LM - lack of guidelines: "She didn't give us guidelines, how long each entry had to be, what it had to be about. It's just, 'write about this course and about the future of education'. And I kind of liked being free like that. Now I think the majority of the students really were very uncomfortable with that, unlike myself."

LM - lack of guidelines: "I want good grades. So I want to know how to get them. And if it doesn't really tell me how I'm going to get an 'A', which she didn't. She just said, 'do your best and you'll get graded. I'm not going to give you a rubric or a grading scheme.' ... One of the people in the classroom did go up to her and said, 'I just need an A- in this class. How do I get my A-?' And what she said [Lindsay] said is just, 'hand in your stuff. If you do good work, you'll get an A-'. And she said, 'well how though? What do I need to know?' 'You need to know how to think'. She couldn't say what you need to know to get an A. Because the whole theory of postmodern teaching, at least a component of, is that there's not a set thing that you have to know. It's just openness, and open your mind, and just letting things fall out and drift in."

LM - what constitutes good work: "I, as a student thought that if I handed in something that was well-written and flowery and deep thought processes, that I would get an A."

LM - no blueprint: "You can't tell people these things because you don't know it because you're learning too. And that's not a bad thing. But you can't say, 'this is the strategy. This is how we're going to train you to teach holistically and open and this leap of faith."

Have fun. Ecological.' There's no blueprint, I don't think for that. And I don't think there ever will be. So then how do you teach teachers to teach like that?"

LM - how know when doing good work: "Now as far as whether I think it's a good job or not, I just get into it when I'm writing. And I can feel that I'm hitting stuff. I can just feel that the paper's flowing: the work is good, I'm touching on stuff that's being discussed in class. And by the end, if I'm feeling good about it, I'll nail a good closing paragraph and I'll be, 'yes, that's an A'. And I don't know really how to describe that. It's just a feeling."

LM - not as organized an approach: "Principals want lesson plans. They want unit plans. They want, 'how are you going to teach the curriculum? How are you going to evaluate?' They want it all planned out. I guess I'm thinking that in a more postmodern approach, you're not as organized. And I don't think that's necessarily a fair comment. But maybe that's how I see it."

JK - difficult without guidelines, not what used to: "Some students really got pissed off. You could see they're upset. I could see how it's hard for a lot of students to take a course that way. Because they're so used to the instructor or teacher saying, 'here's what you have to do. Here's what I want to see. Here's what you get marked on.' It's so linear, laid out. So you could see how a lot of people got upset. Because they didn't know what to do. It's really hard to teach people if they don't know. 'Cause everybody was so used to one way."

JK - not direct, linear goals: "I just don't think that people were used to having everything up in the air all the time. Like a lot of the talks and the lectures were, people might call them spaced out. Some of them might have been, and even I found some of them were, because I'm not totally used to it. It's pretty hard to get used to that. Some people were thrown for a loop, how they had to construct their own knowledge. That happened with everything. 'Well, here's a set of knowledge, skills and attitudes that you're going to have when you're done this course.' They found out that, 'well, I'm going to have to work on that myself.'"

JK - not something to grasp onto - free floating discussions: "Sometimes when you talk about postmodernism, you get into the discussion details about it, and sometimes you lose yourself. You're like, 'well where was I? What was I talking about?' Sometimes it's hard to have something to grasp onto to continue to go back to. You just find you're like the internet. Once you click on one link, you just keep going and going and going. You can never find where you started."

JK - not wanting specific criteria because limits: "I really didn't want specific criteria. Because then all you do when you write is meet the criteria. And maybe go a bit beyond."

NH - what's it mean for something to be valid - p.13, 14, 15, 16

RL - wasn't sure what supposed to take out of material: "I didn't find myself having a great sense of direction in the course. It seemed as though the material if not the readings we had to do, was fairly often well-defined. I guess maybe I did not have a very strong idea as to what I was supposed to take out of the information."

RL - wanting clearer guidelines: "I would define exactly which articles they were responsible for, what assignments and what exams, tests. I would have probably narrowed down the areas of responsibility. I would have said that these things would be tested at this particular point in time. This assignment is derived from these particular articles. I would have defined exactly which material you would be responsible for at any point in time. ... I would have very very set and kind of defined areas of responsibility."

RL - not comfortable with shades of grey: "I would be looking for right or wrong answers. And it seemed as though they didn't exist. And I wasn't comfortable with that. I would ask a question and the question would be put to the group rather than being answered by the instructor. And I found that difficult. ... I was always looking for black and white. And sometimes it wasn't there. It was grey."

CP - can't define things -> can't talk about it: "Spirituality - actually that was a big problem. Because nobody would define it. ... When you can't define it, then we can't talk about it. Well, I can't talk about something that can't be defined. ... People were just trying to give examples. But I found they were actually refusing to try to define it."

JD - what constitutes good work: "I knew the kinds of things that she saw as valuable and I knew the kinds of things that she was seeing as shallow and uninteresting. When people would take an article by Wendell Berry or whatever and just talk about it on a really superficial level, like talk about his ideas exactly as they were presented, not sort of process them at all. Like just taking stuff at face value."

JD - wanting concrete, technique: "There were those classes at the beginning of practicum year where we were actually coming away from it with specific lesson plans and they were really excited about that. ... And I think in the front of their minds those are the kinds of things that they're looking for."

JD - uncertainty helps with finding own way: "Some of what she said was that it's a good idea to do some sort of journaling and take an issue and grapple with it and write down your thoughts about it. And by making that an actual assignment ... it forced us to do it. ... when you're forced to do it, you actually do it. You have to sit down and you have to think about it otherwise you have nothing to write about."

JD - ambiguity allows to find own voice: "The open-ended assignment was really important for her because she was able to use that artistic voice, whereas she wouldn't have been able to on a multiple choice exam."

JD - after practicum year, realize life not as cut and dried: "And especially coming off of my practicum year, I see less and less value in answers and facts and notes. You start to see that it doesn't matter what you've written down about what it means to be learning disabled, little Johnny is totally not a textbook case. Little Johnny is little Johnny and sure it's useful to know that this guy could be lumped into this category. That category basically says nothing about him except that he needs your attention and so does everybody else. I think to deal effectively with little Johnny it's really important to have this kind of foundation developed in the courses that we're talking about. Because it doesn't matter how much learning you've done on the surface. When it comes right down to it, it's who

you are as a person and what kind of roots you've got that allow you to deal effectively with those kind of situations."

SY - what is quality work: "If you know you're putting quality into something and it's interesting to you, then I think that's where it kind of comes down to. Then you don't care what the teacher thinks. You did a good job and you like it, and hopefully they'll see that."

