

Journeying through despair, battling for hope: The experience of one environmental
educator

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For my mother

Abstract

Environmentalism and environmental education can lead people to experience feelings of despair as they learn more about the severity and complexity of environmental challenges. Environmental educators often grapple with questions of how to remain hopeful without being naively optimistic and how to balance professional responsibilities with personal doubts about the efficacy of the field and the sustainability of the human enterprise.

Using tools of autoethnography, this study examines the experience of one environmental educator as she struggles with these questions. Insights come from literature in education, cognitive psychology, sociology, medicine, theology, and philosophy.

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Prologue

If we environmentalists agree with Aldo Leopold that we are like “the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise,”¹ then we need to examine the emotional toll exacted upon doctors of terminally ill patients and acknowledge that we too experience these emotions. We need to recognize, as does physician and medical school professor Naomi Remen,² that we need to prepare students to deal with their own grief in witnessing loss and in being unable to prevent death.

If we environmentalists agree with environmental activist, mountaineer, author, and owner of Patagonia clothing company, Yvon Chouinard, that environmentalism is like a religion in that we are always striving to become more enlightened and faithful,³ then we need to recognize the effects of religious stress and doubt. We need to recognize, as does religious scholar Uzeyir Ok, that all religious education systems must help students deal with uncertainty, distress, questioning, contradiction, confusion, doubt, anxiety, loss of faith, . . . guilt, alienation, loneliness, disloyalty, and unwillingness.”⁴

If we wonder why the percentage of people across partisan lines who believe there is solid evidence of global warming has been falling since 2006 even as the scientific evidence has become stronger,⁵ we might gain insight from ethnographer Kari Marie Norgaard. She studied people in Norway where many of the factors blamed for the backlash against climate science in the United States are either absent or much reduced. She found that people in Norway avoided talking about climate change because of the unpleasant feelings it produced. Norgaard believes people will not begin to actively deal with climate change until emotional and conversational norms shift and people develop a different relationship with feelings of powerlessness, fear, & guilt.⁶

¹ Leopold 1953, 165

² Remen 1996

³ Vetter 1997

⁴ Ok 2004, 201

⁵ Pew Research Center 2009

⁶ Norgaard 2006

It could be that while we environmental educators in the United States are busy fighting the politicized nature of the climate issue, America's scientific illiteracy, the widespread anti-science sentiment, the industry-funded denial industry and all the other factors blamed for the American public's lack of action on this issue, we're missing the big picture. Could it be that people won't deal with the climate issue until they have a way to deal with the emotions that come along with it? Perhaps all those previously mentioned "causes" of American disengagement with the climate issue are in reality nothing more than convenient "outs" for people who don't want to be depressed and frightened.

Introduction

What follows is an autoethnography of my experience as a doctoral student in environmental education as I struggled with both doubts about the efficacy of the endeavor in the face of what I perceived to be an environmental holocaust and also with the accompanying emotions of sorrow and despair. My hope for this dissertation is that it will help people reflect on, understand, and discuss their own and others' experiences as we collectively try to make sense of our place in a planet where life-support systems are unraveling. I have come to believe that shedding light on these "dark" emotions by creating public dialogues during which people can share their experiences is a first step towards creating an honest environmentalism. The resulting honest environmentalism would not rely on naïve optimism, but would instead promote true hope.

If you're like most people, you might have some questions about autoethnographies and how to read them. You might be surprised that something that seems more like "creative writing" could be considered "research" and fulfill the requirements of an academic dissertation. Even if you are familiar with autoethnographies in general, you'll no doubt be wondering how you should read this one and what process I followed to create it. To make the reading experience easier for you, I'll address some frequently asked questions below:

- What is an autoethnography?

Ethnography first emerged as a method for studying the *other*. The others were studied and efforts were made to conceptualize and analyze their cultures. New postcolonial sensitivities, however, questioned the ethics involved with traditional ethnographies including issues surrounding imbalances of power and privilege between ethnographers and those they study. Questions then arose about how one might study one's own culture. These concerns contributed to the emergence of autoethnography—the "study of one's own culture and oneself as part of that culture."⁷

- How is writing considered research?

⁷ Patton 2000, 84

New ethnography, including autoethnography, is not to be confused with an effort to simply *tell* about research findings in a more entertaining way. New ethnography is a research methodology that pushes the frontiers of social science, providing tools for investigating new and important questions. New ethnography recognizes that “writing is not just a mopping-up activity at the end of a research project. Writing is also a ‘way of knowing’—a method of discovery and analysis.”⁸

[New ethnography] is a way of writing to get to the *truth of our* experiences. It is a method of inquiry, scholarly inquiry, that privileges the exploration of self *in response to questions that can only be answered in that way*, through the textual construction of, and thoughtful reflection about, the *lived experiences of that self*.⁹

The writing process is in itself the method of inquiry. “The researcher’s self-knowledge and knowledge of the topic develops *through* experimentation with point of view, tone, texture, sequencing, metaphor, and so on.”¹⁰ The process of interpreting the lived experiences requires self-examination and awareness of personal interpretive frames, sensitivity to possible alternative meanings, and a tolerance for differences and for ambiguities.¹¹

- How did you write this particular autoethnography?

I reflected on journal entries and other personal and academic writings, conversations, and events from the years during which I was a doctoral student in environmental education. I selected the most influential conversations, the most pivotal moments, and the most pressing emotions and questions. I then consolidated them into three sections, each one framed as a conversation between my character and another character.

⁸ Richardson 1996, 516

⁹ Goodall, 2000, 191, emphasis in the original

¹⁰ Richardson 1996, 523

¹¹ Goodall 2000, 86

I constructed the other characters as amalgams of real people, my own thoughts, and theories and literature I was reading at the time which influenced my thinking. I also constructed my own character, the “rhetorical figure of [my] self as it is prosaically carved into the fieldwork story.”¹²

My character emerged from the prose intersection of three *positionings*. Positionings are “ways of discovering—and revealing—the influences that shape who you are and what you think about, value, and are prone to believe and do.”¹³ The three positionings are *fixed*, *subjective*, and *textual*. Fixed positionings are personal facts such as age, gender, class, nationality, and race that might influence how I experience and interpret my data. Subjective positionings refer my life history and deeply-felt personal experiences. Textual positionings are the language choices I make.¹⁴

To further develop the personas in my writing, I focused on *reflexivity* and *voice*. Reflexivity refers to “the process of personally and academically reflecting on lived experiences in ways that reveal the deep connections between the writer and her or his subject”¹⁵

To be "reflexive" means to turn back on our self the lens through which we are interpreting the world. It "implies a shift in our understanding of data and its collection—something that is accomplished through detachment, internal dialogue, and constant (and intensive) scrutiny of “what I know” and “how I know it.”¹⁶

¹² Goodall 2000, 132

¹³ Chiseri-Strater and Sunstein 1997, 57 – 58, cited in Goodall 2000, 132 – 134

¹⁴ *ibid.*

¹⁵ See Behar 1993, 1996; Ellis and Flaherty 1993; Goodall 1989a, 1991; Krieger 1991; Mykhalovskiy 1997; Richardson 1997; Rosaldo 1989; Rose 1990: cited in Goodall 2000, 137

¹⁶ Hertz 1997, vii-viii, cited in Goodal, 2000, 137

Voice refers to “the personal rhetorical imprint of who we are in and on what we write.”¹⁷ Voice “conveys to readers the self that is textually constructing others and contexts.”¹⁸

As I worked with the text, my goal was to produce an account that “rings true” with myself and also with readers of the text. Once I had a “story” I felt captured my lived experience, I worked to place it firmly within the academic literature so readers could understand its connections and implications. These discussions take the form of notes on the bottoms of the pages.

- What are the different sections of your autoethnography and in which way should I read them?

There are three sections of this autoethnography. Each captures part of my experience as a graduate student of environmental education. An epilogue follows with reflections written a year after leaving full-time study to start a teaching job.

Within the autoethnography itself there are numerous notes at the bottoms of the pages. These provide background information, additional context, and connections to relevant academic literature. These are not included in the main text in an attempt to make the text read more smoothly and also to more closely mirror my lived experience—that is to say the notes often represent the “background” information that informs my thoughts and emotions during discussions with others but that does not directly enter into the discussion.

I suggest to readers that they read *only* the main text of each section first and then, before beginning the next section, return to read the notes at the bottoms of the pages. I feel this technique will allow readers to best immerse themselves in the writing.

¹⁷ Ellis and Bochner 1996; Charmaz and Mitchel 1996; Ellis, Kiesinger, and Tillmann-Healy 1997; Goodall 1994b, cited in Goodall 2000, 140

¹⁸ Goodall 2000, 140, emphasis in the original

- How should I judge your work?

Because new ethnographies operate on different ontological and epistemological assumptions than positivistic approaches, they strive to produce different kinds of knowledge and must be evaluated by different standards. They do not strive for generalizability or to contribute “findings” to an “additive body of previous work.”¹⁹ The value of new ethnographies is based on whether or not the questions and concerns are interesting and important, whether it makes the readers think and help them learn and reflect, and whether it leads to “scholarly talk and editorial controversy.”²⁰

Richardson offers five criteria of quality for holding new ethnography to “high and difficult standards.” She draws these criteria from both science and creative arts and describes them as follows:²¹

1. *Substantive contribution*: Does this piece contribute to our understanding of social life? Does the writer demonstrate a deeply grounded (if embedded) social scientific perspective? How has this perspective informed the construction of the text?
2. *Aesthetic merit*: Does this piece succeed aesthetically? Does this use of the creative analytic practices open up the text, invite interpretive responses? Is the text artistically shaped, satisfying, complex, and not boring?
3. *Reflexivity*: How has the author’s subjectivity been both a producer and a product of this text? Is there adequate self-awareness and self-exposure for the reader to make judgments about the point of view?
4. *Impact*: Does this affect me? Emotionally? Intellectually? Does it generate new questions? Move me to write? Move me to try new research practices? Move me to action?
5. *Expression of a reality*: Does this text embody a fleshed out, embodied sense of lived experience? Does it seem a “true”—a credible—account of a cultural, social, individual, or communal sense of the “real”?

I appreciate your willingness to enter into the conversation that follows.

Remember, the purpose of autoethnography is not to convey “findings” but to spark

¹⁹ *ibid.* 190

²⁰ *ibid.* 196

²¹ Richardson 2000b, 937, cited in Patton 2000, 87

conversations. If I've done my job well, you'll finish reading this dissertation with more questions and more desire to discuss and investigate than you had when you started.

Part I

“How’s school going?” Rebecca asks casually as she kicks the front door shut behind her and leans her bicycle against the wall, removing her helmet and clipping it around the handlebars.

“I’m drowning,” I reply.

“How do you mean?” she inquires as she plops into the secondhand armchair in the house we share with two other grad students.

I think of the pent-up frustrations of the last three years of my doctoral program in curriculum and instruction of environmental education. Surely Rebecca does not want to hear the messy details. Surely she is asking merely to be polite, in the same way people ask “How’s it going?” as they pass you in the hallways, not breaking their stride or slowing down to hear any response longer than the expected “fine!” I study her face trying to judge how much if any I should reveal.

“Well it’s just that I’m having what I am calling an existential crisis,” I say with a smile and tiny laugh that I hope gives her permission to shrug it off and not probe more deeply than she wishes. I want very much, however, for her to ask. I need to unload and process.

“Oh! That sounds juicy!” she laughs, pulling her stainless steel water bottle out of her messenger bag and folding her legs up underneath her. “Tell me more!”

“Well you know how I’m teaching that course on the principles of environmental education?” I begin cautiously. “Well, the course focuses on challenges environmental education faces. For example, it’s often politicized and controversial and so school districts are afraid to teach it. And the school day is already packed full of the more established disciplines and environmental education isn’t tested so it isn’t emphasized, and there’re no graduation standards for it, and it’s difficult for teachers to teach, and many teacher training programs are inadequate, and a lot of the curriculum materials are poor. And that’s just the logistical details. When you start thinking about effectiveness and you look at the ultimate goal of environmental education, to promote responsible environmental behavior in students—which, actually, that’s another can of worms because the practitioners can’t even agree on what environmental education should be

doing²²—but anyway, when you look at behavior change, you realize that you can't just tell people how things work and what's problematic about it and then expect them to change their behavior.²³ Look at smoking—everybody knows it's bad for them, but people still do it—human behavior is so complex! But anyway, so you have to make people *care*. And that's hard to do in a classroom—you have to *connect* them emotionally with nature and that happens through firsthand contact.²⁴ But schools don't

²² Thirty years after the coining of the term “environmental education,” there is still contention about what is and what is not environmental education (Disinger, 2001). Debates arise about whether or not environmental education should have as its goal promoting responsible environmental behavior (Hug, 1977; Rennie, 2008). Some feel this legacy makes EE too politically-charged and opens practitioners to accusations of “brainwashing.”

Finley and Cogan (1994) propose “environmental studies education” as an alternative. This contrasts with environmental education, which has traditionally started with an environmental “issue” and the inherent assumption that action should be taken to remedy the problem. Instead, “environmental studies education” presents the environment as a series of interacting natural and social systems. It then asks students to decide whether or not anything about those interactions is problematic to them and allows students to decide whether or not to take action.

²³ Earlier models of environmental education assumed a linear progression from knowledge to attitudes to behavior. Later research proposed a more complex model outlining three categories of variables that contribute to behavior: entry-level variables including environmental sensitivity; ownership variables including in-depth knowledge about issues and a personal investment in issues and in the environment; and empowerment variables including knowledge of and skill in using environmental strategies, locus of control and intention to act. (Hungerford and Volk, 1990). Even this more complex model, however, falls short in its ability to predict and explain decisions to behave in environmentally responsible or irresponsible ways.

²⁴ In a synthesis of previous research, Hungerford and Volk (2001) assert that environmental sensitivity, defined as an empathetic perspective toward the environment,

have money to take all their kids on camping trips. And even if they could, developing that emotional connection is a somewhat enigmatic and finicky process and you can't just run the kids through some nature weekend and have them come out the other side caring about nature.”

I pause and glance at Rebecca to gauge if she is still with me. What had started as a cautious and somewhat academic explanation has gained momentum. The floodwaters are about to crest over the dam. She nods, leaning forward slightly in her chair.

“So here we get to the part about my personal crisis—I was thinking the other day about how even if it were possible to magically fix all those problems environmental education faces and there were instant environmental education programs in every school and they were well-funded and well-designed and the teachers were well-trained and all the kids had meaningful personal connections with nature, the outcome would be people like me.”

“And what’s wrong with that?” Rebecca smiles.

“I am the ideal product of environmental education. I understand the issues. I have the skills to take action. I am empowered to believe that I can influence decision makers. I care very deeply about the environment—I mean I care so much that sometimes when I am in my canoe surfing a wave on a river I start to *cry* because I love this world so much and I know how much we’re screwing it up.”

“Yeah, and you recycle and compost, and you bike to school, and you’re a vegetarian, and if everybody made similar choices it would add up and make a big difference.” Rebecca offers.

“Yes, but,” I continue, “I flew to Europe in August to hike in the Alps because my friend hired me to scout the route and take photos for his trekking company. I flew to the Alps to go hiking because I wanted to. My job is environmental education and I write curriculum about climate change and I flew to the Alps for fun. If I wanted I could

shows a dramatic relationship to environmentally responsible behavior choices.

Development of environmental sensitivity, however, is not often associated with formal education. It is a function of an individual’s contact with the outdoors in relatively pristine environments.

calculate exactly the amount of carbon dioxide emissions my flight put in the atmosphere,²⁵ and I could tell you how that carbon is going to help push us over the tipping point and potentially set in motion non-linear catastrophic climate change. But, hey, offer me a free trip to Europe and I'll go. Because I want to.”

Rebecca is silent.

“And that’s because I’m human. And humans are going to do what they want. Sure I use cloth shopping bags and carry around my stainless steel water bottle and wear my organic cotton shirts. But that’s because that’s easy. And, let’s be frank—it’s cool. And I’m rich and I can afford to buy organic.”

“I wouldn’t say you’re rich.”

“I have a safe place to live, clean water, and more than enough food—that’s a heck of a lot richer than a lot of people.” I counter, “And even with all my organic veggie buying and bike riding, if I figure out my environmental footprint I am still using *way* more than my fair share of the resources on this planet.²⁶

“Anyway I am getting off on a tangent,” I say. “My point is I think environmental education is futile. Worse than futile—I think it may even be counter-productive.”

“It’s *not* futile,” Rebecca proclaims. “Even though changing to CFL light bulbs or recycling might seem small in the big scheme of environmental problems, those actions add up. Just think how much better things are now than they were even a generation ago. I mean when I was growing up *nobody* recycled and now we have curbside recycling.

²⁵ By flying to Europe, I was responsible for 3 – 4 tons of carbon dioxide emissions. Although an individual molecule of carbon dioxide may stay in the atmosphere for only a short time, the large input of carbon dioxide from the burning of fossil fuels results in an effective atmospheric lifetime of tens of thousands of years. (Archer, 2005)

²⁶ If everyone on the planet lived like I do, we would need 4.37 earths. My footprint is smaller than the average American footprint (<http://www.myfootprint.org/>). The ecological footprint looks only at the resources needed to support humans and how many of those resources are available. Its anthropocentric focus ignores the needs of the vast majority of the rest of the community of living beings.

And look at how much cleaner the air and water is—I mean at least rivers aren't catching fire anymore!"

"Right. Sure. Some progress has been made," I offer. "But that was all the easy stuff. And the obvious stuff. People like swimming in rivers, not watching them burn. Clean water is an easy sell, especially because achieving it doesn't require the average person to change much about the way he or she lives.

