Green Pedagogy in a Culture of Decay A Post-Ecological Vision¹

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A S I WRITE this, I am seated in an airplane. The cover of *Sky Mall* catches my eye, inviting me to *go green* by purchasing a solar-powered charger for my Apple iPhone. The advertisement's visual rhetoric is both compelling and disorienting. In the background, a sun sets over mountains fronting an anonymous beachhead. An iPhone stands in the foreground, docked on the fold-out charging station like a rocket ready for launch. The battery icon is backlit and brilliant green. I have to admit. I am mildly interested. Lately, I *have* been dreaming of sending my iPhone to the moon.

Although I am tempted to dismiss this advertisement as a simple case of green marketing, what Menon and Menon (1997) call "enviropreneuring," this 21st century image inspires me to dig deeper. Clearly there is a persuasive power at work here, but what exactly is this power and how might it be redirected to serve *green pedagogy*? Is a self-consciously *green* pedagogy fit to engage in "rhetorical jiujitsu"² and other arts of cultural activism, hijacking green transmissions? And if Enzensberger (1974) is correct and ecology has become "marginally relevant to everyone"³ (p. 4), can this green pedagogy help bring ecology back "down to earth" (Prakash, 1995, p. 331) by grounding denatured ecologies⁴ in a culture of pedagogy that foregrounds the natural world? Most importantly, can green pedagogy make explicit connections between green theory and teaching practice?

My vision of green pedagogy emerged after considering Gruenewald's (2004) claim that environmental education has failed as a "transformative educational discourse practice" (p. 72). Gruenewald argues that the process of institutionalizing environmental education within standards-based general education has worked to "discipline" environmental education's ambitious project. This disciplining process reproduces the gap, identified by Stevenson (2007), between the transformative goals of environmental education and the transmissive purposes of conventional schooling. In recent years, environmental educators have worked to bridge this gap, to more clearly define it, and to imagine possible worlds beyond it, and I offer this essay in the context of these transformative pedagogies (e.g., Bowers, 2001a; Gruenewald, 2003; Jardine, 2000; Kahn, 2010). My primary desire is to critically engage the greening of culture, something the field of environmental education has been slow to do (see Strife, 2010).

Color is important here. The spectral quality of color allows me to adopt a "dark" green position on culture and education, and from this position to identify "lighter" green discourses, ecologies, beliefs, and practices.⁵ I will propose that as the darker end of the green movement represents a potentially dangerous threat to existing structures, *green* is discursively trivialized in culture and education, its meaning fixed towards the lighter end of the spectrum (Batchelor, 2000). The color green has additional advantages as an organizing metaphor. For one, green nicely connects the immediacies of nature and color with the particularities of pedagogical moments. Philosophically, color moves us to engage the "visible reality that baffles the usual procedures of language" (Lichtenstein, 1993, p. 4), a move which foregrounds the natural world. Pragmatically, green is well-suited for discursive engagements across a variety of cultural sites, when everywhere we look we are persuaded to go green.⁶

My argument for green pedagogy has five stages. In the first section, I draw a distinction between simple and complex nostalgias as a framework enabling teachers to "trade on the old dream of the simple life" (Buell, 1995, p. 44) and make productive use of the pastoral ideal deep in our cultural memory. Second, searching for deep and dark green foundations, I revive the cultural and ecological perspective of the Romantics, linking Romantic ideas to green political theory, curriculum theory, and anthropological work on cultural revitalization. Third, considering what I have unearthed, I address the tensions within today's ecology and show how these tensions reflect competing traditions in ecological thought. Fourth, I examine how the dominant interpretation of *green* within educational discourses works to narrow the full spectrum of green possibilities. In the fifth and final section, I employ John Elder's (1996) notion of "culture as decay" to re-theorize the role of the green teacher as a *fruiting body of dissent*.