GW - hard to know how to proceed because messy work: "You have to work harder doing this work. Because it's so messy. It's chaos. And it's organic. It's uncertain. And it's even hard to know how to take notes, because what is it you're looking for? and you probably won't know until you give it an opportunity to sort of wash through you."

GW - always preparing but don't know what for: "We're here engaged in preparing for something. ... I'm not quite sure what it's going to be but prepare in the ways that we're preparing. Finding things out, exploring, nurturing along the way, and allowing yourself to be nurtured. That's called preparing."

GW - what constitutes good work: "If you're inviting people in a course on 'Adults as Learners' to give the best they can, how do you know what is superior? Well, if somebody goofs off, everybody knows."

FG - needing technique as well: "I did want some of the how. There is the reality that I will be going in on the Monday morning, as well as the September Monday morning. And I will be in the classroom with my students again. Now maybe I've got the conviction and maybe I've got the message to give them. But how do I get that message across in absolutely the most dynamic way so that I am going to engage them."

JF - need stability in the change: "We want to organize. We want to become stable. We want to feel secure. And that's the goal. But it's always going to change. So it's always that ability to change and stabilize, change and stabilize, change and stabilize."

JF - fear of death: "Going in and having identified our fear of death. Death is a natural process. If you look at organizations, there is a time when they should die. There's times when a project should die. There's times when we die. But it doesn't mean it's the end of the world. Which is a paradox. But it doesn't mean that it's the end of the world. Because we can get on and move on to something else if the organization dies as such."

JF - vision instead of direction - related to fast pace of change, uncertainty, non-linear: "There are times linear's right, but we're doing more cyclic, spiral, returning to the same place but moving a bit, in one direction or another. Instead of having a direction, I think we have a vision."

JF - process becoming more important: "We looked at the product, not the process. And now we know the process is important and the product is important. There was a time, particularly with the teaching of young children, when I first came into the field in the seventies, we were producing these wonderful little products. And then we realized process was more important. And what a struggle to convince parents that the children were having a good time, were playing and they were learning a lot. But no, they don't have a painting to take home today. But if I could take a picture of the water play, there's a process there."

Or if I take a picture of the clay, there's a process there. But today we're saying process and product. and that goes with the linear and non linear, predictable and unpredictable."

RW - requirement of certainty in politics: "Politicians always have to claim some level of certainty because that's the way politics works. If you say you're uncertain in politics, you're dead."

RW - human desire for certainty: "Evolutionarily, we like certainty. We like the idea that we can predict something from something else. This is a great sense of security that we get from that idea. that's why science has become as popular as it's become. Because it says, 'if you do this, then this will follow every time'. And we love that idea. But it's not true. It's only true in the lab providing you maintain a whole bunch of artificial circumstances. It's not true in the real world."

RW - personal dislike of certainty: "I like things that are ambiguous. Knowing something for certain is like death. ... For me then the joy in life is what's going to happen that I don't know. And I think that's the beauty of life is that a lot of stuff does happen and you don't know. You couldn't predict, that is a surprise."

RW - too busy to do extras, curriculum full: "From my point of view, would I do the three field trips? Generally no. I have enough to do just delivering what I'm supposed to deliver the curriculum."

EA - we aren't too reassured today - live in fear: "The trouble that we're feeling today is, well we don't feel too reassured. ... We can start letting go of some of our fear. We can honour, care, love. I think some of that letting go of our fear is the reassurance. We can see how nature has a tremendous capacity to endure, to recover."

EA - view of uncertainty: "I know very clearly where I want to go. In fact, I know very clearly through experiences that I want a greater sense of knowledge of place. I want them to have a greater sense of knowledge of themselves. And therefore by fostering the questions, it can be ambiguous because I don't know what those questions will be, but it's not ambiguous in that I know that we'll do a lot of self-looking and self-doubting and question one another and question the text and remaining open. Why I do that is not ambiguous. What you don't have is the map in front of you when you start, but you do know that you want to foster a relationship to themselves, you want to foster a relationship to this body of knowledge and to their place. Where hopefully the knowledge that they learn will help them to live healthier, better lives."

EA - dealing with uncertainty, don't need to have all answers: "I receive my direction from their questions and their responses to my questions. Be willing to listen. And to not feel that I have to have the answers."

SB - what's good work: "There's a number of processes that I'm trying to encourage that I talk about in the package. One is to learn to be critically reflective. ... I want 'em to be at the very least critical thinkers. If they can actually go to the level of their assumptions, I try to encourage that. To be creative."

SB - diverse modes of participation: "I still lose people in their quietness. I try to make quietness OK. And that's another thing that's a little bit ecological. You don't have to be noisy in class to be thought of as participating."

SB - lack of structure: "In not providing lots of structure, and that was a concern obviously with some is that I don't do lots of objectives. I don't say these are the objectives. But in training, that's the norm. Put up the objectives for the workshop. And they're definitely useful. ... I don't do necessarily a lot of objectives. So they get frustrated with what they perceive as a lack of structure."

SB - wanting practicality, not deeper questioning: "One of their challenges for this class is they come in wanting, and they're quite practical. Like a lot of adults are like this. It's not unusual. But they want to know, how to. Whenever I do a brainstorm of questions, it's how to. And so I try to emphasize the whys. And say, 'well, we're going to look at the deeper sense of why. Like why is this happening? Why are you doing it? And there's lots of books out there on how to. But if you're just how toing without being aware of the why, then you're not aware of the bias you're bringing or the effect that you're having on your learners'. So that can be a challenge is that adults are very practical."

SB - not wanting to close down by definition: "I kind of say, 'well this is about adult learning. And this is about adult learning. And this is about adult learning'. And people often say, '(Sam) tell me in three words. What's adult learning?' Well, this is about adult learning. And I'm refusing to name it exactly. ... There is that sense of not wanting to define and give definitions in the same way that a dictionary does. Finding ways to look at it and look at it. And realizing at the same time that I'm going to give you layers."

SB - clearly structured learning - benefits and challenges: "The nice thing about providing objectives and a summary is that you can use reinforcement and you can guide people through what you want. But you also limit the incidental learning that could take place too. If you say, 'you will learn this, this and this'. At the end, 'you've now learned this, this and this'. And they walk away saying, 'I've learned this, this and this'. Meanwhile there's something else that's there that's really powerful but it hasn't been validated."

Step Seven Method

The quotes under each theme were then read through to determine the major points which participants were trying to raise with regard to each theme. These major points are listed in their entirety below, forming the data set for this study.