"It's like the ozone hole," I continue. "Everybody holds this up as the big example of how we can have international cooperation to solve global environmental problems. But the difference between the ozone hole and some issue like global warming is that all we had to do to solve the ozone hole was switch to a different chemical—which, by the way, was already available and happened to be manufactured by a major American corporation—it didn't require regular people to change anything about the way they lived. Fossil fuel, however, is the basis of our modern society. We don't have a ready alternative. Asking people to reduce their carbon footprint is asking them to sacrifice. And I just don't think that's in human nature—at least not for something as amorphous as climate change is to most people."²⁷

"Well you have to start somewhere," Rebecca says. "Change is a slow process. At least now everybody is talking about global warming—a few years ago it seemed a lot more on the fringe. I think public opinion is starting to shift."

"Yeah, I think you're right that change is a slow process and I agree that people are more aware now. But this is where I think environmental education is actually counter-productive."

²⁷ The Yale Conference on Climate change called climate change a "perfect problem" for its "uniquely daunting confluence of forces." These include:

Complex and inaccessible scientific content; a substantial (and uncertain) time lag between cause and effect; inertia in all key drivers of the problem; psychological barriers; partisan, cultural and other filters that cause social discounting; motivational obstacles; mismatches between the global, cross-sectoral scope of the climate issue and the jurisdiction, focus, and capacity of existing institutions; a set of hard-wired incentives, career and otherwise, that inhibit focused attention and action on the issue. (Abassi, 2005, p. 17)

Rebecca shoots me a look. Is she simply confused by my argument or is she starting to get frustrated with me?

“See, environmental education in its attempt to ‘empower’ people to believe they can ‘make a difference’ keeps people from really honestly examining the true extent of the problem and the drastic nature of changes that would need to take place if we were to get serious about living sustainably. We make people feel all warm and fuzzy inside when they plant a tree, or feel self-righteous when they drive their Toyota *Pious*. But we never tell it to them straight. We never say, ‘You know what? We’re screwed and the only thing that is going to make human society ‘sustainable’ would be massive economic collapse coupled with a pandemic wiping out the majority of the humans on the planet.’ Or maybe a complete redefining of progress and a rejection of capitalism. And if I had to bet on which one was more likely, I would take the pandemic. But this whole idea that we can have it all—this contradiction called ‘sustainable development’—two words that cannot be coupled without raising some serious questions—is just a hoax to keep people from realizing how screwed we really are so they can keep on playing the game all the while feeling ‘green.’”²⁸

“Whoa whoa whoa,” says Rebecca. “I have problems with that on so many levels. First of all I get really mad when I hear people saying population is the problem, because they are almost always *not* talking about themselves—they are talking about *other* people. Probably poor people or people from different cultures.”

“Oh no,” I retort, “I am talking about me. I’m talking about rich Americans. Actually I guess I’m talking about everybody.”

“Second of all, who privileges your ideas of what is sustainable or desirable or even problematic? There are a lot of other ways of seeing the world and of assigning

²⁸ Blohdorn (2002) argues that environmental education, especially in the form of education for sustainability can “serve purposes to which it might be expected to be fundamentally opposed.” It does this by generating an illusion that society is working to promote ecological integrity. It thereby “pacifies potentials for social conflict that emerge from inherently exclusive and unsustainable practices of growth, accumulation, and consumption” (p.7).

value to things. Who are you to assume that you understand the ‘real’ way the world works and that other people are delusional?”

“Sure, I acknowledge that there are different values out there,” I respond, hoping I sound sincere in my consideration of her point, but fearing that I sound too cocky and sure of the correctness of my argument. I continue, “And I know that my values come from my privileged background as a middle-class white person who loves wilderness and hiking and animal-watching. And I know granola-eating hippies like me are cast as totally out-of-touch with the needs of working-class people and with the harsh realities of economics—we’d rather save an owl than a logging community.

“But what I’m talking about,” I say, “is the current environmental crisis in terms of the loss of the planet’s life-support systems and the accompanying loss of biodiversity. Populations of vertebrates declined nearly thirty percent between 1970 and 2005.²⁹ Fifty-thousand species go extinct each year³⁰—compare that to the normal ‘background extinction rate’ over the earth’s geologic history of one species in any major group *every million years*³¹ and it’s pretty clear that we have a problem!”

“But that’s a western science-based perspective,” Rebecca shoots back, “You have to ask what values are inherent in that research. You can’t just take it as ‘truth.’”

“Sure.” I say, “It is a western science-based perspective. I’m sure there are people out there who understand the world in different ways and maybe the idea of loss of biodiversity doesn’t make sense to them or doesn’t matter to them—who knows, maybe someone who is very *Zen* believes it’s all one and so it doesn’t matter if species die because they’re just transitioning to another form or something. But to me it does matter. It’s a holocaust for the other life forms on this planet.³² It’s a holocaust and no one seems to even acknowledge that it’s happening.

²⁹ Hails 2008, 3

³⁰ Olson 2005

³¹ Quammen 1998

³² In considering the magnitude of species loss, it is illuminating to consider the concept of “extinction debt.” This is the idea that habitat destruction and fragmentation

“Add climate change into the equation,” I continue, “and the picture gets even more bleak. And that’s physics—which, sure I’ll grant you every human endeavor has inherent values and no science is bias-free, but physics has got to be getting pretty close. The physics is pretty clear that if we keep adding greenhouse gasses to the atmosphere, the planet is going to warm. I don’t think I’m making too crazy of a ‘value statement’ by saying that changing the composition of the atmosphere drastically enough to raise the temperature of the planet to levels never experienced during the development of human beings and possibly triggering run-away climate change that could make our planet more like Venus where surface temperatures melt lead is potentially problematic, at least from my perspective as a human.”

Rebecca is silent.

“So, yeah, I guess my perspective is that we humans are killing the rest of the living beings on the planet and my value judgment is that this is not okay.”

“So, what’s your solution then?” she asks.

“Well that’s the rub. There really is no solution that I can see. For example James Hansen at NASA tells us if we want to keep a planet similar to the one where human life developed, we have to stabilize our atmospheric concentrations of carbon dioxide at or below 350 parts per million.³³ We’re already at 380 parts per million and rising. And the Tyndall climate research centre in the U.K. says it is ‘unlikely’ we could stabilize the atmosphere below 650 parts per million.³⁴ And that would be even *with* a concerted effort. When you throw politics and human nature and the difficulty of international negotiations and enforcement and all the other social stuff into the mix and then think about the fact that we need to start taking dramatic action now—no actually five years ago—but that we’re still bickering about not only what to do but whether or not it’s even

causes a “time-delayed but deterministic extinction” that happens generations after the initial destruction (Tilman, 1994)

³³ Hansen 2008

³⁴ Adam 2008

a problem worth tackling, it's hard to come to any conclusion other than that it is too late."³⁵

"That's not helpful."

"No. Maybe not. But at least it's honest."³⁶ It's a heck of a lot more honest than telling people they can stop global warming by changing their light bulbs."³⁷

"But what's the point of telling people that?" Rebecca shoots back.

"I don't know if there is a point. I just think the honesty might be refreshing. A more honest environmental education would start with a discussion of just how bad

³⁵ The opinion of scientists at the Tyndall Centre for Climate Change Research at Manchester University is that "the battle against climate change has been lost and the world now needs to prepare for things to get very, very bad" (Adam, 2008).

³⁶ Blohdorn (2002) argues that talk of sustainability and other "ostentatious emphases in public discourse on political renewal, social inclusion, and economic greening" are strategies of societal self-deception. They simulate modernity and disguise our post-ecological society. The hidden post-ecological society is one of egoistic and exclusive hyper-materialism, inequitable and unsustainable growth and consumption, and an increasing rejection of collectivism and community.

Discourses of sustainability "provide moral and political legitimation for the further expansion of this system and for the crusade against its...enemies." They serve to "stabilize and reproduce the consumerist, growth economy" by creating norms and pacifying potential social conflict. Blohdorn asserts, "any undisguised expression of the post-ecologist frame of mind would amount to straight barbarism compared to contemporary practices of simulation."

³⁷ Shellenberger and Nordhaus argue that environmentalism must think in more transformational and expansive ways. In their critique of the environmental movement, Shellenberger and Nordhaus write:

In the face of perhaps the greatest calamity in modern history, environmental leaders are sanguine that selling technical solutions like florescent light bulbs, more efficient appliances, and hybrid cars will be sufficient to muster the necessary political strength to overcome the alliance of ideologues and industry interests in Washington, D.C. (2004, p. 10)

things are and why the proposed ‘solutions’ are hollow. It might depress and frighten people to the point that they might panic. Maybe they would lose the motivation to continue contributing to the economy, they might decide to not have children, they might kill themselves, they might get so angry at the corporations and government that have been deceiving them that they might become eco-terrorists,³⁸ they might perceive how ineffectual our societal infrastructure will be in protecting us from ecological collapse and they might riot and loot in an attempt to secure resources for their own families.

“From a deep ecological perspective,” I continue, “one that values the other species equally to the human species, all these outcomes would be better than the ones currently promoted by mainstream environmental education. An undermining of our societal structures might actually make a measurable difference. After all, the only developed nations to reduce their greenhouse gas emissions since the 1990s were former soviet block countries and this reduction happened only because their soviet economy collapsed.”³⁹

“I can’t believe you just said that.”

“What?” I ask. “That the best outcome for environmental education would be to make people riot until society collapsed? I know that would never happen. I know environmental education is not that powerful. If I got up on my soapbox and starting shouting about doom, no one would listen. Nobody wants to hear it.”⁴⁰ People are too comfortable and too selfish and too removed from the ecological holocaust to really care

³⁸ Jack Turner argues:

Effective protest is grounded in anger and we are not (consciously) angry. Anger nourishes hope and fuels rebellion, it presumes a judgment, presumes how things ought to be and aren’t, presumes a caring. Emotion remains the best evidence of belief and value. (1996, p. 21)

³⁹ UNFCCC 2005

⁴⁰ Although Clinical Psychologists Norem & Chang (2002, p. 998) recognize that considering potentially negative outcomes could avert disaster, they warn, “Nevertheless, just as in ancient times, we remain unreceptive to modern Cassandras—no matter how many times we are reminded that the original Cassandra was right.”

much at all. There are plenty of voices already out there crying in the wilderness. And only the already converted read their books.”

“Wait. Go back to what you said before—about wanting civilization to crumble. Do you really mean that?”

“I know that sounds misanthropic or sociopathic,” I say. I pause, trying to find words that can convey my thoughts at this moment without making me sound like a monster. “I love humans on an individual basis—and I believe that once a human is born we have a responsibility to try to provide for that human. But I feel that if I take Aldo Leopold’s admonition that we become ‘plan member and citizen’ of the land community to its full extension,⁴¹ I have to value the other life forms on the planet. And we humans are killing them—rapidly and massively. And if I detach myself from my personal investment in the human race and look at the situation objectively, it’s easy to come to the conclusion that what would be best for the vast majority of life on this planet would be if humans had a massive die-off.”

Rebecca is studying my face.

I should stop here and maybe even backtrack and smooth over the rough edges of what I’ve just said. I am on a roll, however, and I continue. “This argument that population isn’t the problem—that it’s the level of consumption that is the problem, and if humans can just learn to control their appetites, all seven billion of us can live sustainably on the planet—I look at the selfishness—people driving their Hummers, people buying their sixty-inch plasma televisions—wait, who am I kidding? It’s not just the people driving the Hummers; I’m just as bad as the next person, just with a green candy shell—anyway, I look at human nature and I just don’t see it happening. At least not on the scale needed and not nearly quickly enough.”

I can’t read Rebecca’s face. I’m not really trying, however. The ideas and their implications are exciting me. Exploring the extent of different lines of logic—probing the dark corners of environmentalism, education, and my place in them—exposing inconsistencies and hypocrisies—it’s too enthralling to stop, yet painful and shameful at

⁴¹ Leopold 1949

the same time. Like when I pick at my cuticles until they're ragged and bloody, the entire time telling myself to quit and being angry at myself for my lack of willpower and knowing that the inevitable result of this will be ugly and embarrassing and will probably get infected and take a long time to heal.

I know I would probably be happier if I didn't think so deeply about these things. My ex-boyfriend called me "turbo-brain." He even had a superheroesque theme song he would sing when I would over-think things: "Turbo-brain, do-de-do-de-do. Turbo-Brain!" I often envy my friends from high school who took over their parents' business and bought large houses and had several kids early. I imagine that they must be continuing the relatively carefree life we all led in high school. I know they surely have concerns and stress. But I imagine it deals with comparatively solvable dilemmas—mortgages, kids' softball schedules, miscommunications with their spouses—not the impending failure of the planet's life-support systems.

I think about myself in high school. I was well liked. I seemed to be always optimistic and positive. I think that sunny outlook was perhaps the key to my popularity—I said nice things to people and made them feel good. I had an idealistic outlook on life and believed in my ability to make a positive difference. People sensed that optimism and idealism and wanted to be around it.

Starting somewhere in the early years of my doctoral studies in environmental education, however, I started to feel more like Debbie Downer. Perhaps it was my choice of homepage for my Internet browser—the US Climate Action Network—everyday featuring a digest of the world's top climate-related stories. Even an optimistic demeanor can be challenged by waking up each day to stories about how the Great Barrier Reef, where I lived and dived for a year, will be dead in twenty-five years or how Lake Nakuru has only a fraction of the pink flamingos it had ten years ago when I visited it on a safari with my biology class.

Research suggests seeing special places being destroyed can be a catalyst⁴²—turning people into environmentalists and activists. What if seeing too much of this destruction has pushed me past the stage of activist? What good is my education to

⁴² Chawla & Cushing 2007, 440

anyone, including myself, if instead of being motivated by the challenge I am defeated by it?⁴³

Maybe my new outlook is the result of being immersed in the academic culture that views pessimism as a more rigorous mental approach and sees optimism as naïve.⁴⁴ Maybe it is the result of thinking too much and not acting enough—broadening my focus to the entire field and to the prospects of biodiversity and the challenge of global climate change instead of on the work of a single organization or classroom or project that can be accomplished and the good measured.

Whatever the cause, it is clear to me now that my pessimistic (realistic?⁴⁵) outlook is not only making me unhappy, it is also making me unlikable. I can see that Rebecca does not like what I am saying. Is she angry with me or just frustrated with the idea that perhaps environmental education is futile in the face of global environmental collapse? I cannot tell.

⁴³ James Sheppard (2004), a professor of environmental education and ethics describes how as students continue to explore paradoxes in the struggles of humans to live ethically with the environment, attitudes begin to arise of “apathy, outrage, anger, hopelessness, and of course, pessimism.” These feelings can lead to students leaving the environmental field. (pp. 216 – 218)

⁴⁴ Brett Johnson (2005), a Luther College professor writes, “Blind pessimism is too often seen as a realistic, sophisticated, and intellectually refined view of the world among many academics. Hope is often seen as quaint, religious, and naïve.” (p. 48)

⁴⁵ Although our society tends to think of optimism as being a more desirable approach than pessimism, there are times when pessimism can be perhaps more functional than optimism. Psychology professor Edward Chang argues that research shows that relative pessimists may be more accurate than optimists at gauging success and failure rates. The optimists tend to undercount failures and overcount successes. Optimists may not acknowledge the severity of challenges. This can be seen as a coping mechanism for situations where the person has little knowledge and no answers. This may not, however, be the most functional attitude to adopt in certain situations. (cited in Sandberg, 2007)

I should probably backtrack. I should probably smooth things over, say something like, “But in the end, I am sure humans will learn to live sustainably. And environmental education is the best way to achieve that. I know it will take time, and things might continue to get a little bit worse before they get better. Individual and community actions, however, will make a real difference in slowing down the destruction. And eventually with the enlightened use of new technologies and with a more educated citizenry, we will be able to stop and even reverse a lot of the environmental degradation.”

Instead, I am seduced by the ideas and their implications, enraptured by the logical impossibilities of environmental education solving the current environmental crises.⁴⁶ I continue my polemic.

“But anyway. My whole point here, what has led to my existential crisis, as I am calling it, is that not only is environmental education unable to solve the environmental crisis, it is also potentially counterproductive.”

“How could it possibly be counterproductive?” Rebecca asks wearily.

“Because it promotes this myth of sustainable development.⁴⁷ It makes people believe that human society can be sustainable if we all just make some simple changes

⁴⁶ We need to reduce our carbon emissions by something like 80% in the next few years, a feat that by conservative estimates would require an investment of 5% of world GDP and an effort similar in scale to that needed to fight World War II. And it needs to be started right now.

Some environmental educators, however, are still walking on eggshells to even broach the topic in their classrooms. For example the curriculum planners who consulted with me as I was developing the Global Warming 101 curriculum worried that they would need to send home waivers for parents to sign, warning that their child would be exposed to the theory of global warming and if they preferred for their child to not hear it, alternative learning experiences would be provided.

⁴⁷ Some argue the idea of sustainable development is:

A constructive compromise, an umbrella under which those who put faith in progress and those who were concerned about the environment worked together

and if we can just develop the right technologies. If we all just recycle and use CFL light bulbs and ride public transportation or bike, we'll be sustainable. It's just greenwashing. It lets people continue to participate in our consumer-driven fundamentally unsustainable culture without having to face the fact that we as humans are anything *but* sustainable. At least not in our current numbers and in anything remotely like the comfort and convenience we enjoy."

"But without environmental education things would be so much worse," counters Rebecca. "It seems to me like you're letting the perfect be the enemy of the good.⁴⁸ Just because environmental education can't completely solve the big problems like loss of biodiversity and climate change doesn't mean that it's not worth doing so that we can at least keep things from getting as bad as they would be otherwise. I mean, think about everything that has come out of environmental education and environmentalism—the Wilderness Act, the Clean Air and Water Acts, the Endangered Species Act..."