Why This is Not Your Average Nostalgia

Returns-to-nature risk being dismissed as simple nostalgia—escapist longings for some preconscious, earthy womb. If we understand nostalgia as a form of homesickness, though, green theorizing becomes rightly nostalgic. *Ecology*—a word that undergirds the breadth and depth of the green movement—is etymologically linked (>G. *oikos*) to the home and household, to a private experience sheltered from the public sphere (Lyotard, 2000). Homesickness is a natural and appropriate response when we witness the household of the earth ransacked, its private contents dumped on the public market. In times like these, "[o]ur dwelling is harassed by the housing shortage" (Heidegger, 2000, p. 88) and we become uprooted. We long for home.

As cultural and literary critic Raymond Williams (1973) reminds us, "[n]ostalgia is universal and persistent; only other men's nostalgias offend" (p. 12). If our experience supports Williams' claim, then environmental educators should not be surprised to find themselves wearing the "soft veil of nostalgia that hangs over our urbanized landscape" (Marx, 1964/2000, p. 6). But what are we making of this nostalgic urge? Are we simply "using the past…as a stick to beat the present" (Williams, 1973, p. 12) perhaps holding an imagined sustainability over ourselves and our students? Or are we up to something more complex, unearthing ecologically destructive epistemologies (Willems-Braun, 2004) or exploring the practices of pre-modern cultures in order to "see ourselves" and our unsustainable practices "more clearly" (Bowers, 1995, p. 320)? Although nostalgia may imply a simple longing, is this longing the initial arc in a wider "circuit of healing" (Elder, 1996, p. 1) marked by longing, leaving, *and return*?⁷

Regardless of how we answer these questions, educators must cultivate something more complex than the tug of the individual childhoods we *imagine* we spent in nature. In isolation, a simple and nostalgic vision of an American childhood outdoors is an insufficient response to complex socio-ecological problems. These are cultural problems requiring cultural solutions. To be useful then, nostalgia must move us to ethnography, to critical engagements with culture, and to the creation of fresh metaphors for understanding cultural experience.

The pastoral tradition in literature and culture⁸ offers a precedent for such a productive nostalgia, and although the pastoral mode of shepherds and rural pastures has been critiqued heavily since the 1970s, with back-to-nature images challenged for masking deep and present injustices (see Buell, 1995, p. 31–52), the pastoral *moment* remains a powerful tool of cultural critique when used to appeal to "an alternative set of values over and against the dominant one" (p. 49– 50). In The Machine in the Garden, Leo Marx's (1964/2000) classic work regarding the intersections of technology and American pastoralism in the writings of Thoreau, Melville, Hawthorne and others, Marx distinguishes between two types of nostalgia: a sentimental or simple type expressing "infantile wish-fulfillment dreams...and a naïve anarchic primitivism" and a complex or imaginative type enriching and clarifying Western cultural experience (p. 11). In my mind, the first type corresponds roughly to nostalgic visions of an American childhood outdoors and to pedagogies exclusively focused on outdoor experiences. The second type differs from the first in its ability to make sense of culture, distinguish between competing value systems, and uncover hidden sources of cultural transmissions. Central to this second type of nostalgia is a critical examination of the role of technology in social life. So in addition to outdoor experiences, central to any earth-centered pedagogy, green pedagogy is interested in the possibilities of complex nostalgia as cultural critique.

Leo Marx (1964/2000) claims that a major cultural signpost marking complex nostalgia is a metaphor—*the machine in the garden*—first used by 19th century artists to represent a pastoral uneasiness towards industrial technology and society. At that time, a steam locomotive passing through a green pasture was a typical manifestation. Although a "simple device," this "noise clashing through harmony" (p. 17) had an uncanny ability to sharpen the boundary between two value systems. This contrast and metaphor remain central to the green critique. Traces can be found in the work of scholars who position a *mechanistic* paradigm, cosmology, or pedagogy against an *ecological* one while arguing for the desirability or necessity of the later (e.g., Capra, 1982; Hutchinson, 2008; Merchant, 1980; Sterling, 2001).