Step Seven Results

Love

1. View of the good life

- Wanting to follow own path (Resistance: Not liking to be confined)
- Needing to feel good about self
- Need for alone time
- Personal meaning
- Connecting with nature (Unstructured time: Connecting with sacred: Sense of belonging and acceptance: Accepting reality)
- Connecting with sacred (Slow down: Sense of obligation / limits: Operating from place of care)
- Sense of belonging
- Making things special
- Good treatment of self (Slow down)
- Opening, Creativity
- Explore on own
- Sense of play
- Appreciate moment
- Opening the world, Learning, Engaging (Connected to following own path: Connected to feeling good about self)
- Questioning / Critical Thinking (Connected to following own path)
- Doing something care about (Connected to meaning: Connected to engagement)
- Operating from a place of kindness
- Connection with others (Brings back to self: Need skills for healthy survival in world; Enjoyment and support: Places in continuity)
- Limiting self / Humility
- Feeling accepted / Valuing self (Connected to following own path: connected to honouring own truth)
- Honouring own truth / Finding voice / connection to self (Connects to centring, sense of peace: Connects to following own path)
- Valuing others
- Sense of peace / quiet / simplicity
- Resistance (Following own path: Living with integrity: Feeling good about self)
- Connection to ancestors
- Connecting to flow of life / Being placed in bigger picture

2. View of How Achieve the Good Life

- Awareness (Centring; Self-reflection & honesty -> Living with Integrity -> Vigilance: Ruthlessness with self)

- Acceptance (Learning lessons from life rather than avoiding, pouting, being in denial)
 - Attention / Being in Moment (Slowing down)
 - Detachment
 - Self Care
 - Resisting Negative / Resisting Power Over / Standing for Values
 - Self-Reflection (Awareness)
 - Stay True to Self
 - Responsibility / Doing what's Right / Standing for Values (To work: To world: doing what: Being caring: Humility -> Limits)
 - Facing Reality (Acceptance)
3. View of Human Purpose
- Authentic Life (Living Fully: Carrying out actualization of who are and what have to do)
 - Follow Passion
 - Act on who are (Authentic Life: Follow Passion)
 - Growth
 - Bettering oneself
 - Having joy
4. View of Reality
- Choice about actions
 - All is not beautiful, perfect - the whole spectrum (Facing reality)
 - We all deal with same issues
 - Everything's connected inside and out
 - We can't control everything / Know everything / Life is uncertain / Mystery
 - Intellectual preoccupation has limited us
 - Can try too hard
 - Letting go / Going with flow / Opening to possibility
 - Learning from life (Acceptance)
 - Life not clearcut, method - "it depends"
 - Other energies out there
 - We aren't at centre
 - Having a vision
5. View of Human Nature
- We have it all - positive, negative within us
 - People are changeable, chaotic
 - All want love
 - Fundamental need for nature
 - Resistance to oppression / Striving for justice is a fundamental part of being human
6. View of Knowledge and Truth
- An intelligence in each of us which need to listen to
 - Knowledge is on bodily level, not intellectual
 - Knowledge that isn't word oriented
 - Knowledge within connects to universal
 - Knowledge connected to sense of engagement and growth
 - Instinct leads in right direction, Need to trust guts
7. View of Teaching and Learning
- Need to know what's appropriate

- Need to build a relationship
- Allow students own path / Want to learn different things
- Being attuned to student's truth
- Safety / Challenging - Risk-taking (Connected to don't know path)
- Requires time, practice, unfolding (Connected to have to go through)
- Students have to take responsibility for learning
- Teacher as opening students to themselves, giving them some tools
- Teacher connected to self
- Have to live through experience to embody (Have to go through something, Try and see - Can't know ahead of time; Failure OK; Meander)
- Just try and see - Can't know ahead of time / Have faith
- Value in the process. Don't expect perfect attainment
- Responsive, not set path
- Importance of failure (Risk-taking)
- Need application - Meaning (Connected to facts isn't learning; Connection to material)
- No common learning experience
- Discussion - All have something to offer
- Self-discovery / Growth
- Learning facts is not learning
- Deep engagement / Passion / Opening students to world
- Caring
- Empowerment
- Self-esteem
- Honouring work / world
- Non-linear / Non-direct / Non-verbal learning - Sifts in, intuition, layers (Connected to have to experience)

Wounding

I. Monoculture

- Wanting to show support, compassion, kindness
- Have to act against own nature
- Don't accept dominant way - effects
- Value assessed in monetary terms
- Invalidating of other ways of knowing (Shut down)
- Lose sense of self / Automaton
- Lack of sense of power
- Way told life is, isn't really -> Dissonance
- Mocking
- Have to justify self
- Can't be self, Will be abused, Need to be self-protective
- Way world is is against nature / Don't see our beliefs reflected back
- Giving over power to others
- Self-deprecation because don't support or fit with societal values
- Shut down / Marginalized / Isolated / Ignored
- No possibility for diversity
- Pressures to conform - internal and external
- Illusory power
- Wanting to be heard, understood

- Desire to belong / be taken seriously
 - Not valued
 - Dismissed
 - Resistance
2. Demeaning of Humanity
- Wreaking havoc on earth
 - Things not right
 - Unfulfilled in life as currently operates (Safety and comfort: don't know otherwise)
 - Nastiness
 - Have to conquer all - Arrogance
 - Demeaning of potential / Dumbed down
 - Demeaning of engagement in world, not treated as of interest, Don't need to care about life
 - People don't care, don't try
 - Not respected, valued, drawn out
 - Loss of what it means to be human, Loss of wisdom
 - No magic in life
 - Demeaning of connections, of relationships
 - Demeaning of work
 - Loss of meaning
3. Role of Change Agent
- Wanting to convince
 - Who am I to tell them what to do? / Speak own truth
 - Can't talk about anything because all is acceptable
 - Not respecting all diversity
 - Moral code / Rigidity of belief
4. Limited by Own Entrenchment in System
- Thinking life owes you something
 - Negativity
 - Letting go is giving up
 - Life is under your control
 - Don't know how to find fulfillment
 - Language limits
 - Things should be perfect
 - Not OK to be kind to self
5. Miscellaneous
- Lack of connection with self
 - Own needs not fulfilled
 - Feeling alone
 - Coming up against own negative traits

Truth of Wounding

1. Uncertainty

- Needing to be labeled as expert
- Discomfort with unpredictability
- No course / assignment guidelines (Student ownership)
- No map to follow - How know how to proceed
- Lack of organization, planning