"Sure," I say, "lots of seemingly positive things have come out of environmentalism and environmental education. But what if those things, along with the message of environmental education in general, are allowing people to continue to be in denial about the severity of the crisis and the enormity of change that would need to happen to address the underlying cause, not just alleviate some of the symptoms."

"What do you mean?"

"People know there are government agencies like the Environmental Protection Agency that are supposedly looking out for the common good and protecting the environment. They know there are wilderness areas where they assume 'nature' is 'protected' and therefore will always be there—like a museum. They figure the

from the mid-1980s through the mid 1990s. Yet...the umbrella of sustainable development folds when some obvious questions are asked. (Norgaard, 2002, p. 290)

⁴⁸ Blohdorn (2002) writes that the post-ecologist, late modern condition is obviously not the "end of history." It is therefore not unchangeable:

Neither is environmental education pointless, nor can policies of social and environmental sustainability simply be given up. After all, there is evidence that environmental education can have an impact and that ecological modernization does change societal practices. (p. 8)

Endangered Species Act will keep species from disappearing.

Environmental protections we do have work well enough to slow down or hide destruction to the point that people don't notice it. Newspapers do feel-good stories about schools doing 'green' projects. Environmental groups send out messages that 'if you just take these simple steps you can help solve the problems.' And all these things combine to make people feel like the problem of sustainability or loss of biodiversity or whatever are being addressed and progress is being made. So there is not really anything for them to worry about. There is no reason for society to change its fundamental structures because the ones we have are addressing the problem well. If anything, they just need a little tweaking or improvement."

"Yes, society's not perfect," Rebecca says. "The acts and processes we use to address environmental problems are not as good as they could be in an ideal world. But they are the structures we have and working through them is how change happens. People are diverse and opinions and values vary widely. Cooperation takes time and compromises have to be made."

"You're right," I say. "I know what I'm talking about would likely not work in the 'real' world. But from an academic perspective I find it interesting to entertain the thought of what would happen if environmental educators were more honest. What if instead of being overly cautious to not discourage or depress people too much, we told it to them straight? What if instead of painting this rosy picture of how we can solve the problems by individual and collective actions (but not actions that are require too much sacrifice or make us too uncomfortable), we say something like, 'We're killing off species at a rate that is orders of magnitude faster than at any other time in the history of the planet. And so far we've been able to largely ignore the problem because we're so clever and can invent all these techniques for maintaining our quality of life and we don't pay much attention to the lives of other species anyway. But guess what? We're now pushing our magnitude of impact to the level that we're likely not going to be able to avoid catastrophic climate change. Things are probably going to get very very bad for a lot of people within our lifetimes. And as for your kids and grandkids? Well let's just say I'm happy I won't be alive in 2100.'"

“What’s the point of telling people that?” Rebecca asks incredulously. “People need hope.⁴⁹ *I* need hope.⁵⁰ I don’t want to hear that. That’s just not helpful!”

“Yeah, nobody wants to hear it. But what if they *need* to hear it?⁵¹ What if once they heard it and got over their initial denial and anger and fear, we could have some sort of honest and possibly productive discussion about what we humans should do now?”

“But if you can’t offer a solution or a positive vision of how things can be better, how can the discussion possibly be productive?” Rebecca asks. “I think that’s the problem with a lot of the environmental messages out there—they say ‘Hey look at how bad things are! Now take some action!’ But they don’t offer a vision that people can rally behind.”

“I agree with you. That is one of the major pitfalls environmentalism faces in communicating its message to people. It’s a conundrum. On the one hand it’s true that people need hope and that a positive vision is more inspiring and motivating than acting

⁴⁹ Braithwaite finds that hope has benefits for society:

Institutions of hope move us collectively away from a social script that makes engagement in shaping our futures seem futile toward one in which we are expected to be active and responsible participants contributing to a vibrant civil society. (2004, p. 7)

⁵⁰ There is much evidence that hope is important to individuals. Citing multiple studies, Snyder (2002, p. 249) asserts higher hope “consistently is related to better outcomes in academics, athletics, physical health, psychological adjustment, and psychotherapy.”

⁵¹ Clinical Psychologists Norem & Chang describe potential benefits of listening to negative projections:

Much is made...of the self-confidence, optimism, personal accomplishments, and resilience of American business leaders...Much less often, however, do we tally up the costs to employees (and sometimes investors and clients) when overly optimistic expansions and acquisitions lead to bankruptcy and layoffs. Indeed, throughout society we could point to delays and overruns as a result of overly optimistic projections, and disasters that might have been avoided or curtailed if we were willing to consider the negative. (2002, p. 998)

out of fear.⁵² On the other hand, people need to be aware of the *scale* of the problem before they can think of appropriate actions. If we don't let people know just how bad things are, then they'll think increasing the Corporate Average Fuel Economy standards or some similar measure is a solution when it's really more like putting a Band-Aid on a severed leg that's squirting blood everywhere."

Rebecca is silent.

"I think our situation is similar to someone who is dying of cancer," I say. "The doctors try everything they can to kill the cancer, just like we've tried everything we can think of to solve our environmental crisis. But at some point they realize that the person will die. The doctors have to communicate that to the patient. And I'm sure it's no easier to say than it would be to hear. And I'm sure the realization can initially rob the person of hope. I imagine it can even send her into depression, which probably makes matters worse, at least in the short term. But not telling the person isn't going to change the fact that the cancer will kill her. Once she has all the information, she can be in control of her response to the challenge—she can make deliberate decisions about how she wants to spend her remaining time. Furthermore the doctors can rest easy knowing they've been honest.

"In contrast," I continue, "I feel like what a lot of environmental educators and environmentalists are doing would be, to continue the cancer patient analogy, like doctors who can see that the cancer is terminal, telling the patient that everything will be just fine as long as she keeps taking her multivitamins, eating well, and exercising. It's not honest

⁵² Shellenberger and Nordhaus argue in their controversial essay "The Death of Environmentalism" that part of the environmental movement's difficulty in reaching the public is its lack of an inspiring vision. They write:

Once environmentalists can offer a compelling vision for the future we will be in a much better position...Martin Luther King, Jr.'s "I have a dream" speech is famous because it put forward an inspiring, positive vision that carried a critique of the current moment within it...In the absence of a bold vision and a reconsideration of the problem, environmental leaders are effectively giving the "I have a nightmare" speech. (2004, p. 31)

and it's not helpful.⁵³ It may save the person some grief in the short term, but it denies her the opportunity to be an agent in her own destiny. If she has the facts, she can respond. She might go through a period of denial, then anger, then grief, or however it would play out. Eventually, however, she might come to some sort of terms with the disease and with her impending death. She might be able to find hope and beauty and meaning in small things that would go unnoticed or unappreciated by someone who thought she still had a long life ahead of her.

“Maybe if we humans could all realize how fundamentally *unsustainable* our lifestyles are,” I say, “and how our current strategies for dealing with the crisis are not working, at least not on the scale and timeframe needed to avert catastrophe, we could perhaps be like the cancer patient.⁵⁴ We might be able to make something beautiful with

⁵³ Clinical psychologist C. R. Snyder examines the importance of hope in ill patients. It is not difficult to see parallels between his statements about the doctor-patient relationship and the matter of the proper relationship between environmental educator and student or public. Snyder writes:

Among physicians with whom I have spoken about this matter, those who purposefully promote false hope do so to lessen the patient's worry and suffering, rather than to improve the patient's chances of survival. Such “ends justify the means” logic must be based on the premise that the only way to raise the needed hope is to do so through deception. I question this premise because the physician can join with the patient in an honest alliance that acknowledges the difficult survival odds and maintains hope. In my experience, patients ferret out the truth by watching the nonverbal cues of their physicians and nurses, by talking with other patients, by talking with family members, and surfing the net... When the patient discovers that the physician has been misleading him or her, then the crucial doctor-patient alliance is broken—often beyond repair. Borrowing on the pioneering ideas of physician Eric Cassell (1976, 2002) I suggest that the severity of the disease be faced head-on by the physician and the health care team, and that they and their patient thereafter agree to make the very best fight possible so as to defeat the odds. Hope simply is too important, in my view, to be jeopardized by untruths, even those that supposedly are for the good of the patient. (2002, p. 268)

⁵⁴ Abraham Verghese (2004), a professor of health sciences who worked with early AIDS patients found some patients were able to use the illness to find meaning in their lives. “They did not give up hope, but instead, the nature of their hope changed; they wished for simpler things like a good night's sleep or the strength to make a trip to a

what we have left.⁵⁵ We might be able to find hope that is not based on some naïve optimism that we can ‘save the planet’ by recycling our drink containers.⁵⁶ We might be able to recognize the pitiful inadequacy of the solutions we’ve proffered thus far and then come up with something revolutionary—or if not revolutionary, at least honest.”

“This conversation is depressing me,” Rebecca says, abruptly standing up. “This idea of ‘make something beautiful with what we have left’ isn’t much comfort. I need to feel like I can make a difference—a real difference. Thinking about what you’re calling the ‘environmental catastrophe’ and about the supposedly ‘inadequate’ solutions to it is simply not helpful. It’s not helpful.”

I can see tears welling in Rebecca’s eyes. They are there for only a second before she blinks them away. She is a tough person and will not let anyone see weakness. Perhaps she does not want me to know I have upset her. She says she has to “get going.”

theme park with their children.” Verghese quotes Roxy Ventola, a performance artist who died of AIDS, “I know time is precious. So I don’t waste it any more. Things that matter to the uninfected aren’t important to me...Now I’m free to be the person I always wanted to be.” (p. 12)

⁵⁵ Environmental and Educational philosopher, David W. Orr (2004) examines several potential responses to the ecological crisis. One in which, incidentally, Orr does not take much comfort, is stoic resignation—“rather like a person who has gracefully adjusted to the news of a fatal illness:”

The assurance of the gallows in a fortnight, as Samuel Johnson once noted, can concentrate the mind wonderfully. Perhaps the same will be true if and when we conclude ‘that the effort to produce a sustainable society has definitively failed’ (Miles 2001). Having ignored a long list of warnings from scientists and seeing the end ahead in some finite time, perhaps humankind would turn its attention to creating, in the words of theologian Jack Miles, ‘a new kind of religion and a new kind of art.’ If so, Miles believes that the final hour of humankind could be ‘our finest,’ rather like the band playing ‘Nearer my God to Thee’ on the deck of the sinking Titanic. (p. 296)

⁵⁶ Clinical Psychologist Bohart suggests that hope, as differentiated from optimism, “might lead to accepting a tragedy that one cannot change.” (2002, pp. 1039 – 1041)

She grabs her bike messenger bag, throws it over her shoulder and heads back out the front door. I look through the window and see her walking down the sidewalk towards the park. I wonder if she'll ever want to talk about this, or anything else for that matter, with me.

I lie back on the couch, stare at the ceiling, and castigate myself for being insensitive. I seem to do this a lot. The ideas, the theories, the implications, the possibilities—all these academic things excite me. Environmental education is my field and I steep myself in philosophical and theoretical writings relating to it. This allows me to, sometimes, think abstractly about the human prospect and the role of environmental education in our future. When I'm thinking in these ways I can, sometimes, detach from the emotional side of myself. I forget, sometimes, that other people may not think this way.

I sometimes forget that for people whose field is *not* environmental education—and depending on their mood that day, for those whose is—these are questions of far more import than a merely academic exercise. These are emotionally laden. I imagine if my field were particle physics or speech pathology or ornithology, I could discuss my theories with friends without raising hackles.

Questions concerning our prospects for a sustainable future on this planet and questions about the efficacy of individual and collective action, however, touch nerves. These questions bore into the heart. What does it mean to us that we are killing the other species on this planet? What does it mean to be a member of a land community that includes all living things? What does it mean to us that we are robbing future generations of humans of the quality of life and the intact ecosystems we've enjoyed? What does it mean to be a member of a society that is fundamentally unsustainable?

More vital than these questions, however, are the questions of hope. I feel these questions, more than any others, make it potentially painful to examine underlying issues about the efficacy of environmental education and environmentalism. What is the importance of hope? Can we examine the severity of the environmental crisis without losing hope? Can we be hopeful without being naively optimistic? If we can't find hope, how do we continue in our work and life? How do we deal with the despair that can so

easily take hold when we examine the complexity of the problems and our record of failure in addressing them? How do we deal with the grief of witnessing the destruction of places we love?

I think about the tears in Rebecca's eyes. Am I a calloused person? Why didn't I see that what I was saying was upsetting her and then stop saying it? What good does it do to depress her? Who am I to take away her hope?

It took me years to come to the mental place where I am right now. I started as an optimistic and idealistic aspiring eco-warrior. I believed without a doubt that a sustainable society was possible. I believed that my actions could help usher it in. The erosion of that certainty was slow. Each blow it suffered exacted a personal toll. I was saddened by each report of loss and destruction. I grieved every time I read another article about the Amazon rainforest drying up or the Western Antarctic ice shelves disintegrating. I had to deal with each loss. I had to work through my sorrow.

After years of this, I have developed a somewhat thicker skin. This is not to say that I am not saddened by reports of loss. It is just that I have become somewhat accustomed to them so they are not as shocking.

I think about my reaction to an article I read recently about scientists who were surprised to find that the Southern Ocean is already saturated with carbon dioxide and will not be able to act as a carbon sink to the same degree they had assumed in their climate change models.⁵⁷ If I had read this article a few years ago, it would have thrown me into an emotional funk that would have lasted days. I would have gone for a bike ride to try to clear my head, but my thoughts would have kept coming back to the depressing fact that we are royally messing up our home and that I can't see any way to solve the problem. I would have probably cried at some point during the bike ride. I would have returned home from the ride and called my mother to talk it over with her. Instead of making me feel better, the conversation would have ended up only making my mom feel worse. The next day she would tell me that, after our talk, she had a nightmare about a polar bear swimming and swimming in search of ice until, exhausted, it slipped below the surface of the water.

⁵⁷ Zabarenko 2007

This time, however, I almost laughed when I read the headline. I said, “Oh boy! We are *so* screwed!” I proceeded to read the article with a somewhat detached and academic curiosity.⁵⁸

I wonder if this detachment is a good thing. Is it necessary or even helpful? Is this how emergency room doctors are able to deal daily with death and suffering?⁵⁹

I remember a class on the science and policy of global environmental change I took early in my graduate career. Each week’s topic built on the last until I felt I was faced with an unavoidable conclusion—we humans are unsustainable and by the year 2100 things are going to get very bad.

The professor was pregnant. I remember sitting in class watching her coolly lecture about carbon budgets. I couldn’t stop wondering how she could know everything she knows and *still* make the decision to have a child? Her child would likely be alive in 2100, the same year we keep referencing as being so bad. How could she balance the outlook she was painting for us (one of little hope) with the most hopeful act of all—bringing a child into the world? Is this detachment what allows scientists to work on what has the potential to be overwhelmingly depressing subjects?

At the time I was most certainly *not* detached. Did I have too much of the thing environmental education is always trying to develop in people—environmental sensitivity? Was I *too* sensitive? Was the quality in me that first attracted me to environmental education making the work extract too severe of a toll on me?

Perhaps, then, it was a sense of self-preservation that brought me to this point⁶⁰—where I am somewhat calloused. Is this an appropriate stance, however, for an educator?

⁵⁸ This is *not* to say that I am always able to laugh and read reports like this with detachment. I sometimes still become emotional—but I struggle with whether or not to allow myself to feel this way.

⁵⁹ Palmer (1983) examined how in emergency room situations, usually considered sacred, paramedics often use language that could be considered calloused or insensitive. For example, they may describe dead bodies as “crispy critters” or “veggies.” Palmer asserts these are strategies for dealing with death and dying.

Aren't educators supposed to inspire and encourage? What student would sign up for a course with a teacher who painted such a bleak picture of our prospects? Rebecca is right—nobody wants to hear that.

I wonder if perhaps I should keep my mouth shut. Environmental education is like a religion. There are consequences for heretics. People want teachers who tell them what they want and expect to hear: "Sure, there are some environmental challenges out there, but together we can solve them." They don't want a teacher who asks them to question whether environmentalism's quiver of solutions might be not only futile but also perhaps counterproductive. They certainly don't want to be asked to question the efficacy of the field when the teacher doesn't have any better ideas to offer.

I rub my eyes with the heels of my hands and then sit up, swing my feet off the couch and sit for a moment, my elbows on my knees, staring at the rug. I inhale deeply and then stand, slip on my sandals, grab my keys and leave the house. I want some fresh air and exercise.

As I walk towards the river, I think about the class I teach, Principles of Environmental Education. It is full of in-service and pre-service teachers. They have chosen this field because they are idealistic and hopeful for the future. It is a beautiful way to see the world. I remember seeing it that way.

I fear robbing them of that outlook. My mental space can be a bit hellish when I start to debate these topics with myself. Why would I want to bring my students down here with me when I am unsure as to whether or not I will be able to guide them back out?

As I walk I remember a class several weeks ago when the topic was an overview of some of the more pressing challenges environmental education faces. I prefaced the discussion by saying that we would be enumerating a series of challenges, but that students shouldn't leave class depressed about the prospects for environmental education because we would be spending the rest of the semester exploring ways to improve

⁶⁰ Ying (2008) examined self-detachment in social work students as a "buffer" against emotional exhaustion. Ying found that this detachment allowed the students to continue to work on situations that could otherwise be emotionally draining.

environmental education and surmount challenges. Charles, a young in-service teacher with bright eyes and a wife who is expecting their first child, stayed after class to talk with me.