- Not clear direction - Meanders
 - No objectives, goals
 - No clear right and wrong
 - No clear definition
 - Wanted tangible class outcomes
 - Allows to open to who you are
 - Focus on process, See where it takes you
 - Requirement of certainty in society
 - Enjoying ambiguity, chaos, openness
 - Fear of what's ahead
 - Objectives limit learning
 - Risk of opening self
 - Risk of not knowing where going
 - Letting go of control takes confidence
 - Need control - emptiness, loss of meaning
2. Difficulties with Slowing Down
- Fighting desire for productivity, to achieve
 - Difficult to settle down
 - Desire to get to point, not meander
 - Frenzy / Rush of life / Spread thin / Overwhelmed
 - Takes time for this work to unfold (See where things go: Faith)
 - Organize for efficiency
 - Relationship building takes time
 - Difficult when content dense: Much information to get across
 - Deep thought takes time / Deep consideration of ideas or problem
 - If slow down, others will get goods
 - Require immediate response
 - Takes time to internalize / Take in at deep level
3. Fear of Ownership
- Wanting to please teacher
 - Used to being spoon-fed / Scary to make own choices
 - Don't think outside of immediately necessary to other possibilities
 - Painful to think deeply
 - Wanting to do what's right, what supposed to
 - Like being led
 - Not used to open-ended direction; always a goal fit self to
 - Wanting to be passive / fed information / Defer to experts
 - Taught not to question / engage
 - Difficulty in knowing who you are
 - Wanting praise, validation, thanks
 - Fear of standing out there alone
 - Need self-confidence
 - Need to discover for self
 - Not wanting to take responsibility in world -> Overwhelming
 - Wanting to teach to be self-sufficient
 - Your way, your beliefs aren't important
 - Students responsible to take on ideas or not, participate or not
 - Wanting to teach to have voice
 - Change requires risk-taking

- Wanting to push limits
 - Each individual shapes in own way -> Follows own path
 - Information can be inaccurate
 - Expectations too high
4. Different from Education Accustomed to
- Takes time to get accustomed / Discomfort
 - Requires leap of faith
 - Fear of looking foolish / Fear of failure -> Requires risk-taking
 - Fear of difference
 - No precedent to follow
 - Seems ridiculous
 - Feel like outsider
 - Change is scary / bad / difficult
5. Don't Comprehend Approach
- Feel criticized
 - Go through "hell" to figure out meaning / relevance
 - Language is unfamiliar / obscuring
 - Didn't have frame to place ideas in
 - Different frame required for understanding
 - Not sure why considering these ideas
6. Difficulties with Actualization
- Up against economic realities
 - Up against self and habit
 - Not structured enough for classroom
 - Don't get content when teaching this way (Difficulty when time limited: Focus on process)
 - Don't know how to do
 - Up against political realities
 - Up against societal structures
 - Up against expectations
 - Challenges of assessment (What is good work)
 - Difficulty when time limited
 - Up against beliefs in society
 - How have rigour and be open
7. Sense of Vulnerability in Living Authentically
- Trying to understand acceptable behavior in this circumstance
 - Identity laid bare
 - Anonymity helps
 - When talk about what's real, taking risk
 - Openness and sharing is scary; Relationship is scary
 - Showing weakness is scary
8. Contradicts Understanding of Life
- Don't want self focus
 - Have to improve world
 - Not OK to take care of self
 - What's important is what tested on, getting good grades
 - Feels childish
 - Teaching is not about emotions
 - Actions have consequences

- Focus on social standing, material acquisition - Not important
- Short term
- Wanting to please everyone else
- Should do it all, know it all
- Education is about techniques
- Shouldn't be caring

9. Miscellaneous

- Only ecophilosophy is right
- Interpretation of relevance
- Buzzwords without deep thought
- Don't want to do without - material goods, love, etc.
- Wanting immortality

Healing

1. Healing Ecological Educators' Pain

- Support / Contact with others
- Faith in process
- Familiarity with body of knowledge
- Centring self
- Opening to world
- Not taking on other people's work
- Letting go of need to control, make things all right
- Self-protective

2. Easing Transition to Ecological Lens

- Exposure to alternative viewpoints
- Self-confidence. Not caring about others' opinions
- Mentors / Knowledgeable teachers
- Willingness to try / to fail
- Feedback / Reassurance / Validation
- Secure lifestyle - financially, etc.

3. Life Experience

- Maturity brings openness to alternatives
- Trauma helps you to realize life's priorities
- Readiness
- Times which challenge values
- Experience of ecophilosophical ways to know benefits
- Maturity brings self-confidence
- Maturity brings understanding and experience
- Experience which shows oneness, all on same path

4. Decoding Ecological Perspective

- Careful about language use
- Choose practices / techniques which are in line with western beliefs
- Examples of success
- Teaching skills
- Taking through experience

5. Teacher Walking the Talk

- Offering own truth
- Teacher in process
- Confidence in teacher so can take leap of faith / can take risk

- Accepting teacher
 - Teaching living what saying / means what saying / believes in what saying /
Congruence
 - Teacher sharing self
6. Honouring Student Needs
- Objectives
 - Interpreting ambiguity; Framework around ambiguity
 - Small steps
 - Being credible develops confidence

Step Eight through Eleven Method

Once the major ideas were pinpointed, a series of steps were undertaken which involved grouping like ideas to determine the major points of discussion, and then teasing apart the points to allow for subtlety of interpretation and so that conflicting perspectives would emerge. Through this process, the data was organized and re-organized in an attempt to be both comprehensive and focused and to find ways to manage all of the ideas.

The most important information which came out of these steps of analysis were the three themes which form the organizing schema for Chapters Four through Six. The importance of (a) turning to inner truth, (b) connecting with creation and (c) taking pleasure in the world became the underlying themes which grounded the rest of the data. These three themes, along with the four categorizations which had been used up until this point, then formed a matrix within which the issues raised by the data could be addressed. This matrix is represented in Table B1.

Step Eight through Eleven Results

See Table B1.

Table B1.

Ecological Education in a Modern World - Themes and Issues

| Thematic Premise | Love | Wounding | Truth of Wounding | Healing |
|------------------------------------|---|---|---|--|
| | What is the view of life which arises from this theme? | Monoculture Demeaning of Humanity Intercultural Communication Role of Change Agent | Uncertainty Issues of Time Ownership Fear of Difference Translation into Actuality Sense of Vulnerability Contradicts Understanding of Life Intercultural Communication | Life Experience Seeking Understanding Teacher Walking the Talk Honouring Student Needs Living Ecologically in a Modern World |
| <u>To Live Divided No More</u> | | | | |
| <u>A State of Grace</u> | What is the view of education which arises from this theme? | | | |
| <u>Surprised by Joy</u> | | | | |

Step Twelve Method

Once the framework for the discussion of data was established, there was no further data analysis required. There was, however, still much shaping of data which needed to occur. Using the matrix offered above as a framework, I wrote and rewrote the three "results" chapters. Within the framework, I attempted to rearrange ideas according to different organizational schemes; I changed emphasis; I added more detail and then jettisoned additional information to provide more focus.

It seemed that in attempting to follow so accurately the concerns of the study participants, I had lost the spirit of their words and their lives. In attempting to be faithful to them, I had betrayed them. The structure of the framework was forcing their words into odd shapes and sounds and carving up ideas which needed to remain together.

I decided to keep the theme which underlaid each chapter, but to eliminate any type of framework. I returned to the quotes which had been grouped by theme in Step Six of the data analysis process. With no more categorization in mind than the three general chapter themes, I once more grouped these quotes. The results, a small sample of which are shown below, formed the data which became Chapters Four through Six of this dissertation.

Step Twelve Results

Sample Data - To Live Divided No More

NH - liking self-direction - engaged in work - felt good: "I enjoyed the fact that it was very self-directed. ... But I know a lot of people were. I think it's the whole conditioning thing again. Never before had people been able to self-direct themselves. ... The way I had really approached Lynn's class was kind of an ego-centric sort of a way. ... 'I've got to get what I want out of this class.' So when I would hand stuff in, it was what I wanted to do. Which is really what we want kids to do. That's how to engage them. And it's to feel good about your work. And so it just perpetuates. It will fuel itself when a kid feels good and they know that's what they like doing. I really enjoyed doing stuff for that class."

EA - importance of questioning and engaging with world: "I want the students to interact with text, to each other, to what's coming at them in an open way. And to question themselves. I don't think that process is necessarily harder. What comes out of that are more questions."

SB - engaged with world: "I'm asking you to look at things like ahas, patterns that strike you, things that connect up with your own learning, questions. What are your questions now? What are your individual questions about learning? ... I'm trying to teach them to question too, as a skill."

JC - living with integrity, walking the talk, standing up for beliefs: "It's just an attitude, an intrinsic attitude about me caring. And trying to live with integrity, teach with integrity, give everything I can to make it the best situation for those kids, to parent with integrity, to try to model with I think is right and when I fall on my face to admit it. Talk about what I'd do different next time but not ever to try to assume that I am perfect. ... I think that's really important to admit that I'm fallible. Encouraging kids to speak out for themselves, giving them the courage to disagree with me or disagreeing with each other. And so where do we go from there? But bringing the conflict out and dealing with it."

RH - importance of accepting teacher, no judgment, trust: "She's very accepting of everybody in the class. ..She's not judgmental in any way. ... It's just a very accepting, open, comfortable class to be in. I feel totally relaxed there. And the people in the class, I don't feel like there's any judgment. And she's just so loving. She's just a very good person."

JD - allowed to express self: "The two assignments were both things that I was really interested in doing. And I found them exciting because they were open-ended enough that I didn't feel stifled. Like I had the opportunity to write things out in pen. And I didn't feel like I was going to get shot down for doing that. Whereas in a lot of courses, I know that I could write things out by pen or type up something ten times worse. and get a better mark on it just because it's typed up. The fact that it was open-ended enough for me to let me do it in my own way was really nice for me. Just to sort of have the creative freedom. And again that's scary. ... Because you're not sure if you're going to get shot down because you've never done something like that before. It's a risk. And it feels really safe to type something up on the computer. To do anything out of the norm, it feels like a risk. If it doesn't have a title page with your name and the title of the assignment in the center, that's scary. From square one. we've been getting it back with red marks all over it if we haven't done it that way. We've been focused pretty well."

JD - felt self, could offer own voice: "I thought that going home each night, coming back the next day with something, be it a thought or a quote or a question or a artifact, I thought that was really neat. I'm not sure what the word is there, it made me feel sort of, I mean that helped me to feel at home. It helped me to feel like myself not just a grey face in a grey crowd. It gave me a chance to share my stuff in a small group or to share my question or my quote. It made it a little bit more personal. Wherever you're investing some of your own thought into something, or your emotions, then you start to feel. Those kind of things do build community."

JC - supportive of who students are: "Rather than feeling uncomfortable, I want my classroom to be a sanctuary, a place where they feel like coming, eventhough school can be a real drag. There's a place where they can be themselves to a certain extent. I encourage students to say how they feel and talk about how they feel. And if they're frustrated then it usually will come up in our classroom. And then we all deal with it. We talk about it together."

JC - building kids' confidence - approach to teaching: "Giving them opportunity to show themselves. I think project work is important to this age group where they have certain parameters with their creativity and their individuality can come into it. And they can show that to others. I think that is an extremely important thing. ... Letting them express themselves and having the freedom to do something with confidence. And just in a public was endorsing them and getting other kids to endorse them too. And working out the relationships."

JC - importance of acceptance of nature: "When nature was a refuge for me as a kid, it was always accepting. And it didn't judge me and it didn't make me feel awkward. I felt really good there."

OA - freedom to be yourself: "you have the freedom to relax and just be yourself in that room. You don't have to do anything. I can talk or not talk."

CC - being true to who are: "An attempt to realistically analyze myself, look at myself and see what kind of a person I really am. As opposed to trying to convince myself that I'm a certain kind of person."

SC - lot less ego involvement, looking at what's important in life, to yourself: "It didn't have the ego-involvement that it had before.... Much less ego-involvement, just all the way. I would use that term probably across the board. So it started to shake a lot of things. I would say, 'OK, so what's really important in this world?' There are things that you can that are of value to people. Of course there are. But what's really important? What's really important to you?"

MM - lack of connection to inner self leads to stress: "I think there are great areas of ourselves which we totally ignore and know very little about. Probably why we're so stressed and distraught half of the time. I would guess."

RH - brings back to self, and peaceful place: "It lets you go inside and recognize what you believe in and what's important to you. And time to just reflect and bring yourself back to. I'll say, a peaceful place. ... That's important to me 'cause it's something I'm searching for. I think, in all this frenzy. ... I like to be in that place. 'Cause I need to be in that place at some time during the week to kind of deal with all the other stuff."

BH - being centred: "I think she objects if you try to change her, change what she's doing. She's not goal-oriented as much as she's oriented towards her own path, doing what's right. ... Just realizing who you are and what's important to you. That's the most important goal."

BH - getting in touch with yourself: "The spiritual aspect of that is getting in touch with yourself. And trying to understand what's important to you."

JF - needing to center & know yourself: "I talked about mind, body and soul. If you spend equal time supporting all, you will find that time. If it doesn't slow down the environment around you, it centers yourself. ... If you can't deal with yourself on the inside, you're not going to deal with the outside. So needing to know yourself and your values and your philosophy. And what is important? What are your core beliefs and core values? Which is

the foundation of your philosophy. ...So the people that I believe have been able to slow down or find those moments that are peaceful and rejuvenating, are the people that know themselves well, have come in touch with what they believe."