The scene begins to replay in my mind. I'm still walking towards the river, but I'm seeing only the long hallway of our classroom building with its rows of lockers and flickering florescent lights.

"Do you really think it can work?" Charles asks earnestly.

"Can what work?" I reply.

"Environmental education. Do you really think it can help solve all these environmental issues? I mean it just seems like it faces so many challenges; and the environmental issues are so big and complicated!"

I pause. I can't think of how to respond. I look at his face and see hope. Is he asking me because he hopes that I will reassure him? He seems very eager to participate in class discussions—does he just want to continue the class discussion and explore the concepts a little more deeply? Or does he really want to know what *I* think. And who am I right now? Am I the teacher who guards my own opinions and instead asks questions to draw out the student's ideas and beliefs and guides him in examining them? Or am I me, the one who struggles with doubts about the field and about the prospects for the human race?

I settle on, "That is a good question." I figure that is a sufficiently vague and safe response.

"Take climate change, for example." Charles says, "We need to make big changes really quickly, and I just don't know if education is quick enough and effective enough to make a meaningful difference. What do you think—do you think it can help?"

"I..." I pause again, searching for the right thing to say, "I think you're right—climate change is a difficult issue. You're right that emission reductions and other changes need to start being made right now. And education is a slow process so it's questionable whether or not it can have an impact that will be timely enough and large enough to address some of the more pressing climate concerns."

I feel like a politician—carefully choosing my words so as not to “go off message” too far. I remind myself that Charles wouldn’t have signed up for the environmental education class if he didn’t believe in the potential of environmental education. I remind myself that I have no right to unload my dark thoughts on a student. I tell myself that even though I am currently doubting the potential of the field and even flirting with depression about the future of the human prospect, my role as a teacher in the field of environmental education is to equip students with the knowledge and skills to be reflective practitioners. It is not to cause them to question the legitimacy of the entire enterprise.

I hope I am successfully walking the line between my personal doubts and my role as a teacher. I cautiously continue, “Education is still, however, our best bet for changing public opinion and creating support for environmental policies. If the politicians are going to have the political will to address climate change, they will need the support of the people. And I don’t know any better way to create that support than through education.”

“Yeah,” Charles sighs. “I guess it is the best option we have. I just wish I could see a way to match the effort to the timeframe and the scale of the problem. What environmental education is doing now just seems inadequate.”

“Yeah, I hear you.” I reply with a small smile and a shrug. “It will be interesting to see what the next few years bring. Maybe more frequent climate-related disasters might galvanize public opinion and give environmental education the push it needs to move more into the mainstream of education. Perhaps then environmental education will be able to ramp up its scale to more adequately match the problem.”

“Yeah, we can hope, I guess.” Charles replies.

We both stand in the hallway for a moment as we strap on our bicycle helmets and zip our jackets. We smile and say our goodbyes and turn towards exit doors on opposite ends of the long corridor.

As I reach the River Road and turn to walk along the bicycle path, I replay in my head the conversation with Charles. Did I say the right things? I think I did an okay job. After all, I didn’t tell him that I think environmental education is futile—that might have

caused quite a stir if news of that had reached my major professor. I think I offered an amazingly good bread crumb of hope there at the end with that bit about climate change galvanizing public opinion and opening up new possibilities for environmental education.

I climb the hill to reach the overpass over I-94. I stop on the apex of the hill, directly over the center of the roaring highway below. I hold the railing and look at the eight lanes of traffic winding its way to and from the towering skyscrapers of downtown Minneapolis. I turn to look in the opposite direction towards downtown Saint Paul.

My mind wanders and soon I am high above the ground with a bird's eye view of the cities. The web of concrete and asphalt roads continues as far as I can see in all directions. Cars and trucks idle at stoplights, cranes pierce the sky, airplanes line up to land at MSP. I swoop down over the Mississippi River, down into the tree-lined gorge, over the locks and dams. The years roll backwards and I see barges full of wheat, then steamboats, then wooden boats of early European explorers, Native American canoes, and finally I see no boats at all. I see an untamed river with unnamed falls.

The years retreat with increasing speed and I see the lip of the falls marching downstream at an astonishing pace. The floor of the gorge rises to meet the surrounding hills. A cold breeze smacks my face as a sheet of ice advances to cover the land in every direction and then as quickly as it arrived, it retreats. I float past the clouds and gaze down to see the Rocky Mountains rising, the Earth's tectonic plates grinding, ocean floor spreading, the sea level rising and falling like my chest as I breathe.

I float higher. I can see the full extent of the Earth's circumference. I watch with curiosity as the big blue marble glides away into the distance. I turn around and see nothing but cold blackness. I reel my face back towards my retreating blue planet and dive towards it, picking up speed.

The air becomes thicker; my nose grabs hold of familiar scents—the organic soil, the rotting leaves. Time is no longer retreating. It now accelerates forward so quickly I must dodge rising mountains, shooting up at me from below. I reach the Great Plains and fly low over the prairies back towards the Mississippi River's confluence with the St.

Croix. Along the way I startle buffalo herds, then overturn wagon trains, turn heads of engineers in steam locomotives, and finally scare drivers of passing cars.

The blare of a car horn jerks my mind back to my body. I stare down at the rumbling traffic on I-94. “We are *so* screwed,” I say to myself. “In a blink of geologic time we’ve transformed the planet in ways we cannot comprehend.”

When I take the long view, the geologic time scale view, the global view, the biodiversity view, it is difficult for me to see myself as a player in an ongoing environmental struggle—one with ups and downs—victories as well as defeats—one that may eventually lead to a better way of living with the earth and the other species on it. I don’t see my contribution to the environmental movement building on the victories of previous generations and providing a starting point for future generations. What I see is a precipitous collapse rivaled only by the previous five “mass extinctions.”⁶¹

“We are a cancer on the one home we have in this vast universe,⁶²” I whisper.

The image enters my head of Rebecca, sitting in the armchair of our living room, arguing for the value of a discipline that isn’t even hers. I wonder if I don’t believe we humans can live sustainably along with the other species on this planet, and if I don’t believe environmental education has the potential to contribute to meaningful progress, at least not on the timeframe needed to solve the big issues, and if I fear it may even be counterproductive, then how can I profess environmental education at the University? I stand in front of my class every week and lead discussions about how we can “tweak” the field to make it better. My students look up at me and see, I imagine, someone who entered environmental teaching because she believes it is a worthwhile, noble, and effective pursuit. Maybe they see me as a role model.

⁶¹ These extinction events wiped out between 76% and 95% of the species on the planet. It then took between 5 and 10 million years for biodiversity to recover after each of the previous events.

⁶² Quammen (1998) writes that the recovery of biodiversity “might not begin until *after* the extinction-causing circumstances have disappeared. But in this case, of course, the circumstances won’t likely disappear until *we* do.” (p. 69)

“I am a phony.” I sigh, grasping the railing of the overpass and arching my back to gaze towards the sky.⁶³

⁶³ Uzeyir Ok (2004) describes the experience of “religious stress” by Muslim students of Theology in Turkey. It is not difficult to draw parallels between the experiences of these students and the experiences of environmental educators, especially if one understands environmentalism as a type of religion, and understands, as Ok asserts, that tensions and contradictions are expected among students of all religions. Ok defines *religious stress* as:

A state of mind which is often characterized as being uncomfortable because of such feelings as uncertainty, distress, questioning, contradiction, confusion, doubt, anxiety, loss of faith, discord, and so on, which may result for the people who experience it in such emotions as guilt, alienation, loneliness, disloyalty, and unwillingness in the context of religion. (p. 201)

Ok argues that “all religious education systems worth of the name are expected to develop the means to handle such challenges” (*ibid*).

Part II

The signal turns to “walk” and the horde of students and I step off the curb into the crosswalk on University Avenue. We cross the four lanes of pavement towards the brick and wrought iron campus gates. My office building sits immediately behind the gates. I am heading there to print some articles I want to use for my class discussion next week.

Students stream around the edge of the gate, threading their way between the hordes coming from the opposite direction. Bicyclists weave between pedestrians and a man on rollerblades jumps over the curb and cuts in front of me, gliding his way up the sidewalk towards my building. My eyes follow him and then I see one of my professors, Doug, exiting my building and walking down the sidewalk towards me.

“Oh no,” I whisper under my breath, my thoughts immediately focused on the “Incomplete” I have for an independent study Doug supervised for me last year. The incomplete paper has been weighing on my mind. I am embarrassed to see him.

“Hi, Doug,” I say somewhat bashfully as we approach each other.

“Elizabeth!” Doug smiles, “I was just thinking about you!”

“I’m working on the paper,” I blurt out, “It’s just taking me a long time, but I’ll get it to you—soon. I promise.”

“Oh I wasn’t even thinking about that,” Doug says in his soft-spoken way, his eyes smiling. “I am sure you’ll get it to me. I’m not worried about it. How’s it going?”

My paper was supposed to be about the potential for critical pedagogy to more effectively encompass environmental concerns. It was my idea to write on this topic. At the time I proposed it, it seemed to me that critical pedagogy, with the premise that traditional education is a political process which “supports the needs of the dominant cultures while subverting the interests of marginalized cultures,”⁶⁴ needed only to expand its definition of marginalized cultures to include what Aldo Leopold called the land-community, including soils, water, plants and animals.⁶⁵ After all, the capitalist ideologies

⁶⁴Kincheloe 2004, 14

⁶⁵Leopold 1949

responsible for colonizing, dehumanizing and exploiting people are the same forces responsible for the exploitation of the environment and of non-human life.⁶⁶

⁶⁶ Words of Martin Luther King, Jr., when read with an ecological perspective take on a significance beyond their original intent. The same words King used to fight racism and discrimination could be re-read to be an acknowledgment of the interconnected biosphere:

I am cognizant of the interrelatedness of all communities... Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly. (1963, pp. 188-189)

Paulo Freire and his followers' assertions that capitalism increases disparities between the powerful and the oppressed and that "all people, places, and things are potentially converted to commodities, whose value is determined by the whims of the marketplace" (Darder, 2002, p. 75) echo ecological concerns that free markets do not adequately value environmental health and longevity.

Writings of critical feminist pedagogues like Patty Lather also seem to offer a compass guide. Lather's work challenges the "dinosaur culture of master narratives" (1991, p. xvi) just as environmental concerns seek to question an unsustainable capitalistic consumer-driven juggernaut that defines success and quality of life in terms of wealth accumulation. Lather's talk of a politics of empowerment, drawing on Gramsci's work of counter-hegemony, which "analyzes ideas about the causes of powerlessness, recognizes systematic oppressive forces, and acts both individually and collectively to change the conditions" (*ibid*, 4) echoes the words of environmentalists who seek to find the underlying causes of environmental degradation and then organize individual and collective action to correct them.

Native American critical pedagogies also seem to be a place to find environmental hope. Where some other critical pedagogues fail to make explicit the connections between oppression of humans and exploitation of the environment, Sandy Grande (2004), makes the case strongly:

One of the primary effects of the contemporary environmental debate is that it obfuscates...the real source of environmental destruction (colonization and the ill-effects of its consuming habits). In a time when the dominant patterns of belief

Critical pedagogy's goal of deconstructing seemingly natural beliefs, practices, and language, examining the ways these taken-for-granted constructs uphold the status quo, and then creating a new, emancipatory vision, seemed a natural fit for environmental education and environmentalism. Environmentalism struggles to even verbalize its most basic values in a language that reduces old growth forests to "board-feet," soils and water to "natural resources," and functioning communities of living beings to "ecosystem services."⁶⁷ The same pedagogy that works to give voice to oppressed people seemed a natural ally for people wanting to give voice to victims of the current ecologic holocaust.

I was excited by the possibilities of mining the substantial body of critical pedagogy literature for gems of wisdom that would propel environmental education into more transformational and effective forms. I was also excited by the idea of helping environmental education grow from its small niche. If I could promote the idea of including environmental concerns in the already vast and vibrant critical pedagogy discourse community, environmental education could greatly expand its reach. As I delved into the literature, however, I began to see several roadblocks.

"You mean, how is it going with the paper, or with things in general?" I ask.

"Things in general—school, life."

and practice are being widely recognized as integrally related to the cultural and ecological crises, the need for understanding other cultural patterns as legitimate and competing sources of knowledge is critical. In this context, the voices of indigenous and other non-Western peoples become increasingly vital... because non-Western peoples and nations exist as living critiques of the dominant culture, providing critique-al knowledge and potentially transformative paradigms. (p. 65)

⁶⁷ Jack Turner (1996) argues that many environmentalists have accepted the economic language or the dominant resource extracting economies and have thus been "colonized." He writes:

In accepting their descriptions we allow a set of experts to define our concerns in economic terms. This predetermines the range of possible responses. Often we cannot even raise the issues important to us since the language used excluded our issues from the discussion. To accept this con emasculates not only radical alternatives but all alternatives. Every vocabulary shapes the world to fit a paradigm. If you don't want nature reduced to economics, then refuse to use its language. (p. 126)

“Oh,” I say, “they’re okay.”

“Hmm,” Doug replies. Then silence for a moment. He is opening a space for me to provide more details.

I rock up onto my toes and then back onto my heels and say, “It’s actually been a bit rough trying to write that paper for you. Thinking about some of the questions it raises makes it difficult for me to keep my motivation for environmental education.”

“In what way?” Doug asks.

“Well, I found some reasons why critical pedagogy might not be the perfect match I was initially hoping it would be for environmental education.”

“Oh?” Doug raises his eyebrows and then waits for me to continue.

“Yeah, and that’s just the tip of it.” I say and then continue in a tone that I hope conveys the lighthearted breeziness appropriate for brief encounters on busy sidewalks, “Then I started to question whether environmental education is even a worthwhile endeavor. And if it *is* worthwhile, I started to doubt whether or not the university is the place to be pursuing it,⁶⁸ and more importantly, if I am even suited for it. And after all

⁶⁸ One of the books I was reading for my independent study was David W. Orr’s *The Earth in Mind, Tenth anniversary edition* (2004). In it Orr indicts higher education for its failure to promote environmental ethics, instead equipping graduates only to be more efficient vandals of the earth.

Many if not all of Orr’s criticisms of higher education were being illustrated for me at the time by the University of Minnesota. At the time I was reading Orr, the University of Minnesota was crushing a strike by its workers who were asking for a raise to match inflation. The raise was to be funded by monies for which the workers themselves had lobbied the legislature and which the legislature had granted the university. The university administration refused to engage in good-faith negotiations, bullied professors and students into not supporting the workers, publicly and repeatedly denied the value of the workers by assuring students that their absence would cause little to no disruption, and waited until the striking workers could no longer afford to strike.

Given the university’s actions and the complicity or acquiescence of the university community, the lofty rhetoric of the university’s mission rang hollow to me. I

that thinking, I kinda feel like maybe I should just drop out and go teach canoeing for a living.⁶⁹ Or make pottery. Or dig trenches.”

I half expect Doug to laugh. I was, after all, being a bit hyperbolic with the part about the trenches. I expect him to say something like, “Well, I can see why that paper is taking so long!” and then give me an encouraging punch on the elbow and suggest I make an appointment to see him during his office hours. He does not laugh, however. He doesn’t even smile. Instead he looks at me with concern and studies my face for a very long moment. I try to give a little smile.

“What’s been making you feel this way?” he finally asks.

“Oh, you don’t have time for me to get into it right now,” I say. “You must be on your way somewhere.”

Doug shrugs his shoulders, lifting both arms up to his sides, palms up, and raises his eyes to the rustling leaves and to the blue sky beyond them as if checking for rain and says, “I’ve got time.”

The matter-of-fact way he says it makes me believe him. I think to myself that, if I ever do end up being a teacher, I am going to have to bottle whatever it is he’s got that makes you feel like the center of his world while you’re with him. I forget the fact that

doubted whether an institution that would so blatantly exploit its workers could produce graduates who would do anything other than continue to participate in and provide service to a system of wealth accumulation that destroys the ecologic integrity of our planet. I doubted whether the radical re-thinking of education, and indeed of society, that would need to occur to begin to save remote organisms without voices would come out of institutions of higher education exploiting workers vociferously protesting outside its gates.

⁶⁹ Researchers have been trying to understand why teachers burnout and leave the profession. Karen Hammerness (1999) asserts that one factor that can put a teacher at risk for leaving the field is having a vision for the outcome of her work that is clear, but that is perceived as very distant from current reality. For teachers whose vision is radically different from their daily practice, rather than being inspired by their vision, their vision leads them to doubt and depression.

we're standing on a busy sidewalk and that social norms would frown on launching into an emotional discourse. I begin.

“So, let's start with critical pedagogy and why I can't seem to fit environmental education into its frame. I was reading Antonia Darder as she was making the case for why, to be a critical pedagogue, you must see yourself as part of an ongoing struggle.⁷⁰ This view makes so much sense for social issues where we see ourselves inheriting a struggle from our ancestors and passing our hard-won gains on to our children who will continue the fight. The master narrative here is one of progress. No one expects to solve all the social problems today, but when you think of our small gains as the starting point for the next generation, it's easy to see the value of fighting.

“When I think about the master environmental narrative, however, I can't see it as one of progress. I see it instead as a rapid downward slide into annihilation. Critical pedagogy demands patience and the long view. Patience doesn't work for an issue like climate change where we needed to take drastic action yesterday. And the long view doesn't work for an issue like biodiversity where species are disappearing everyday and once they're gone, they're gone.”

I pause to give Doug a chance to argue about how the picture I'm painting is too bleak and how the master environmental narrative includes many victories and that he can remember back to when rivers were catching fire and at least they're not doing that anymore. He doesn't argue, however. He just continues his eye contact and his open face.