JF - knowing inner truth: "There are core values. And if they're ever tested, I know them. Because when you're challenged, you know them."

EA - necessary to have freedom to explore and form a relationship with the world on your own terms: "It was having freedom to form a relationship, coming to it on your own terms. It wasn't through a formalized education program. It was through the freedom to be out there, to explore, to make discoveries, to simply have time."

SB - living out what's right for you: "I think you still have a sense of self and identity that's very powerful. And you have your vision, but it's a question of how you choose to live your visions. Maybe there are good days to die, but you can do it with a sense of humour. ... I appreciate a lot of my decisions are made perhaps in a warrior image. In that they're made from heart, a place of rightness and resistance."

Appendix B3 - Abandoned Paths

Decision points arise constantly within a research study. Who would be the most appropriate study participants to interview in order to obtain the richest data? How long should the interviews be and how many interviews should there be per participant? How should I define and delineate the field of study which anchors the work? Would it be more beneficial to transcribe interviews oneself or would the time-saving of "hiring out" offset the losses of data intimacy? How can I best ensure participant confidentiality? What style of writing is most appropriate to bring the topic to life? The questions which are considered on a day to day basis are countless.

In an emergent design, however, there are not only decision points, but paths followed for a while, and then abandoned when it is determined that they won't yield adequate results or when their following is too complex to be feasible within the study constraints. This appendix outlines those abandoned paths in order to place the methods used within the larger array of choices which were considered. These abandoned paths arise with regard to the original research design, the initial method for data analysis, and the search for themes among the condensed data.

Research Design

There were several possible ways to get at the information which I was seeking regarding the tensions between ecophilosophy and modernity in a classroom. I spent some time investigating the first two possibilities listed below, and then abandoned them for the reasons given. The other research design ideas mentioned below, were considered and while they were not actively discarded, they faded into the background as my chosen design method became more viable and appealing.

I. Taking on the role of participant-observer and studying several programs which were based in ecophilosophy.

Reason abandoned - Difficulty with determining appropriate program

i) While many programs offer components of ecological education - a community approach to education, place-based learning, integration of subjects, intergenerational learning - they are not necessarily involved in these aspects of education for environmental reasons. Their underlying ideology, therefore, could be quite different from my research interests, even though these understandings resulted in similar manifestations of educational approach.

ii) I could not be certain whether a program actually embodied an ecological approach without spending some time observing the program before choosing it as a study site.

iii) In order for the tensions which I was seeking to understand to be fully realized, the programs had to exist within the context of modern institutions. That is, there had to be clashes in perspectives; obstacles which they came up against. Many of the institute oriented programs, such as Institute for Deep Ecology Education, and some of the school oriented programs, such as Petrolia School in California, were operated independently. They were ideologically supported by their students on the one hand and on the other hand, they did not have to find their way between their own values and the demands of a system with a different ideological basis. They would not, therefore, encounter the sorts of tensions which I wished to explore.

2. Developing and teaching an ecological program or course and using the experience as a basis for study.

Reason abandoned - Difficulty with determining appropriate audience

i) Ecologically-oriented instructors would be able to wrestle with ideas, co-develop a course with me, integrate ecophilosophical ideas into their own practice and speak wisely about the challenges which occurred. But if these instructors had such a deep level of knowledge and experience with ecophilosophically-based education, then what interest would the course hold for them?

ii) Classroom teachers who were not familiar with ecological education could act as educator participants. But if the teachers who came to the course were not familiar with ecophilosophical ideas, a week's workshop would not provide sufficient time to develop the required depth of understanding of ecological education. I couldn't be sure that the ideas which they took back with them to play with in their teaching practice accurately reflected the understandings of ecological education.

iii) Classroom teachers who were not familiar with ecological education could act as student participants. There were several potential problems with this choice:

(a) I would be caught in a conflicting role. If I were to be an effective teacher, I would teach in such a way as to ease the difficulties of encounter. From a research perspective, however, I wanted to find where the challenges existed for people who were encountering these ideas for the first time. I did not want to ease the tensions or the sense of alienation which encounter evoked.

(b) Practice is always paramount for classroom teachers. Whereas a non-teacher audience only has to wrestle with the implications of ideas for their own lives, a teacher audience is always thinking towards translation. The challenges of living out ecophilosophical ideas in actuality are, therefore, much more on an educator's mind than would be the case for any other student population, making teachers ideal study participants. On the other hand, the necessity to jump immediately to

relevance for practice does not allow the opportunity to muse over and develop ideas which ecological education requires.

(c) Teachers would be seeking a course which discussed and developed educational topics. From a research perspective, I wasn't necessarily interested in the response of students who were studying ecophilosophy or ecological education *per sé*. That is, I wanted to understand the tensions which arose for students when the teacher was teaching through an ecological lens, not when the teacher was teaching *about* ecophilosophy or ecological education, which could always be embraced or rejected on a cognitive level.

(d) My research required a course of some duration, where ideas could be worked out over time, and where participants could check back in with each other over the course of the school year to discuss the challenges which were arising and work through problems. But most continuing education for teachers is short and intense: a weekend, perhaps a week at best.

iv) There were dilemmas which arose regardless of chosen audience:

(a) How would I make the course worth students' time? Would the course meet the requirements to obtain university sanction or affiliation so that I could offer participants credit for the course?

(b) How would I ensure that the type of participants who would be most helpful for the data which I was seeking to obtain, would be the students who would register for the course? Should I hand-pick participants, send out an open invitation, have organizations or schools send delegates, or include the course as part of a series of continuing education offerings?

(c) Depending on audience and venue for the course, how would I ensure control over course content?

(d) Could I ensure cost recovery if I were to have a sponsoring agency?

(e) If I was offering a credit course, would students feel compelled to participate in the research and to respond to questions in a certain way in order to ensure that they

were granted credit for the course? Could I be certain that the data would be valid or valuable? Could I ensure that the students would not feel a sense of coercion? While these problems wouldn't arise in a non-credit course, many of the tensions which I was seeking to understand also wouldn't arise. That is, if there was nothing on the line in the way of grades or credits or successful course completion, then student demands for structure, certainty and clear guidelines and their tendency to defer to teacher authority wouldn't arise in the same way.

3. There were several other research designs which I considered and didn't pursue.
 - i) Conducting a survey of educators who were involved with programs which focused on at least one aspect of ecophilosophy such as place-based teaching or integration of subjects;
 - ii) Turning to well documented programs such as Foxfire as data sources;
 - iii) Videotaping teachers teaching from an ecological perspective and analyzing their interactions with their students;
 - iv) Co-creating a course with a practicing teacher and observing course implementation;
 - v) Videotaping presentations and discussions regarding ecological education, for example, the discussions which were taking place as part of the Calgary Environmental Charter School Project;
 - vi) Conducting a series of discussion groups with local and regional ecological educators and creating discussion groups via e-mail with ecological educators across the country and internationally to discuss their own processes and challenges with teaching through an ecological lens.

4. The research design which ended up forming the basis for my study was originally intended to include three study groups rather than two. I had intended to interview pioneers in ecophilosophy, ecological educators and students. The pioneer - educator - student continuum seemed to provide an elegant way to uncover the tensions between ecophilosophy and modernity. That is, educators act as translators sharing, with students,

the messages which ecophilosophers have articulated. The challenges of being a groundbreaker are both different and the same as the problems which arise in the process of translation. I wanted to understand the challenges which occurred along the entire idea generation and sharing process, from groundbreaker to eager recipient, from translator to student. I abandoned this more extended study, however, both because determining who would be appropriate to include in the category of "ecophilosophical pioneer" was problematic, and attempts at contacting people who may fit this category led me to dead ends.

Data Analysis

Before arriving at the method for data analysis outlined in Appendix B2 (Step One), I had attempted two other methods of data analysis which didn't prove to yield adequate results.

Challenges with Ecological Education

Initially, I went through nine of the student interviews underlining any mention of challenges or difficulties or tensions which arose for the students as they encountered this new form of education. As I was engaged in this process, I noticed that the concerns mentioned seemed to fall into distinct categories. I developed definitions for the different categories and sorted the students' concerns accordingly. The definitions as well as sample concerns from each category are listed in Appendix C2.

Analyzing the transcripts in this manner provided me with too strong a lens to use in encountering the words of the study participants. That is, the conflicts and tensions neatly jumped off the page to fit my predetermined plan. But I wasn't hearing what the transcripts had to say for themselves. I wasn't listening to the full spectrum of the ideas and the richness with which the transcripts wished to speak.

Meditation as Method

My first instinct when approaching the entire data set was to simply get a sense of the study participants. Who were they? What were their concerns? What was their life path? What was the essence of their journey, their struggles? I wanted to be able to tell the participants' stories and to honour their life tangles and joys.

I was seeking essence, not data or facts. The best way to connect with essence, I thought, was to undertake a meditative method of sorts. Not knowing quite what a meditative approach would entail and not finding assistance in books on meditation, I

attempted my own stabs at a meditative approach: reading the transcripts; centring myself to hear deeply, sufficiently and precisely; seeking resonance with the transcripts: searching for deep threads of lives.

I had to abandon this attempt because the ideas discussed were too meandering, too partial. I simply couldn't get a sense of some underlying meaning for each participant. Nor was I able to find some cohesive whole for six hundred pages worth of data. The thoughts took me in too many different directions. I wasn't capable of holding the whole web of relations simultaneously in my head.

Finding Data Themes

After arriving at the initial set of condensed data (Step Two in Appendix B2) I found myself at a loss for how to handle the quantity of data obtained to attempt to find themes and patterns. I attempted two methods before arriving at an adequate system (described as Step Three in Appendix B2).

I initially attempted a straightforward process of further condensing the data. I looked through the data for major points seeking to arrive at a smaller list of essential issues. But how could I determine what constituted a major point? I wasn't interested in only those ideas which surfaced among more than one participant. Frequency was not a valuable criteria for selection. But if every idea was important then I would not be able to reduce the data at all. I abandoned this "meaning-making" method because I alternately felt that I was arriving at a new data set which was identical in size to the old data set, or that I was arriving at a smaller data set which had left out critical information.

By this point in the work, I had arrived at the Love - Wounding - Truth of Wounding - Healing categorization for environmental research. I decided to shuffle and recategorize the condensed data (obtained from Step Two) according to these territories with the hope that patterns would emerge. As I began to code the condensed data in this format, however, I found that the comments which were grouped under each question heading were already aligned quite well with the four territories of environmental research. That is, most of the responses to question one, two and three for the instructors were related to their love of the territory; most of the responses to question four referred to their sense of wounding, et cetera. In other words, this method was not going to help me to find patterns or condense the data and so I abandoned this "meaning-making" method as well.

APPENDIX C - NAVIGATIONAL TOOLS FOR THE JOURNEY AHEAD

Appendix C1 - Instructor Characteristics

One of my interests in interviewing ecologically-oriented educators was to come to understand what had led them to the awarenesses which they hold. What are the experiences or the personal traits which had led these people to see the world in a fundamentally different way from the majority of society? What, in their upbringing, had enabled or required them to question those aspects of society which most people take as givens? If the way that ecological educators see the world leads to a more benign relationship with the natural world, then perhaps we could learn from their pathway, and help students to take the same journey.

There were certain commonalities which emerged through the interviews with regard to ecological educators' characteristics, aspirations and experiences. While not everyone fully embodied all of the qualities listed below, they did all aspire to and value these qualities:

1. Natural inclination to ecological self;
2. Desire to question assumptions, to challenge norms and to look at ideas from a variety of perspectives;
3. Strong conviction in beliefs;
4. Exposure to non-mainstream ideas and perspectives and to a critique of western, industrial values;
5. Time spent in presence of others living from an ecological perspective;
6. Opportunity for conversation with like-minded individuals who supported and validated perspectives as well as helped to sort through ideas;
7. Trust in self.

Appendix C2 - Categorized Challenges with Ecological Education for Student Participants

As mentioned in Appendix B3, my first attempt at data analysis involved an analysis of student transcripts searching specifically for their challenges or tensions with ecological education. While I didn't end up using this analysis method for the dissertation, enough work was completed to arrive at categories of difficulties for students. These categories along with a couple of examples for each type of challenge are provided below.

Conceptual Challenges

Conceptual challenges are difficulties which arose for students due to ideas presented or approaches taken in class, which conflicted with a student's value system or were outside of a student's frame of reference.

- Difficulty with spiritual orientation - oriented to physical world
- Extending compassion shouldn't lead to acceptance of injustice

Methodological Frustrations

The teaching / learning methodology used in ecological education was most frequently cited as a cause for student anger, resentment, resistance.

- Openness to student goals - uncertain what should take from material
- Vocabulary was foreign, e.g. metaphor - didn't help to frame learning
- Teacher not wanting to be authority - didn't get questions answered
- Difficulty with slow pace
- Groupthink and political correctness

Obstacles to Learning

Obstacles to learning refer to approaches which are an inherent part of ecological education and which hinder the learning process.