“And the second problem I see with trying to fit environmental education into the critical pedagogy frame,” I say, “is that to be a critical pedagogue, you've got to have hope. Freire makes that point over and over.⁷¹ If you're trying to be an educator and yet you don't have hope, what the hell are you doing? You should get out of the way and let somebody who does have hope take the job.

“Again, with social issues, this makes sense. With the environment, on the other hand--I don't see how one can understand the situation and still be hopeful. To be an

⁷⁰ Darder 2002

⁷¹ Freire 1997

environmental educator I have to understand the intersections of ecology, chemistry, climate science, demography, politics, and human behavior. Practitioners in any one of those individual disciplines can focus in on their specialty and ignore the big picture.⁷² I can't. And when I look at the big picture I see a holocaust."

"Why are you choosing to see it in those terms?" Doug asks.

"You're right, Doug. I guess it is a choice." I pause and chew on my upper lip. "I guess I see it this way because I'm looking through the lens of Deep Ecology. I believe *all* species on this planet have a right to live, and I don't see anything especially remarkable about *Homo sapiens* that should give us the right to exterminate the rest of the species. I suppose if I looked instead through a strictly anthropocentric lens, things wouldn't seem so bleak. We humans, well at least we *rich* humans, could always engineer our way into comfort, no matter what happens to our environment."⁷³

⁷² David Orr (2004), in his essay "Hope in hard times" argues:

Most people, many scientists included limit their range of attention to the more agreeable particularities of life and profession. Educated to be specialists, it is easy, even comfortable, to avert our gaze from events, trends, affairs, and deeper currents beyond the narrow boundaries of our expertise. Much can be said for the strategy of not knowing too much...Doing so has the advantages of helping to preserve one's sanity and good reputation as a dependable and sociable sort. (p. 296)

⁷³ Policy analyst Thomas F. Homer-Dixon (cited in Quammen, 1998) describes the rich post-industrial nations as riding in an air-conditioned stretch limo through the potholed streets of New York city where the homeless beggars live. Outside the limo is the rest of mankind, going in the opposite direction. Quammen, after examining the trends of ecological destruction, predicts the following:

So the world's privileged class--that's your class and my class--will probably still manage to maintain themselves inside Homer-Dixon's stretch limo, drinking bottled water and breathing bottled air and eating reasonably healthy food that has become incredibly precious, while the potholes on the road outside grow ever deeper. Eventually the limo will look more like a lunar rover. Ragtag mobs of desperate souls will cling to its bumpers, like groupies on Elvis's final Cadillac. The absolute poor will suffer their lack of ecological privilege in the form of lowered life expectancy, bad health, absence of education, corrosive want, and anger. Maybe in time they'll find ways to gather themselves in localized revolt against the affluent class. Not

“So I’m looking through the lens of Deep Ecology and I see the projections of species loss and I understand the drivers of this loss and I don’t see a way to stop it,” I say, “and that’s why I don’t see any hope.”

Doug inhales deeply and purses his lips. I continue, “So those are the first two reasons I can’t fit my environmental views into critical pedagogy--no master narrative of progress and no hope. And the final reason is love. Freire writes that ‘it is impossible to teach without a forged, invented, and well thought-out capacity to love.’⁷⁴ And I assume he means a love for the people you’re teaching and working with. And like the other two reasons, this makes a lot of sense from a human-centered perspective.

“And while I do have love, I have that love for *all* species. And when I look at the fact that humans are on track to wipe out the vast majority of all the other species sharing our planet, it’s easy for me to think that the best thing for all involved would be if humans would just disappear.”

It feels good to speak these thoughts aloud. I’ve been wrestling with these ideas in private as I read the texts I’ve chosen for my independent study, take notes and journal in preparation for writing the paper. In private these thoughts chase their tails and dive down rabbit holes I fear to enter. I turn corners and am confronted by mirrors that show me as a misanthropic monster. To speak them on a busy sidewalk to a professor of education is, in contrast, to bring them to the surface. It puts them on a chalkboard where connections can be drawn to other thinkers and where questions can be asked in an academic way that does not judge the speaker as a monster, but instead as a fellow in a society of people who are not afraid to examine the less lovely aspects of the human condition.

“I would argue,” begins Doug, “that it is possible to love humans without loving all aspects of humanity. It’s hard to deny that there are some very ugly things about the human race. I doubt even Freire didn’t have the occasional misanthropic sentiment.”

likely, though, as long as affluence buys guns. In any case, well before that they will have burned the last stick of Bornean dipterocarp for firewood and roasted the last lemur, the last grizzly bear, the last elephant left unprotected outside a zoo. (p. 69)

⁷⁴ Freire 1998

“Sure. And I do love individual humans and, even though right now I don’t feel like admitting it,” I smile sheepishly, “there are times when I love the human race. And I’ve thought about using that love to motivate my teaching--I could reason that, because I love my students, I’ve facilitated for them an environmental education which enriches their lives and perhaps even contributes to a slowing of our society’s precipitous slide into ecological disaster, which will make life more pleasant for them and perhaps even for their children.

“I can’t help but fear, however, that there are other, more sinister outcomes from the environmental education I spread. Take, for example, this idea of ‘sustainability.’ It’s the current buzzword in environmental circles--the United Nations recently declared a ‘decade of education for sustainable development,’ books and curriculum are popping up everywhere promising to educate people for a ‘sustainable’ world, heck, even my job as a graduate assistant is to help design a teacher education workshop on sustainability. And I fear all this talk of sustainability just serves to hide the *unsustainability* of our lifestyles by making us feel like we’re being ‘green.’ It makes us feel positively about the future and lets us continue, guilt-free, in our capitalistic, consumer-driven ways. And so, ironically, environmental education, especially under the guise of ‘education for sustainable development,’ contributes to environmental destruction.

“So, no master narrative of progress, no hope, and a love that seems problematic,” Doug says while rubbing the back of his neck with his right hand.

“I just feel like a phony, like a fraud.” I blurt out. “I am getting paid to profess something I don’t really believe in. And I do it. And, somewhat unfortunately for my conscience, I apparently do it pretty well because my students tell me how ‘inspirational’ my class is.

“I don’t feel honest doing it, but I keep doing it because it’s more comfortable to keep doing it than to stop. I’m in the program, I’m getting paid, I’m going to someday graduate with a degree that will give me respect among people who are easily impressed.

But more than that, people smile and nod when I tell them I'm an environmental educator and they say trite things like 'what an important job you're doing!'⁷⁵

"And sometimes I feel like a lot of us environmental educators realize what a farce we're putting on, but we don't change anything because we're giving people what they want and, frankly, our jobs and reputations depend on it. Take for example this teacher education workshop my professor and I are planning on 'sustainable futures.' In private, even he admits that he sometimes thinks sustainability is a pipe dream and that we're now just playing the 'end game,' trying to keep things as good as possible for as long as possible. But he still recruits the participants with the promise of teaching about 'sustainable futures.'"

"That makes me so mad!" Doug says. "I mean really furious. I think if I saw him right now I'd be tempted to punch him. To 'play' at something like that!"

His outrage catches me off guard at first. Then I understand it. Doug embodies the critical pedagogy he professes. He teaches about emancipatory spaces as much by creating them as by lecturing about them. There is no disconnect between his personal views, his academic views, and the way he lives his life. I envy him. I don't know if that luxury is available to environmental educators.

"I don't think anyone starts out his career as an environmental educator by 'playing' at anything," I say. "I think we all start in environmental education because we believe in its potential. All the way through my master's degree and four years of full-time work after it, I believed in the idea of sustainability and in environmental education's ability to get us there. It wasn't until I really steeped myself in the philosophy and theory and reflection, not to mention the science, that I developed doubts.

"Part of what keeps me from dropping out is the amount I've invested to get where I am. And part of it is the fact that the work is relatively easy for me—I know the

⁷⁵ Orr (2004) asks, however, "what does it mean to be thought sane in a system that is insane? Or to be well adjusted in a system out of adjustment with its larger ecological context? Or to be in good social standing with a crowd standing dumbly on the edge of a precipice?" (p. 207)

literature, I know the lingo, and I'm good delivering. But I think I could get past all those barriers and quit. I think the biggest thing keeping me from quitting is that I haven't fully convinced myself that environmental education is not the 'right thing' to do. And if environmental education is actually the 'good fight' then, even if it's hopeless, I feel obliged to keep fighting it.

"Just last week," I say, "I was volunteering at the Heart of the Beast puppet theatre, helping to make some papier mache hands for their annual May Day parade. And as I was dipping the strips of newspaper in the glue and smoothing them over the form, my mind was running over all these questions and doubts. Occasionally I would raise my eyes and look at all the other volunteers, each working on their own puppets, and I would think how happy they all looked. And I would think back to times when I had been very happy and carefree in the way I imagined they were.

"I remembered being very happy working as a wilderness guide. Of course I had things to worry about--weather, safety and risk management, group dynamics--but they were all concrete things. Once the van dropped us off at the trailhead, my world shrank to contain only the things I could currently observe and control. I was also happy because I could see the fruits of my labor each day--mountains climbed, shelters erected, meals cooked. Each night I would fall asleep as soon as my head hit the pillow--physically tired and mentally clear--pretty much the opposite of how things are for me as a graduate student. And I got to recharge my spirit in the wilderness. I can't even do that anymore without thoughts intruding about how much we're messing up the planet.

"So there I am, with my hands covered in papier mache, wondering why in the hell I'm putting myself through this mental and emotional anguish when I could just quit and teach canoeing full time. Then I realize that it's getting late in the evening and I should be getting home. So I clean my hands and find the volunteer coordinator to tell her that I'm going home. I mention to her that I'd like to stay later, but I have to prepare for class tomorrow. Then she asks me what I teach and, when I mention environmental education, she grabs my hand in both of hers, looks me in the eye and says with this impassioned tone, 'Oh, thank *god* for people like you! We need more of you! *Please* keep

up the good work!’ and she just keeps holding on to my hand and staring into my face with this pleading expression until I say, ‘Oh yes, I will.’

“Then on the bike ride home, the woman’s words keep replaying in my head and I feel so trapped. This work is making me feel miserable, but the work has got to be done and somebody’s got to do it and I am educated in it and good at it and so I should do it.”

“Elizabeth, you shouldn’t choose a career because you feel like you *should* do it.” Doug says kindly.

I consider this. This sounds like one of those truisms people set to music in cheesy YouTube videos. It seems oversimplified and idealistic. Part of being an adult is being constrained by considerations of what one *should* do.

“Whenever I talk with my mom about this,” I say, “and I bring up the idea of quitting environmental education to do something like be a mountain guide, she always tells me how what gives her meaning in her life is knowledge that what she’s doing is making a positive difference in the world. She warns me that if I decide to do something more self-serving that I may eventually feel that my life is hollow. She says that in the long run what makes people happy is serving others through the best use of their talents and training. And I guess I think she has a point. Environmental education is what I’ve trained to do and I’m good at it, so it’s probably the way I could make the most positive contribution to the world—and given the environmental crises that are going on right now, I feel like I’ve got to do it.”

I realize that I’m being contradictory. First I argue that environmental education is futile or even counterproductive, and then I say that it’s the best way I can contribute to the world. I’m sure the internal inconsistencies in my argument are not lost on Doug. I blush and bite my lip.

“One time I was lying on my back on the ground looking up at the night sky,” Doug begins. “There was no moon and I was miles from the nearest city, so the sky was really black. And I remember being awestruck by the profusion of stars and the incomprehensible size of the universe. And all of a sudden I felt very small and insignificant. Now this realization may make some people feel scared or depressed, but for me it was liberating. I realized ‘wow, I’m this tiny little person and I didn’t cause all

the troubles in the world and I can't fix them all either.' And being humbled like that made me let go of my expectations for myself."

"But you're still working on solving the big social problems."

"Yes, I am," Doug says, "but I'm not doing it because I *should* do it. I'm doing it because it's a good way to live. My work in social justice puts me in a community of good people and I get energy, satisfaction, and joy from my interactions with them and from the work we do."

We both stand for a moment, smiling at each other, still in the middle of the busy sidewalk. "Perhaps this could be a way forward for you too, Elizabeth," Doug says. "Perhaps you choose to do environmental education because you'll be in a community of good people working together to do good—and that's enough. And that can make you happy. It doesn't matter so much if you win."

I chew on my lip and study the leather on Doug's sandals. I would like for things to be as easy as Doug makes them sound. I just don't see, however, how being involved in environmental education could make me happy when it means confronting a holocaust every day. Environmental education is not like social justice. There's no master narrative of progress.

"I just don't know if I'm strong enough to do it," I blurt out, my eyes darting to Doug's face and then immediately back to his sandals.

"Why do you think that, Elizabeth?"

"It just takes such a big emotional toll on me," I say, still staring at the ground. "The irony is that what makes me a good environmental educator also, I fear, makes me unable to do it without getting too sad to continue."

"What is that quality?" Doug asks.

"Sensitivity, I think." I raise my eyes back to Doug's as I return to more comfortable academic speech and give a mini-lecture on a topic I've covered so many times in class. "Environmental educators have known for a long time that a key to getting people to take action to protect the environment is to get them to *care* for the

environment.⁷⁶ And they also know that one thing that can turn people into activists is to see their special places destroyed.⁷⁷ So a lot of environmental messages do just that--they get people to care about something and then they show them how it's being destroyed. And that continual process of getting your heart opened up and then sucker punched is hard."

"Yes!" Doug says, "I've seen this happen with my son. He used to love watching nature documentaries,⁷⁸ but he doesn't want to watch them anymore because they make him too sad. It's this exact process you mentioned--the first fifty minutes of the program extol the wonders of some species and really make you feel joyful to be sharing the same world with it. Then the last ten minutes of the program show that animal being killed or its habitat destroyed. It was just too much for him. He has such a pure heart, it would make him cry."

I picture his sweet little boy crying and then I get the bitter taste in my mouth and the burning in my eyes that lets me know I'm about to cry. "Shit," I think to myself, "do

⁷⁶ While Hungerford and Volk's (1990) meta-analysis of numerous other studies is most often cited to support the idea that environmental sensitivity is a key predictor of whether or not a person will engage in responsible environmental behavior, this is something environmentalists have intuitively known for a long time. Aldo Leopold (1949) wrote, "We grieve only for what we know. The erasure of Silphium from western Dane County is no cause for grief if one knows it only as a name in a botany book."

⁷⁷ Chawla & Cushing 2007

⁷⁸ The *Planet Earth* series, produced by the BBC, captures the beauty and uniqueness of the earth's varied ecosystems perhaps better than any previous nature documentary. My students frequently mention the series and how moved they are by the footage of the animals. True to form for the genre, the boxed set includes an episode called "Saving Species" that touches on the vulnerability to extinction of many of the species highlighted in the series. When I show even a segment of this episode to my students, they report being saddened and depressed. A headline in *Seed Magazine* asks "Has the [*Planet Earth*] footage become a chronicle of an already vanished world?" (Kaufman, 2009)

not cry. Not in front of a professor. Not on the sidewalk.” The picture of his little boy crying morphs in my mind into a picture of that little boy as an old man. He’s sitting with his grandchildren as he recounts how, when he was a little boy, there were still polar bears, short-tailed Albatross, and Wyoming toads. He and the children then turn to watch the “wildlife” visible from their front porch through the buckthorn—the pigeons, the house cats, the white-tailed deer, the house files.⁷⁹

“When I was a little kid,” I begin, struggling to keep my voice even, “my mom and I would spend all summer camping and visiting state parks and going on ranger-guided hikes. I had subscriptions to *My Big Backyard* and *Ranger Rick*. And I was such a spiritual little kid that I would be awestruck by the beauty and wonder of it all; I remember feeling so connected with all living things and so enveloped by love from the natural world. But as I got older and more educated, my heart would just get stomped on again and again.”

I can hear my voice getting higher pitched as my throat tightens. My lower lip and chin start to tremble. “Oh great,” I think to myself, “you’re such an embarrassment--crying in front of your office--get yourself under control!”

“I wish I could love the world like that again--with joy. But I just feel sorrow now,” the tears are now flowing down my cheeks and splattering on the pavement. “And it sucks to have every experience of seeing a rare bird or tapping a maple tree for sap, which should be a joyful experience, tainted by intruding thoughts about extinction or climate change.”

Doug doesn’t try to interrupt or calm me or ask me to not cry. He just stands there, listening, and I continue.

⁷⁹ Quammen calls these species “weedy” species “in the sense that animals as well as plants can be weedy...They tend to thrive in human-dominated terrain because in crucial ways they resemble *Homo sapiens*: aggressive, versatile, prolific, and ready to travel” (1998, p. 67). Quammen looks into the future and sees, not the end of nature, but a nature where the specialized and endemic species are gone and only the weedy species remain.

“Just the other day I was canoeing the Upper Saint Louis River near Duluth. Buds were just beginning to show on the trees and the air had a warm edge. The water on that river is dark with tannin and as it slides over the black bedrock it forms a flawless mirror of the sky. From an eddy just above a small canyon where the river constricts and tumbles over a series of boulders, I slid over the shoulder of a wave and dropped into its trough. That wave was perfect for surfing and I stayed there for what seemed like forever, carving back and forth across its glassy surface. The water piled up on my bow and streamed along my chines. I didn’t have to work or think to stay on the wave; it was second nature to me. I had only to lazily watch the grain of the current and tilt my hips to one side or the other and subtly change the angle on my blade. My little boat would glide from side to side, slip back onto the crest and then surge down into the trough. It’s the most magical feeling to be one with the river like that. It’s the closest thing I’ve found to meditation or worship. My mind just clears and I’m in the moment.”⁸⁰

“And then,” I exclaim, my voice still high and the tears still falling, “I thought about how much it sucks that we’re messing up this world. And I got so sad that I started to cry—there in my boat on a wild river on a beautiful spring day, surfing a sweet wave—and I’m *crying*! And then I got angry. And it was this anger that couldn’t be directed at any one person or any one thing; I felt so *powerless* to do anything about it.”⁸¹ It was awful.”