- When students share in the teaching process, information presented may be incorrect

Technical Challenges

Technical challenges refer to the logistical matters of education which students found conflicted with ecological approaches.

- Grading personal growth

Expectational Conflicts

Expectational conflicts are challenges created when the expectations which a student brought to class with regard to the learning process and the course content conflicted with the reality of the course.

- Wanting techniques not philosophy
- Looking for black and white, and receiving grey
- Expected to be taken by the hand and led through material

Interpretive Tensions

Interpretive tensions refer to conflicts which arose due to differences in perspective or interpretation of key concepts. Typically these clashes were not explicit as they stemmed from differences in taken for granted assumptions about meaning, for example, what constitutes knowledge or success.

- Professionalism = lack of emotion
- People shouldn't be too self-absorbed or self-focused
- Letting go is giving up; giving up is personal failure

Internal Dissonance

Frequently ideas presented or approaches taken were of interest to students, but students encountered difficulties with internalization & application. The ideas conflicted with western beliefs and priorities.

- Being in the moment / Focus / Attention
- Self-acceptance: compassion for yourself
- Not being so goal oriented

Societal / Cultural Dissonance

Societal or cultural dissonance refers to ideas which were embraced by students but were difficult to apply to their lives due to conflicts with cultural priorities or work or family tensions.

- In workplace, bottom line is money - no time for how people feel
- So involved with making a living that no time to reflect on how living
- You have to make a contribution. The world has to be a better place for you being here.

You can't just hang out.

Transferability

Many of the students interviewed were prospective or current teachers. They commented on the difficulties of transferring ecological educational approaches to their own teaching context.

- Difficult with content dense curriculum
- Limited time - teacher has to be leader so that can get through material
- Difficult to create community in workshop setting

Appendix C3 - Easing the Way to Ecological Education - Study Participants' Suggestions

One of the questions which was used to analyze both student and instructor transcripts was "what helped you with the process of ecological education?". For the student transcripts, this was a straightforward question related to easing their understanding of and comfort with a foreign way of educating. For instructors, items were coded as a response to this question if they dealt with (a) factors which assisted the instructors on their own journey towards and through ecological education; (b) factors which assisted instructors in teaching students and dealing with student response; (c) factors which assisted their students.

While some of these "helpful hints" are discussed within the body of the dissertation, a more comprehensive suggestion list appears below.

Teaching Method

- Provide some structure and guidelines at least during early stages of introduction to ecological education. Provide parameters within which the work can take place.
- Present ecological education as just one alternative approach among many.
- Provide room for students to follow their own direction by providing open-ended assignments.
- Provide rich, rigorous resources to inspire and provoke.
- Provide ample time for discussion and encourage the sharing of ideas.
- Presenting strong opinions in the classroom provokes the students to consider their own opinions and to speak up.
- Encourage students to support and accept each other so that a community is created in the classroom.
- Provide experiences for students to go through in which the benefits of ecological education become obvious.

- Reassuring students that other people also find this form of education difficult and uncomfortable, helps to ease fears.
- Provide examples and role models of people who are embracing an ecological way of teaching and living.
- Seeing the relevance and the application to one's own life is important.
- Being forced to reflect through journaling exercises is useful.
- Start slow, start small and take baby steps.
- Having others reflect back what you are doing and saying helps to clarify perspectives.
- A non-hierarchical classroom in which the teacher is part of the learning group, is more conducive to engaging in ecological education.
- Talk about assumptions up front so that students know what to expect ahead of time.
- Being validated in the work helps to allay the sense of discomfort with uncertainty.
- Activities and images which reinforce play, magic, simplicity, creativity, imagination, enjoyment and laughter help to set the tone and help to connect to oneself.
- Encouraging questioning is important.
- Peer teaching and learning is useful.
- Attempt to develop common goals and a common language which all can understand.
- Having successes, and opportunities for success eases the process.

Structure of Education

- Start introducing this form of education at a young age.
- The tenor of the class should be relaxed and open and listening should be encouraged.
- Time is needed to slow down and go inside, to build relationships and to reinforce ideas.
- Repeated exposure to the ideas, particularly with different instructors or in different contexts, is helpful.
- Spending time in nature is helpful as it provides a touchstone, provides a sense of connection, and helps reflect back our own processes and realities.

Qualities of Teachers

- The teacher should be knowledgeable and very familiar with the body of knowledge from which the work is emerging.
- The teacher should be respectful, caring and approachable, and students should have the time to build a relationship of trust with the instructor.
- Teachers should be living out ecological understandings in their own lives, so that they embody the ideas which are being presented and so that they have credibility.
- The teacher should be passionate about the work and share that sense of enthusiasm and deep belief.

Qualities of Students

- Students who have some life experience, and particularly have experienced some adversity find this form of education easier to embrace.
- A student who is dissatisfied with current approaches and seeking alternatives will be more likely to embrace this form of education.
- Students who are willing to take risks will find this form of education easier to embrace.
- Lives which are financially secure enable the risk-taking of ecological education to occur.
- Students who have good self-knowledge find it easier to embrace this form of education.
- Having positive people and nurturing activities in one's life helps to provide the necessary support and helps to put oneself in the right frame for this kind of work.
- Having belief and faith in the process, and remaining open are necessary attitudes for this form of pedagogy to work.
- Self-confidence and willpower are qualities which help students to engage in ecological education.

Appendix C4 - Ecological Education Program Development Criteria

The ecological lens suggests that the basis for ecologically-oriented programs are educational experiences which "sustain, affirm and add meaning to life". But how does an educator or a curriculum developer know whether a particular educational experience meets this goal? This question is complex and demands an on-going conversation in response to each particular situation. In this appendix, I take only the first small step in outlining some criteria for educational programs which are intended to "sustain, affirm and add meaning to life" based on the three themes which were discussed in Section II of the dissertation.

Table C1.

Criteria for Ecologically-Oriented Programs based on Transcript Themes

| Theme | Criteria |
|-------------------------|---|
| To Live Divided No More | <ul style="list-style-type: none"> • Encourage reflection on own beliefs • Support and honour diversity • Help to question assumptions - societal and own • Deal openly with issues and difficulties • Encourage students to define and voice opinions |

Table C1 (cont.).

Criteria for Ecologically-Oriented Programs based on Transcript Themes

| Theme | Criteria |
|------------------|--|
| A State of Grace | <ul style="list-style-type: none"> • Be responsive to present situation • Allow learning to unfold and take own direction • Allow non-rational expression • Honour intuition |
| Surprised by Joy | <ul style="list-style-type: none"> • Encourage play • Encourage creativity • Encourage letting go of control • Engage deeply and maintain complexity • Provide time to explore, discover, meander |