⁸⁰ Psychologist Mihaly Csikszentmihalyi describes this phenomena as *flow*. The concept of flow is central in adventure theory and programming. When a person experiences flow, action and awareness merge and complete attention is given to the activity. The person loses self consciousness and becomes one with the activity to the extent that “concern for the self disappears” (cited in Martin, P. & Priest, S. 1986, p. 18). This loss of self in the activity is the “high” many rock climbers and whitewater boaters seek.

⁸¹ Hungerford and Volk’s responsible environmental behavior model (1990) can help explain some environmentalists’ feelings of disempowerment. Their model suggests that for people to be empowered to action, among other variables, it is important for them to have an in-depth knowledge of the issues, knowledge of the consequences of their

I wipe my nose with the back of my hand. “I apologize about the crying,” I say as I work to regain my composure. “Anyway, I guess the point of all this is that I think I may be too sensitive to deal with the loss I have to face every day as an environmental educator.”

“That’s beautiful.” Doug says.

I raise my watery eyes from Doug’s shoes to his face. This was not the response I expected.

“No it is. It’s really beautiful.” Doug smiles. “I’d like you to meet my daughter. I think she could get a lot out of meeting you.”

This comes as a surprise. I’ve assumed I’ve shown myself to be a misanthrope with depressive tendencies masquerading as an educator. I wouldn’t think anyone would want someone as confused as I am to meet his child.

Doug reminds me that I can make an appointment to see him any time I’d like to talk through my thoughts for the independent study or any of the other questions with which I’m grappling. I thank him for his willingness to listen and I apologize for the long and unscheduled discourse on the sidewalk. He smiles and says, “Any time.”

Doug turns to resume his walk to wherever he was headed when we encountered each other on the sidewalk. I turn and complete the final six yards to the door of my building, swing open the heavy metal and glass door, and descend the steps into my stuffy basement office.

I boot up my computer and select the files to print for class. As the printer spits out the pages, I recall what Doug said about lying on the ground and looking at the stars, about how he can’t hold himself responsible for fixing the world’s problems and how he does the work he does, not because he thinks he’ll win or because he feels he should, but because it is a good way to live, surrounded by good people.

behavior, and an internal locus of control (the belief that their actions can impact outcomes). With issues as large and complex as mass extinction and climate change, it is difficult to feel that one fully understands the issues, that one’s individual behavior choices will have much consequence, and that one’s actions can have much of an impact.

It occurs to me that this is more or less the same argument David Orr makes in the essay he titled *Hope in Hard Times*.⁸² I think back to when I first heard that Orr had published an essay with this title. I couldn't wait to get a copy. I felt Orr was one of the most visionary and inspirational environmental and educational philosophers of our time. I knew he understands as well as anyone the severity of the environmental challenges we face, and I was excited by the fact that Orr could know that and still have found a way to be hopeful. I was naively expecting an "answer," a way to tweak education or policy or philosophy in a way that would turn us around as a species, begin to heal the wounds, set us on the path to right living.

When I had finished reading Orr's essay, I found his only "answer" was to not take ourselves so seriously that we see ourselves as the tragic hero alone on the ramparts, still fighting the war that is already lost. His suggestion that we, instead, see ourselves as engaged in a comedy of survival,⁸³ fell flat with me. More than just falling flat, it angered and depressed me. What does it mean that one of the leading environmental and

⁸² Orr writes:

Optimism cannot be commanded, as [Holocaust survivor Viktor] Frankl observes, but hope can be nurtured by good work, openness to life, and rising above our lesser selves. Hope, real hope, comes from doing the things before us that need to be done in the spirit of thankfulness and celebration, without worrying about whether we will win or lose. (2004, p. 297)

⁸³ Orr(2004) draws on Joseph Meeker to distinguish between the tragic and the comic view of life. From the tragic perspective, the world is a battleground whereas from the comic perspective, life is a game. In Meeker's words (quoted in Orr):

It is tempting to see Western civilization as a collective image of the tragic hero facing the ecological crisis as tragic heroes have faced other crises...but the nobility of the tragic hero is gone, and only his irrationality remains. (p. 297)

The comic strategy, on the other hand, "deflates the overinflated" and offers, Orr argues, our "best hope in hard times." He writes:

Comedy accepts what we are and the world as it is without trying to reshape it to fit either an ideology, a religion, or a worldview. It does not proselytize or pretend. To the contrary it is playful...A comic view, then, accepts our limitations and trims the sails of ambition accordingly. And, in contrast to the tragic hero standing alone on the ramparts of one cause or another, the comic figure is always in a crowd headed for a celebration. (p. 297)

educational philosophers of our day's best try at "hope" is a suggestion to enjoy ourselves as we all go down?

Doug's suggestions fall flat with me in the same way. I grab the pages out of the printer, shove them in my messenger bag, throw the bag over my shoulder and leave my office. I climb the stairs to the heavy glass door and push it open, squinting into the bright sun.

Part III

“Carl!” I exclaim as I catch sight of my friend in the back corner of the coffee shop. He stands up to greet me. We shake hands warmly, I place my other hand on his and revel in the firmness of his grip and the smile lines around his eyes. Carl and I get together very infrequently due to our busy schedules as aspiring academics. When we do rendezvous, however, there is no ice-breaking required--after brief pleasantries, we dive immediately into animated debates and explorations of theories and their practical implications. We both value each other as sounding boards, resources for new insights, and friendly criticism.

“How’s it going?” he asks as we both sit in the mismatched wooden chairs and slide up to the rickety bistro table.

“Well...” I reply, trying to decide where to begin. With Carl I have few of the concerns I have when talking with most people about my doubts for the state of the world in general and for my field in particular. Carl enjoys academic discussions and, like me, is able to debate questions without becoming emotionally invested in a position. I decide to summarize for him my pessimistic view of our environmental prospects, my feelings of guilt about spreading despair among my friends and family, and my doubts about whether I can continue in the field of environmental education given my misgivings about the whole endeavor.

As I conclude my summary, Carl laughs heartily, leans forward and rubs his hands together signaling his readiness to dig in. “So you really haven’t been thinking about much lately, eh?” he quips.

“If you’re going to dig into this one, Carl, I think the next round of coffee needs to be on me.” I offer.

“You’re on.” Carl replies. “The first thing that comes to mind is that you and your environmentalist friends are a dour bunch. Do you know that?”

“I am very aware of that fact, Carl. In fact Aldo Leopold, one of the founders of the modern environmental movement, acknowledged that to have an ecological education

was to ‘live alone in a world of wounds.’⁸⁴ There is a reason he was alone there--few people want to purposely wallow in misery.”

“If that’s true, then why do all you environmentalists choose to wallow?” Carl asks. “Have you examined the dominant paradigms of the environmental movement to ask if you’re all setting yourselves up to suffer, perhaps unnecessarily?”

“Good question, Carl, I see you’re well on your way to eventually being someone’s major adviser,” I smile. “Well, let me briefly tell you about one of the dominant worldviews in environmentalism--Eco Marxism. As you can probably guess from its name, it basically argues that capitalism, because of its emphasis on growth, not only contributes to environmental decline, but is unable to promote meaningful environmental improvements.”⁸⁵

“Right,” Carl adds, “and everybody is on a treadmill of production and is either unable or unwilling to get off the treadmill.”

“Exactly.” I confirm. “And there is a reason Eco Marxism is so popular—it makes a lot of sense. It’s pretty easy to use it to explain the environmental degradation we’ve witnessed around the world, especially during the rise of consumerist culture, globalization and the multinational megacorporations.”

“I think there’s more to its popularity than just that.” Carl says. “I remember being drawn in by Marxist writings when I was a bit younger—they just resonated with my youthful idealism. I didn’t want to compromise purity of ideals. And, to be honest, the idea of being part of a revolution excited me.”

“Comrade, I was right there with you!” I laugh. “I remember when I was nineteen and I enrolled in a field-based environmental education class through the University of Montana’s Wild Rockies Field Institute. We canoed down the Rio Grande and hiked in the Chihuahua desert, all the while reading about the natural history of the area and the environmental and human rights challenges facing it. Then at night around the campfire, my three instructors and some of the other students would swap stories about being arrested for chaining themselves to the propellers of ships, or rappelling down the sides

⁸⁴ Leopold 1953, 165

⁸⁵ Lueck 2007

of sky scrapers to hang banners, or living in trees to prevent them from being cut down, or smuggling radio equipment past drug lords into Tarhuamara Indian villages in the Sierra Madre to set up a network to report human rights violations. These stories blew my mind! I mean I was a nineteen-year-old from Ames, Iowa, and at the time, I thought being arrested meant you were a bad person. Listening to their stories opened up a whole new world to me—and dang! that world was sexy. It was a world of right and wrong and of epic struggles against evil. You have to understand, Carl, that I’m a kid who grew up reading *The Chronicles of Narnia* and *The Lord of the Rings* and this new worldview appealed to that fantasy of being a part of a group of small people who, individually are powerless, but who band together to fight against the dark powers and who, in the end, prevail.”

“Comrade!” Carl exclaims and grabs my hand and forearm in his two hands. We both rise slightly out of our chairs for one moment before relaxing our grip, falling back into a slouch and sighing with wry smiles. “Ah, yes. Perhaps, at thirty, we are old and tired.”

“But to get back to your original question, Carl, the one about why environmentalists tend to fall into despair--I think it does have something to do with the fact that Eco Marxism is one of our dominant paradigms. It appeals to young people. There are a lot of charismatic thinkers who write and speak from this worldview. I mean, here’s a great example,⁸⁶” I dig into my bag and produce Derrick Jensen’s *Endgame* from 2006, flip to page xi and read, “This culture will not undergo any sort of voluntary transformation to a sane and sustainable way of living...civilization needs to be brought down now.”

“Oooh, dramatic!” Carl mockingly exclaims.

“No doubt,” I continue. “Young people read this, get fired up, and go out to save the planet. Fueled in no small part by their environmental teachers and mentors who feed them these lines about how they can change the world. Eco Marxism teaches them that

⁸⁶ Other examples include: Joel Kovel, *The Enemy of Nature: The End of Capitalism or the End of the World*, and John Zerzan, *Running on Emptiness: The Pathology of Civilization*.

revolution is the best, and perhaps the only, way we have to deal with the environmental crisis. And then..." I tilt my head to one side and extend my arm, palm up, towards Carl, signaling him to finish my sentence.

"They go out to start a revolution and realize it's a lot more difficult to bring down capitalism than they first imagined, they get disillusioned and burn out."⁸⁷ Carl states.

"Exactly." We both sit for a moment with our forearms resting on the table, relaxing from the mental exercise, which we both sense is just a warm-up. I pick up my glass of iced coffee, swirl the ice cubes with my wooden stir stick, and take a sip.

"So, Eco Marxism has a tendency to lead young environmentalists into despair," Carl says. "What other paradigms have you environmentalists got?"

"Well." I set down my glass of coffee, slide forward in my chair and carry on, "The other major paradigm, in fact probably the most influential one in environmentalism today, is Ecological Modernization.⁸⁸ On the surface, it seems a lot more promising. First of all, it doesn't call for the overthrow of the largest economic system in the planet; it works within capitalism to 'green' industries through the eventual development of new

⁸⁷ James W. Sheppard (2004), professor of environmental education and ethics, writes about the tendency of pessimism to creep into environmentally-focused courses. He finds that students, although initially inspired by the more revolutionary environmental writers, are then confronted with the reality that change is a difficult and slow process and that many of the environmental proposals are ineffective. As students continue to explore paradoxes in the struggles of humans to live ethically with the environment, attitudes begin to arise of "apathy, outrage, anger, hopelessness, and of course, pessimism."

Sheppard recounts the experience of one of his former students who ended his career in the environmental not-for-profit sector in preference to work in a non-environmental for-profit business. His student informed Sheppard "one reason he had to, in his words, 'get out,' was his increasing frustration over and inability to cope with slow rates of change" (pp. 216 - 218).

⁸⁸ Lueck 2007

technologies which free markets will adopt as they voluntarily work towards sustainable practices.”

“On the surface,” Carl says, “it seems like a win-win for everybody--no need for much government regulation, capitalists can keep producing, consumers can keep consuming, and the environment will be taken care of as technology gets better--no pain for anyone. I’m guessing, however, that you’re going to rip this one apart, given your previous tirade on ‘greenwashing’ and the current fad of ‘sustainability’ acting as a salve to sooth people’s fears and guilt and allow them to continue in their current consumer lifestyles without acknowledging the overwhelming and accelerating decline of the world’s ecosystems.” Carl winks and affectionately punches my elbow, “My little eco-pessimist!”

“Well, you can see why Ecological Modernization is so appealing. Heck, even though I just ripped it apart, I still want very much to believe that it is true.” I take another long sip of my iced coffee.

“Ok, here is a story,” I continue. “As you know, I have been hired by the Will Steger Foundation to write a set of lesson plans on international climate negotiations. So, I’ve been spending a lot of time at my boyfriend’s house working on this project—so far mostly doing research for the lesson plans that will ask students to decide, given their understanding of the best science available as well as their understanding of the difficulties inherent in international climate negotiations, what target we should adopt for atmospheric concentrations of carbon dioxide. Well, you know what it’s like when you start delving into research and you’re finding study after study that relates to your question, and those studies reference other studies and other researchers and organizations sponsoring related research, and you start to get a handle on the question and you’re getting excited by the information, right?”

“I love that feeling.”

“Yes! This is why I love getting together with other nerds,” I smile. “Anyway, so I was in that research groove one afternoon at my boyfriend’s house. I was sitting on the couch with my laptop and he was in his bedroom, working at his desk. Every time I would read some new piece of information I found interesting I would shout out

something like, ‘Yo, Tim, check this out—so you know how the Intergovernmental Panel on Climate Change comes out with their report every five or so years that summarizes the recent climate science? And you know how the most recent one came out in 2007? Well, the observed climate-related changes since that report was released are well outside of even the worst-case scenarios from the 2007 report—things are changing faster and more dramatically than thought possible even a couple years ago! Isn’t that crazy?!’

“And I wouldn’t get much of a response from him, but I didn’t think much of it because I was sucked into my research. Even if I had thought about it, however, I probably would have assumed he was just busy doing his own thing at his desk and not really listening to me anyway. But after I’d been excitedly shouting out bits and pieces of admittedly dark information over the course of what must have been a couple of hours, Tim walks into the doorway to the living room. I look up and I can see that he is upset. So I ask him what is wrong. And he tells me that all the information I’ve been sharing with him has made him sad.

“So I shut my laptop, set it on the coffee table, and get up to give him a hug.”

“Aw.”

“Yeah, well it was the least I could do at that point. Anyway, I won’t get into the discussion that followed—the one where I tried to apologize for making him sad, at the same time that I was trying to explain how my life journey had led me to a place where I could often, but admittedly not always, read studies like these in a detached and academic way—because I want to get back to my earlier point about Ecological Modernization—trust me, it’s connected.”

“Lead me there, sister.”

“Okay. So, even after I tried, in my very clumsy way, to make Tim feel better by waxing lyrical about loss and acceptance and the process of grieving and healing, he, not surprisingly, was not comforted. Instead, he made it his mission to find evidence to convince me that things were not as bleak as I had painted them. Over the next few weeks, he kept sending me articles from *The Economist* or other publications embracing the Ecological Modernization paradigm touting the myriad startup companies developing

revolutionary technologies that would someday free us from our addiction to fossil fuels and scrub the atmosphere of greenhouse gasses.”

“So, what’s to say they won’t?” Carl asks with a grin. “I was involved in drama club in high school, and I always liked the idea of *deus ex machina*.”

“Technological advances, by themselves will not be enough to dig us out of this hole,” I state confidently. “Our modern way of life is made possible by the availability, versatility, transportability, and incredible energy-in-to-energy-out ratio of fossil fuels. No other source of power comes close to being able to replace fossil fuels and we’re not going to be able to figure out quickly enough how to reliably capture enough of the carbon emissions from that fuel to keep us from ruining our climate. Sure, it seems like every time you turn on the television, there’s some new report about a technological breakthrough that is just around the corner--fuel cells, diesel-producing algae, clean coal. But the mythical “technological breakthrough” is just that: a myth.”⁸⁹

“Harsh! That must have burst Tim’s bubble!”

⁸⁹ Climate expert Joseph Romm (2007) argues that technological breakthroughs which achieve non-incremental gains in energy efficiency or production “hardly ever happen” and when they do, they “rarely have a transformative impact on energy markets, even over a span of decades.” He points to the fact that we generate power in roughly the same ways we did thirty years ago, despite several “breakthroughs.” For example, Romm points to photovoltaic cells, which were invented more than fifty years ago yet account for only about 0.1% of U.S. electricity generation. Fuel cells, invented more than 165 years ago, still produce very little electricity and no consumer transportation.

Romm quotes a 2001 report from Royal Dutch Shell, “Typically it has taken 25 years after commercial introduction for a primary energy form to obtain a 1 percent share of the global market.” Romm points out that this “tiny toe-hold” comes 25 years after *commercial* introduction, which he asserts, may itself take decades. Given the urgency of necessary reductions in greenhouse gas emissions, it seems unlikely that a technological breakthrough could produce needed reductions in a timeframe that would avoid catastrophic climate change.

“Oh I didn’t say that to Tim.” I reply, “I think I said something like, ‘Oh wow, this *does* sound promising...’ I could tell the idea of the technological breakthrough was his antidote for the sadness I had caused him and, without anything better to offer, I couldn’t take that away.”

“Ah. So you lied to him.” Carl says. “Maybe that’s what Aldo Leopold meant about living alone in your world of wounds—if you can’t even be honest with the people you love, then you are truly alone.”

“Good point, Carl.” I reply. We both sit in silence for a moment. In my mind’s eye I see Tim, sitting next to me on the couch, his eyes brimming with tears and I try to visualize myself telling him my honest opinion that his vision of a technological fix is a pipe dream and that I believe it’s too late to save the world that we know and love. Even in my mind’s eye, I cannot do it.

I take another sip of my coffee, shrug and try to lighten the mood by joking, “But I’d be even more lonely if he dumped me, which he might have considered doing if I had kept raining on his parade.”

Carl picks up his glass of coffee, swirls the ice cubes, and takes a long sip. “So, you really believe we’ve messed up our environment and there’s no stopping it?”

“I think,” I start slowly, trying to speak accurately, “that the case can be strongly made that we’ve set in motion processes that will inexorably lead to the extinction of the majority of the species currently living on our planet. The window of time where these processes could have been stopped is likely past and efforts we are currently making will do nothing more than postpone, very briefly, the inevitable mass extinction and erosion of the ecosystem services we humans enjoy.”

Carl holds his coffee glass in one hand and jabs the ice cubes with the wooden stir stick held in his other. I watch him jab the ice cubes. This is a scene I’m becoming more and more accustomed to—I tell someone my assessment of the environmental crisis, they grow quiet for a moment and then either get angry with me or offer some pie-in-the-sky reason for false hope. Carl surprises me, however, and reminds me of why I value him as a sounding board. He raises his eyes from his coffee and asks, “Do you know the difference between optimism and hope?”

“Oh! Yes! Well, in a way. What I mean to say is that I’ve been thinking about this exact question.” I say excitedly. “I’ve been trying to figure out how, as an environmental educator, I can be cognizant of the severity of the environmental crisis, yet not become pessimistic or mired in despair. Or, to put it another way, how I can be hopeful without being naively optimistic.⁹⁰ But, I don’t want to get into my thoughts on the matter before I hear yours—I’m so intrigued that you brought up this question!”

“Well, I’m not going to pretend that my thoughts will solve the dilemma for you,” Carl begins with a smile, “but I do think they might at least provide a different perspective.”

Carl smooths the wrinkles from his paper napkin and leans forward in his chair. “Cognitive psychologists have a theory on hope called, appropriately, ‘hope theory,’ which I think might shed some light on why you’ve been feeling so *hopeless* lately.”

I raise my eyebrows and lean forward. Carl continues, “But before I get too deeply into hope theory, let me explain how cognitive psychologists distinguish between optimism and hope. They define optimism as a stable predisposition to ‘believe that good rather than bad things will happen.’ In other words, optimism is irrational and belief-centered. Whereas hope, on the other hand, is, at least to a cognitive psychologist, more about the cognitive process of working towards a goal that is realistically achievable.⁹¹

“So, to make sure I understand this,” I interject, “when people say ‘Oh, I’m sure climate change won’t really get that bad because there will be some technological advance that will fix everything,’ that’s optimism, not hope.”

⁹⁰ David W. Orr (2004, p. 297) acknowledges the severity of the environmental crises and the odds stacked against a positive outcome. Distinguishing between hope and optimism, however, he is still able to make the case for hope:

There are legitimate grounds for hope in hard times, but not one speck of ground for wishful thinking of any kind. We won’t be rescued by more research, hypertechnology, or some *deus ex machina*... In our situation, hope is definitely not the same thing as optimism. It is not the conviction that something will turn out well, but the certainty that something makes sense, regardless of how it turns out” (Havel 1991, p. 181).

⁹¹ Scheier & Carver 1985; cited in Bryant & Cvengros 2004

“Right.” Carl nods, “And that kind of optimism is almost an epidemic in this country.⁹² It seems like, to be ‘American,’ you’ve got to express an unassailable believe that everything will be okay because of, pick your reason: God, American ingenuity, the magical power of the invisible hand of free markets to fix all problems, the cornucopia that is the world with its infinite ability to provide, *et cetera, et cetera*. And if you openly question the premise that everything will be okay, if you say, for example, ‘you know, climate change may undermine the ability of this planet to support the kind of life the human race has come to depend on,’ you get labeled as some kind of pariah.”⁹³

“And then nobody invites you to their parties,” I add.

“Exactly.”

⁹² Clinical psychologist Barbara Held (2002) describes the “typical North American assumption that a positive attitude is necessary for (a sense of) well-being.” She, however, cites research in health psychology, clinical/counseling psychology, and organizational behavioral science which “calls into question the assumption that accentuating the positive (and eliminating the negative) is necessarily beneficial in terms of physical and mental health.” (p. 965)

Clinical psychologist Arthur Bohart (2002) warns that pressuring people to be optimistic may invalidate the way they understand themselves and the world. Bohart asserts that for some individuals, especially those whose lives do have a lot of tragedy, pessimism may be a more realistic and functional way of viewing the world. (pp. 1039 – 1041)

⁹³ Abraham Vergese (2004), professor of health sciences, describes the expectation put on patients to be optimistic in the face of cancer. He sees society pressuring them to “deny those moments when they are dispirited or pessimistic. Those feelings, society implies, are shameful and will cost [them] the battle.” This can lead to the perception that if the cancer progresses, it was due in part to a personal failure or a weakness in will and temperament. (p. 12) It is easy to see this same societal pressure on environmentalists to be optimistic and deny dispirited feelings.

“You know, Carl, this makes me think of an article I read the other day about how environmentalism tries to use utopian visions as a way to inspire people to hope and to take action⁹⁴--this whole idea of a beautiful world where people live in harmony with nature and recognize their connections with the rest of the living beings and aren't driven by greed and consumerism. But the author argued that, because this utopia is just a fantasy, it is devoid of true social change potential—it's not realistic, so people can't figure out a way to get there so they don't start taking any action, or if they do try to take action, they get these unrealistic expectations of what will happen as a result of their work and, when it doesn't happen, they end up burning out.”⁹⁵

“Yeah, I think you're right,” Carl nods, “this idea of an environmental utopia seems to fit the definition of optimism--irrational and belief-centered.”

“I see it all the time with my students,” I continue, “I'll outline some significant challenge faced by the environmental movement and then ask my students for their ideas

⁹⁴ Geographer David Pepper (2005) critiques various radical environmental paradigms including ecotopianism, deep ecology, and bioregionalism. Pepper finds them to be more reactionary fantasies than potentially transgressive or transformative movements. Pepper asserts for the paradigms to be truly transgressive, they “must be rooted in existing social and economic relations rather than being merely a form of abstraction unrelated to the processes and situations operating in today's ‘real’ world.” (p. 18)

Pepper finds similar faults with reformist environmental paradigms. For example, he describes the founding premises of environmental modernization to be “utopian” in the pejorative sense of the word:

They do not adequately and accurately take into account the socio-economic dynamics of the capitalist system they are meant to reform. Thus they fail to recognize that social-democratic and “third way” attempts to realize an environmentally sound, humane, inclusive and egalitarian capitalism are ultimately headed for failure. (*ibid*)

⁹⁵Environmental Philosopher Steve Breyman (1997) argues:

To be truly involved in the environmental movement for the duration that is required to create valuable change, the belief in utopia is contradictory. An honest assessment of the obstacles as required by substantial hope prevents both unrealistic expectations and burn-out. (p. 5)

of how we can move forward given the obstacles. Then they'll offer some clichéd response like, 'We'll just need to help people see how they're connected to the rest of nature and then they'll start to care and take action and those little actions will add up and spread and eventually, blah blah blah.' It's like they're ignoring the specifics of the obstacles we just discussed."

"This is where hope theory comes in," Carl responds. "In contrast to optimism, which is irrational, hope is tied to concrete action.⁹⁶ Hope theory is based on the premise that people are likely to think in terms of goals and that people approach goal pursuits by thinking about how to make a useable pathway from point A to point B. The theory goes so far as to argue that the very purpose of the human brain is to anticipate these

⁹⁶ Dr. Jerome Groopman, author of *The Anatomy of hope: How people prevail in the face of illness*, examines the difference between optimism and hope and explores the role of "true hope" in confronting deadly diseases. Groopman observes that in life, contrary to the optimistic view, things often do not work out for the best. True hope recognizes the difficulties and finds a realistic path to a better future. This clear vision allows people to make good choices and also triggers a set of chemical changes in the brain and body.

For doctors to help their patients develop this true hope, they must be clear about the seriousness of the disease and of the odds for recovery. They then must explore the options, including best-case scenarios, and allow the patients to choose a path forward. Groopman contrasts this approach with one where the doctor misleads the patient to believe that everything will be okay, an approach that can lead to very negative outcomes. (Groopman, 2005)

This would suggest that environmental educators could craft a personal outlook and a teaching strategy that would help both themselves and their students recognize the seriousness of the environmental challenges we face and *also* develop true hope. This would involve avoiding a naively optimistic outlook. It would recognize that things will most likely not "turn out for the best." It would then involve critically examining the options available, both personally and with students, and choosing pathways to more positive futures.

sequences. And the motivation comes from agency thinking, which is our perceived capacity to use these pathways to successfully reach our goals. So that is, at least according to a cognitive psychologist, what hope is.” Carl clears his throat, straightens up in his chair and feigns a highbrow accent, “Hope is the ‘perceived capability to derive pathways to desired goals, and to motivate oneself via agency thinking to use those pathways.’”⁹⁷

“Ha!” I laugh, “That sounds like a cognitive psychologist—way to take all the mystery and romance out of hope!”

“Well, it may not be romantic, but I think they’re on to something,” Carl says. “For example, sometimes when a depressed person commits suicide, his friends will report being shocked because, although the person had seemed very depressed in the past and his friends had been worried about him then, he had seemed much more hopeful in the weeks just before he took his life and his friends had thought he had rounded the corner. Hope theory would suggest that he had, in fact, become more hopeful in the weeks leading up to his committing suicide, but that that hope had come, ironically, not from an improved outlook on life, but rather from the fact that his brain was involved in making a pathway for him to achieve a goal—the goal of killing himself. The more he involved his brain in the planning of the act, and the more confident he became in his ability to be successful with the plan, the more hope he had and, paradoxically, the happier he became.

“You see, it’s the person’s perception of his success or lack thereof that influences his emotions, not the other way around.”⁹⁸ Carl jabs his finger through the air to accent his point and then leans back into his chair to enjoy watching me process the implications of this theory. “And you, my friend, based on what you’ve told me about environmental paradigms and utopian mirages, are experiencing all these negative emotions because of your lack of progress, despite all your valiant efforts, towards your unrealistic goals.”

“Hmmm...” I say, “you may be right about that, Doctor Carl.”

⁹⁷ Snyder 2002

⁹⁸ *ibid.*

“What is your goal, Elizabeth? What is the purpose of the work you’re doing right now in environmental education?”

“Well,” I pause, “I love all the life forms on this planet and I believe humans are killing them and I want to save them—I want to preserve the astounding biodiversity of Earth.”

“And how’s that going for you?” Carl asks with a wink.

“Not so well, truthfully.”

“This might be a case of what the cognitive psychologists call ‘false hope,’ or the state of having a goal and the motivation to work for it, but lacking any realistic plans to reach the goal. Hope theorists would suggest that, to become hopeful, you pick a goal that is challenging enough to absorb your attention, but not so lofty as to be unrealistic.”⁹⁹

“For example, think about a community member who sees a vacant city lot, covered in cracked pavement, weeds, and broken glass and decides to turn that lot into a community garden that will provide organic food for disadvantaged people and give kids a chance to learn how to garden and market produce. Now that is a project that could keep your mind active for a long time! That is a project that would not be easy, but you could at least visualize a pathway to achieve it and, when obstacles presented themselves, they could be a stimulating challenge and not an impervious barrier.”

I raise my eyebrows in agreement, but I’m chewing on my upper lip and Carl can tell I’m not fully convinced. “I mean, Elizabeth, contrast a hurdle you might come up against during this hypothetical garden project, say zoning restrictions, with a barrier you might be facing with saving biodiversity on the plane: the spread of invasive species, habitat fragmentation, overpopulation, climate change. Need I go on? A zoning restriction is a challenge to be overcome; stopping the drivers of mass extinction is a pipe dream.

“No one would argue that your goal is not an admirable one, Elizabeth, but it’s unrealistic. And if you buy into hope theory, you can see how your dogged determination to keep holding on to that goal is going to lead you only to distress and despair.”

⁹⁹ *ibid.*

“I hear you, Carl. But I can’t quite get excited about a project like pulling trash out of a river or setting up composting bins on campus when it’s so clearly inadequate given the scale of the problem. It’s like arranging the silverware on the Titanic after it’s hit the iceberg. And not only is it inadequate, but I feel like it distracts people from recognizing the real problems—it makes us feel all warm and fuzzy inside knowing we’re ‘making a difference’ and ‘being green.’ It makes people think things are getting better when, in reality, we’re circling the drain.

“Here’s a thought,” I say, “what if the people who are organizing the community garden are the selfish ones?”

Carl incredulously furrows his brow. “Stick with me for a moment,” I say, “If you buy into hope theory, the people who are working towards these ‘realistic’ goals are making themselves happy through the process—that’s a self-serving choice. It’s the people like me who refuse to let go of the big picture who are suffering. But society needs to know the big picture—if we don’t we just blissfully cruise towards the precipice, all the while believing that we’re ‘doing good.’ It’s people like me who refuse to take the easy way out by putting on our blinders and diving into piddly feel-good projects like getting people to switch to CFLs, who give society what it needs—brutal honesty.”

“Ah!” Carl laughs, “So you’re the prophet on the city wall—the martyr.”

“I feel that way sometimes.” I admit, “but I realize I’m a lousy prophet. There are a bunch of people more eloquent than I am out there already filling that role, and nobody’s listening to them either.”¹⁰⁰

¹⁰⁰ Charles Shaw, editor in chief of Conscious Choice Publications, writing in *Grist Magazine*, contrasts apocalyptic Eco-Marxist philosopher, Derrick Jensen, with William McDonough, a leading thinker in the Ecological Modernization paradigm. Jensen is the author of *EndGame*, the book whose premise is that to save the planet, we must bring down civilization. McDonough is the author of *Cradle to Cradle*, with the premise that technology can be designed to work with nature in a truly sustainable way. Shaw writes:

Despite the purportedly radical and fatalistic nature of his thinking, Jensen's analysis might be closer to the truth of our situation than the understandably

“Let me ask you this,” Carl begins, “what time scale are you typically envisioning when you start thinking about environmental issues and your place in them?”

“That’s an interesting question. Quite a few years ago I read an article in *Harper’s* by David Quammen that had a huge impact on my thinking about the current environmental holocaust.¹⁰¹ The premise of the article is that Quammen wants to figure out if Earth is currently experiencing its sixth great ‘mass extinction’ event, so he goes to visit a paleontologist called Jablonski at the University of Chicago, to try and get some perspective from the geologic record. Jablonski explains to Quammen the evidence for the previous five mass extinctions, including the ‘background extinction rate,’ compares that to the current extinction rate and, to make a long story short, Quammen comes to the seemingly inescapable conclusion that we are indeed in the middle of another great mass extinction, this one, of course, caused by humans, and that we’re likely to lose ninety-something percent of the species currently on the planet. But the most memorable part of the article comes at the end when Quammen asks Jablonski if he is hopeful and Jablonski says, shockingly, ‘yes’! Which causes Quammen to quip something like, ‘Well, given enough millions of years even rats and cockroaches will speciate, and with speciation comes new diversity.’

“So, anyway, to answer your question about time scale, Carl, I’ve got that image from Quammen’s article engraved in my brain—this graph charting biodiversity across geologic time, and it’s got these five huge dips in it, and the unmistakable start of a sixth, and we’re sliding down the slope of that sixth dip. And I can see a dotted line charting our future path down to the very bottom. And I know that line will come back up about five or ten million years after it bottoms out. And I try to let that fact give me hope, but it doesn’t. I’m sure the animals that were around in the Cretaceous period were great and I’m sure the ones that will be around ten million years from now will be equally

alluring optimism of McDonough...This thoroughly depressing idea may explain why, throughout history, the prophets were killed in unspeakable manners for being heretical, while the priests continued to promise a better life for the adherents, even in the face of destitution. (2006)

¹⁰¹ Quammen 1998

fascinating, but I love the ones that are here right *now*. And I realize ten million years is a blink of time in the scale of the planet's history, but it's a heck of a long time in human terms. So when I think about the things that I care about—the animals and people that are alive now and the ones that will be suffering through the next several hundred years as our ecosystems unravel—I can't see any hope."

"That's what I figured, Elizabeth. From everything you'd said, I'd assumed you were taking the mid-range time horizon."

"Well, it's pretty hard not to."

"Granted. Given your current line of research, I can see why you're focused on the time horizon where most of the global warming projections fall. And it would be quite the trick to be operating in your daily life with a hundred-million-year horizon, but what about becoming a bit more nearsighted instead?" Carl drains the last of his iced coffee and loudly vacuums the bottom of the glass with his straw. "If what you say is right, that we've already set in motion processes that will lead to the extinction of numerous species and the destabilization of our climate, and I don't know enough about that topic to argue with you, but let's just assume for argument's sake that you're right; then all these beautiful amphibians that fill the Minnesota night air with their songs, for example, they're walking dead. Their fate is already sealed, they just haven't quite disappeared yet. So mourn them and then move on. If there's truly nothing you can do to save them in the two-hundred-year horizon, mourn their loss and then change your horizon. You can't be stuck in this state of continual grief—if you keep your head in the two-hundred year horizon, all you're going to see is loss after loss after loss and there will be nothing you can do to help.

"Furthermore, I'd argue it's not a matter of 'putting on blinders,' to borrow a phrase from you, if someone refuses to get bogged down in projections of future destruction to instead focus on something she can change in the here-and-now. Rather, it's opening your eyes to the fact that you can't realistically keep the future the way it is today. Things are going to change. The boreal forest that you love in northern Minnesota is going to be replaced by savannah. And if there are humans alive then to see it, then you know what? They will think it's beautiful.

“If you think a project like rehabilitating a vacant city lot to become a vibrant community garden is ‘piddly’ then...”

“I shouldn’t have said ‘piddly.’ I was just trying to make a point”

“I know, and now I’m making one as well,” Carl says, “if you have trouble seeing the value in small-scale projects, then you need to refocus your lens from the global to the human-scale and from the mid-range time horizon to the near-term horizon. I can understand your argument that these small projects seem like rearranging the silverware on the Titanic after it’s struck the iceberg, but I can understand it in that way only from the global, mid-range perspective. We may be on a sinking ship, but this ship is going to take longer to sink than we have left to live. And after we die, our children and grandchildren will still be living on this ship. And any efforts we make to improve the quality of life on this ship are not wasted.”

“That’s kinda a lame metaphor, Carl” I joke.

“Yeah, admittedly,” he laughs, “Give me a while and I’ll come up with a better one. But for now, to go back to hope theory, I would argue that you’re depressed at this point because for the last several years you’ve been striving towards unattainable goals and, to make matters worse, you’ve been doing it within the confines of academia, far removed from the people who are actively involved in the trenches—the ones actually getting their hands dirty in the community gardens. I think hope is contagious and you’ve been in a bubble. Pick a realistic goal and start working towards it, and I think you’ll feel more hopeful and be more happy.”

“At the risk of coming off as a sappy sentimentalist, I think I have to quote the Indigo Girls at this point,” Carl says with a bashful grin. “You’ve got to get out of bed and get a hammer and a nail; learn how to use your hands, not just your head, you’ll think yourself into jail. Now I know that refuge never grows from a chin in a hand in a thoughtful pose. You’ve got to tend the earth if you want a rose.”

“That’s beautiful, Carl.” I tease, “You’re full of surprises. I wouldn’t have batted an eye if you’d quoted me Habermas, but, the Indigo Girls? You’ve outdone yourself,” I wink.

“Hey, Carl, we haven’t even touched on your progress with your research yet. And I think I remember promising that the next round of coffee would be on me. What should I order for you?” I ask as I scoot my chair back.

“If we’re going to get into my research,” he says, “we’re going to need something stronger than coffee!”

Epilogue

It is now more than a year since I left the life of a full-time graduate student and climate change curriculum writer. I have not, however, left the field of teaching and working with students. I've taken a job as an Assistant Professor of Outdoor and Environmental Education at Northland College, a small environmentally focused liberal arts college on the south shore of Lake Superior.

Many of the classes I teach—group process and leadership, wilderness instructor training, winter expedition skills—have little connection with the questions with which I grappled as a graduate student. I have not, however, left these topics completely behind; I teach a class on the societal reaction to climate change and another in environmental education. I give presentations and speak on the radio about hope and despair in environmentalism. I advise the college's Student Environmental Council.

Although I still confront sorrow and feelings of futility when I think about environmental challenges, the feelings are more manageable now than they were during my graduate studies. I have a few ideas about why this might be so. In no particular order they are: humor, humility, work, news “rationing,” meliorism, and sharing of mutual experience. I'll address each of them below.

First, *humor*. During my last summer at the University of Minnesota I helped organize a teacher education workshop on sustainability education. All day for two weeks guest speakers educated the participants on their individual specialties, ranging from mineral and water resources to sustainable housing, agriculture, and climate change. By the end of the week, it was nearly impossible to not feel overwhelmed and depressed by the magnitude and complexity of the challenges facing a “sustainable future” for humanity, let alone the other species.

One of the final speakers addressed public transportation. He started his presentation by showing a headline from the facetious newspaper, *The Onion*. It read “Report: Ninety-eight percent of U.S. commuters favor public transportation for others.” Everyone laughed for what seemed like the first time in two weeks. I wanted to see the original article, so I opened my laptop and found the online version. It was part of *The*

Onion's "All Paper Salute to the Environment,"¹⁰² which contained other articles with headlines such as "EPA to drop 'E,' 'P' from name" and "New eco-friendly packaging triggers boom in guilt-free littering." I was no longer listening to the speaker; I was absorbed in *The Onion*.

I then realized that I was in a better mood than I had been for the whole two-week workshop, and perhaps in a better mood than I had been in months. This gave me the idea to prepare a session for the participants on the use of humor in the teaching of environmental education. We had an open timeslot the next day I hoped I could fill with an antidote to the depressing statistics we'd been viewing. I searched the library's databases and discovered a wealth of literature on the benefits of humor. I even discovered the existence of the International Society for Humor Studies, with branches all around the world and centers in numerous universities.

As I read the literature, I began to realize why the simple act of reading a few humorous articles about environmental challenges had changed my outlook so dramatically. Multiple studies show that humor increases hope, relieves stress, promotes a general sense of well-being, and may competitively inhibit negative thoughts.¹⁰³

I spent the rest of the session constructing a PowerPoint presentation on humor as a pedagogical tool. I wanted to find examples of humor to support my points, so I looked through webpage after webpage of environmental humor. By the end of the session, I was in an excellent mood. I asked my professor if I could use the open hour the next day to present on my ideas and he agreed. I left the campus on an emotional high, riding my bicycle down the River Road, smiling. I stopped at the Dairy Queen to treat myself to a blizzard.

As I sat on the grass under a large oak tree, eating my blizzard, my mind drifted to the conversation I had more than a year before with my professor who had told me of his experience lying on his back and looking at the stars, the feelings of insignificance it produced in him, and the accompanying feelings of liberation from personal responsibility for "fixing" all the world's problems. I thought of his suggestion that I

¹⁰² Issue 44(27)

¹⁰³ Texas A&M University 2005

involve myself in environmental work because it is a good way to live, surrounded by good people, whether or not it makes a substantive difference in the state of the environment.

Although during our conversation and the intervening year I had not found much comfort in his (or David Orr's) ideas, sitting on the grass eating my blizzard they suddenly made sense to me. It was the biggest breakthrough I experienced with my mental and emotional struggles surrounding my work in environmental education. Suddenly the world seemed less tragic and more wonderful.

Then, still on the grass eating my blizzard, I had a breakthrough relating to my dissertation. For several semesters I had been planning a study of the possibilities for Adventure Learning to connect students affectively with the natural world through virtual contact with it. This topic supported the work I was doing for the Will Steger Foundation with its Global Warming 101 initiative, a dogsled expedition to the Canadian Arctic to visit Inuit villages and talk with elders about their experience living on the "front lines" of climate change. The goal for the initiative was to have learners in lower latitudes follow the expedition online and, hopefully, develop an empathetic connection with the Arctic and a desire to take action to slow climate change. My proposed dissertation topic also connected with the research of one of the faculty members on my committee. For these reasons I had decided to study this topic.

I was not, however, passionate about the topic. Online "connection" with nature seemed to me a sorry substitute for the real thing. Online "Adventure Learning" also seemed like a small niche. I imagined that even if I did manage to get an article based on my dissertation published in some journal, very few people would read it. I couldn't see how my dissertation would be much use to anyone, other than to myself as a final hoop through which I had to jump to graduate. I would be working on tweaking a delivery technique for a subset of environmental education when, not only did I doubt the efficacy of the subset, but I also had serious doubts about the value of the endeavor as a whole.

Lying on the grass eating my blizzard, high on life from my hour of reading environmental humor and from the validation of my recent experience through the "discovery" of a body of humor literature and from my newly less-dark perspective on

the field of environmental education, a different idea for a dissertation struck me. Why not write about my struggles with despair and disillusionment as a student and teacher of environmental education during an ecologic holocaust? Why not explore the delicate dance required to become educated about the severity of the challenge while remaining hopeful? These were important questions—far more important in my mind than ways to tweak online education experiences to try to get kids sitting in front of a computer to feel emotionally connected to a wilderness they never see.

For the first time in years I felt excited about writing a dissertation. If I wrote it well, it might actually *help* other people. It might find a wide audience—not just environmental educators, but anyone who feels the emotional weight of environmental destruction and doubts whether her actions can make a positive difference.

I finished my blizzard and rode my bicycle the rest of the way home. As I continued to work on my presentation for the next day on humor as a pedagogical tool, I understood more about how the seemingly simple act of reading environmental humor for an hour had created a mental space for me where I could breakthrough previous barriers. The research suggested that humor does far more than just relieve stress, promote a general sense of well being, and competitively inhibit negative thoughts. Humor leads to positive emotions which in turn lead to an increased ability to develop a “plan of attack” and to an increase in the perceived ability to overcome obstacles. These are two of the ingredients for true hope as defined by cognitive psychology’s Hope Theory.¹⁰⁴ Exposure to humor also improves creative problem solving. Humor emotionally distances people from the problem on which they are working. It relaxes them and allows them to think more creatively than they would when they are intently focused on the task.¹⁰⁵ Humor is helpful in teaching sensitive content areas and can help students compensate for previous negative experiences with a subject.¹⁰⁶

I gave my presentation on humor at the next day’s teacher education workshop on “sustainable futures.” I had included as many examples of humor as possible and the

¹⁰⁴ Texas A&M University 2005

¹⁰⁵ McGhee, n. d.

¹⁰⁶ Kher, Molstad, & Donahue 1999

participants were laughing aloud. After my presentation I gave the participants time to talk in small groups to take advantage of the creative mindspace the humor had hopefully created to think about new ways to teach about sustainability. The ensuing conversations were lively and productive. Several participants told me afterward how the session was “just what they needed” after days of rather sobering statistics.

Reflecting on that session, I remembered how I used to feel like a much more “fun” person before I became mired in depressing statistics about species loss and carbon emissions. I thought about the slogan of Ben & Jerry’s ice cream: “If it’s not fun, why do it?” I committed to at least try to incorporate more humor, more fun, more play, more creativity in my practice.

The second reason I think I might be better able now to manage the emotional and mental challenges of environmental education during an ecological holocaust is *humility*. I wish the words *humor* and *humility* came from the same Latin root—that would make for a beautiful transition here. As far as I can tell, however, they do not. Even so, in my experience the two concepts are intimately connected. As I laugh at the ludicrousness of a headline from *The Onion*, “Recent saving of planet attributed to Working Assets long-distance plan,” I am really laughing at the absurdity of current human efforts at sustainability. That laughing allows me to take myself less seriously—that is to say, it allows me to be more humble. That humility gets me away from the vision of the tragic hero, alone on the ramparts, and closer to the vision of a “Comedy of Survival” described by Joseph Meeker and cited by David Orr in his essay *Hope in Hard Times*:

True comedy is not so much about jokes and laughter but rather the recognition and acceptance of our limitations and foibles, right down to our reptilian brainstem. It is, in [Holocaust survivor Viktor] Frankl’s words, “saying yes to life in spite of everything.”¹⁰⁷

I am not capable of stopping biodiversity loss or slowing climate change by myself. It’s likely that we as collective humanity aren’t able to do it either. If I can accept that, I can “do the things before [me] that need to be done in the spirit of thankfulness and celebration, without worrying about whether we will win or lose.”¹⁰⁸

¹⁰⁷ Orr 2004, p. 296

¹⁰⁸ Orr 2004, p. 297

Also connected to this humility is another aspect I feel contributes to my current improved ability to deal with the mental and emotional challenges of being an environmental educator during an ecological holocaust. That aspect is *work*. As a graduate student my work was to *think*, now as a first-year professor teaching seven new classes, my work is to get ready for class. As a graduate student I pondered big questions. As a first-year professor, I ponder syllabi, assignments, rubrics, class activities, and faculty council meetings. My work keeps my mind busy and limits the amount of time I can spend thinking about these larger questions.

It is not, however, as simple as being too busy to think about larger questions. It is a rescaling of goals to a more humble horizon. As Hope Theory would suggest, I've picked a goal (designing and offering quality classes and working towards tenure) that is ambitious enough to absorb my attention but not so difficult as to be unachievable. Contrast this with my "goals" as a graduate student—saving biodiversity and slowing climate change—and the difference in "appropriateness" for true hope, at least as understood by cognitive psychologists, is clear.

News "rationing" also plays a role. From experience I know how overwhelmed I can begin to feel when I read and see too much about current loss and future dire projections. I now purposely avoid exposing myself to more "bad news" than I can handle. To keep the material fresh for the course I teach on societal reaction to climate change, I have to keep abreast of major developments. I am not, however, as enmeshed in the topic as I was when I was working as the education coordinator for the Will Steger Foundation's Global Warming 101 initiative, taking courses on global environmental change, preparing for and participating in the dogsled expedition to Baffin Island, and writing curriculum on climate change, climate policy, and international climate negotiations.

The fifth aspect I feel contributes to my current approach to the emotional and mental challenges of environmental education during ecological holocaust is *meliorism*. I've been influenced by an article written by professor of philosophy, James W. Sheppard, on his successes in "reducing pessimism's sway" in his courses on environmental ethics. He describes his use with students of writings by John Dewey and

William James on the subject of meliorism—the belief that the world is neither good nor bad in itself, it is only good or bad and only gets better or worse as a result of human intervention and action. Meliorism is focused on incremental change. It allows us to “remain grounded and realistically cognizant of the depth and breadth of challenges” while at the same time keeping hope:

The melioristic posture thus requires that we abandon the human hubris that often prevents us from acting unless, that is, we feel as if we will be able to solve all problems at once and for all through our actions. Echoing [environmental activist David] Brower...allowing our desire for perfection to override our responsibility to begin to make things better is a luxury that many living systems cannot afford.¹⁰⁹

Meliorism addresses many of the struggles I confronted as I delved more deeply into environmentalism and environmental education. It allows for a utopian ideal, but places it in the background. It places in the foreground smaller and more realistic goals. Meliorism challenges pessimism and optimism as well as Eco-Marxism and Ecological Modernization by “replacing defeatism and utopianism with an opportunity.” Its awareness of obstacles and its “ability to see the reward in small changes” on the path to the larger goal allows true hope to develop.¹¹⁰

The final aspect I feel makes me better able now to manage the emotional and mental challenges of environmental education during an ecological holocaust is *sharing of mutual experience*. One consequence of writing my dissertation on my struggles to remain hopeful without being naively optimistic is that I now have the opportunity to talk about this topic with many people. When I meet new people at parties or conferences and they find out I am working on my dissertation, they almost always ask about my topic. At first I was bashful about the topic and would usually preface my remarks with, “You might be sorry you asked, but...” Almost without exception, however, people become animated when they hear my topic. They share their own experiences with feelings of hopelessness, sadness, and disempowerment when thinking about the state of the environment.

¹⁰⁹ Sheppard 2004, p. 221

¹¹⁰ Lueck 2007, p. 259

As I delve more deeply into the literature I gain the vocabulary, theories, and models I need to understand and articulate my experience. These tools allow me to enrich the discussions I have with friends, colleagues, and strangers at parties. I can sense that the people with whom I talk are excited to gain this vocabulary and framework—it seems to validate their experience, make them feel less alone, and give them the tools to reflect and share with others.

I eventually developed a PowerPoint presentation I can deliver in forty minutes that outlines the reasons despair is so common in environmental circles and the potential tools for combating that despair. Each time I give the presentation, I have the opportunity to talk with members of the audience and hear their experiences. I began to no longer feel so alone or ashamed of being a “Debbie Downer.” I also began to feel like my work is helping people.

At nearly every presentation I give, at least one person asks me if I will give the presentation at another venue—a class on environmental sociology, a professional conference of environmental educators, a Teach-In on climate change, a meeting of an environmental student council, a community forum, a radio show, a meeting of employees of the National Parks.

I can sense that people are eager to shine some light into the dark corners of their hearts and minds where they’ve been hiding sorrow, guilt, and feelings of hopelessness. In most social situations, talking about these dark topics would be outside of social norms. As ethnographer Kari Marie Norgaard describes, people have subconsciously agreed that talking about these topics is inappropriate for “polite” company because of the unpleasant feelings raised.¹¹¹ Creating a forum where the stated purpose was to examine these feelings freed participants from these restrictive norms.

In addition to helping the participants, I am a key beneficiary of these conversations. Before I had this venue, I was always wary of sharing my thoughts with friends. Too many times I had experienced the friend grow impatient or even angry with me and let me know that he or she didn’t want to talk about this topic because it was “not helpful.” Aldo Leopold must have had similar experiences that led him to write that

¹¹¹ Norgaard 2006

having an ecological education was to “live alone in a world of wounds.”¹¹²

Sharing this mutual experience with others helps me to not feel so alone there.

“So, what did you find out?” people ask when they hear about my dissertation topic. “What is the key to not feeling depressed about the environment? What steps should I take? What is the answer?”

I don’t know that there is “an answer.” I do, however, think that the first steps are acknowledging the existence and prevalence of these feelings, and providing safe places to discuss them with a shared vocabulary, theories, and models. Sorrow and hopelessness do not demonstrate personal weakness—they are natural responses to the environmental destruction we are witnessing. We understand much of what causes these feelings and we have the start of an understanding of how to address them. As long as environmentalism and environmental education promote emotional connection to and awareness of the natural world, these feelings will continue to be widespread among participants and practitioners. Our community has a duty to provide ways and means for people to address these emotions and doubts and experience hope.

¹¹² Leopold 1953, 165

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