I urge teachers to follow suit, calling up the pastoral ideal deep in our cultural memory and rubbing this ideal against a present and mechanistic "counterforce" (Marx, 1964/2000, p. 25) to ecological sustainability. In contrast to the mechanical world that students are socialized to accept, the garden comes to pedagogically represent the more radical propositions of the green movement: that there exist natural limits to economic growth; that social and ecological injustices are intertwined; that technological solutions to socio-ecological problems are insufficient in themselves; that biology offers moral imperatives regarding energy use; that nature has intrinsic value⁹; that human work is noble; that consumerism and consumption contribute to malaise; and that there exist social and political alternatives (Dobson, 1991, 2007; Porritt, 1984). To be clear, it is not the power of the *machine* that we need more in today's classrooms, but the power of the *metaphor* to reveal our options. In this work, the machine is critical as foil and contrast to the green alternative. Nature becomes foregrounded with the passing of the locomotive.

Of course, how this metaphor unfolds in practice will depend on the particularities of each classroom situation. If we imagine a classroom (indoors or outdoors) as a green and community

garden, we might also imagine a number of machines whistling their way through, disturbing the "triadic relationship" (Bonnett, 1994, p. 179) developing between students, teacher(s), and subject/nature. Computers come to mind, but computers are merely technical artifacts. Rubbing computers against our classroom or cultural ideal offers little in the way of clarity unless we go deeper and uncover the "technocratic idea of progress" (Marx, 2008, p. 9) and "root metaphor" of mechanism (Bowers, 2001b), both of which remain taken-for-granted. Analyzing these underlying value systems, we begin to understand the educational *inevitability* of the machine, and this clears the way for a different set of beliefs and practices to take root. As such, a complexly nostalgic classroom dialogue provides students and teachers significant opportunities to contrast mechanistic thinking and its technical manifestations against past and future visions of a sustainable society.

Deep and Dark Green Foundations

Digging for deep and dark green foundations, we uncover the densely layered history of ecological thinking (Worster, 1994). Green pedagogy must revitalize specific aspects of this tradition while remaining grounded in "the place where teaching truly dwells" (Aoki, 2005, p. 188), the range of present and available negotiations between teachers, students, and nature. This is no easy task. Frightening environmental futures pull us out of the classroom moment, and much of the green/ecological canon is apocalyptic, appealing to a future of limits, involuntary simplicity, and collapse (e.g., Carson, 1962; Goldsmith, Allen, Allaby, Davoll, & Lawrence, 1972; Meadows, Meadows, Randers, & Behrens, 1972). It is hard to stay in the pedagogical present and to balance what we think students need to know with their developmental needs (Sobel, 1996).

Still, for those who find a delicate balance between loss and desire, the darker edge of the green movement provides a wealth of cultural sources for building new educational foundations. Just imagine the possibilities offered by the following groups and individuals, all of whom are dark green to a certain extent:

green parties and factions, animal liberationists, bioregionalists, ecofeminists, deep ecologists, social ecologists, eco-Marxists, eco-socialists, eco-anarchists, ecological Christians, Buddhists, Taoists, pagans, environmental justice advocates, green economists, critical theorists, postmodernists and many others. (Dryzek, 2005, p. 181)

Imagine the theoretical and practical moves made possible by such diverse commitments: the ability to call up Eastern and Western traditions (e.g., Devall & Sessions, 1985); the ability to theorize intersecting oppressions of race, gender, class, and nature/species (e.g., Kahn, 2010; Plumwood, 1993); and the ability to inspire deep changes in action as well as in thinking (see Dryzek, 2005, Chapters 9–10).

A representative sample of Chet Bowers' curriculum work (1995, 2000, 2001a, 2001b) demonstrates that Bowers has deep and dark green interests. For Bowers the ecological crisis extends to the depths of *culture*, and solutions to ecological problems are far more complex than the "technological fix" (Trainer, 1991) offered by mechanistic thinkers. Bowers locates the "cultural roots of the ecological crisis" in the "root metaphors" (e.g., anthropocentrism, change as linear progress, individualism, and mechanism) specific to the language, thought, and behav-

ior patterns of persons living in ecologically destructive cultures such as our own (2001b, p. 146–147). For Bowers, the existence of these root metaphors in classroom discourse indicates the "taken-for-granted thought patterns of most western middle-class teachers and students" (p. 142). Bowers' (2001a) "eco-justice" pedagogy seeks to address these thought patterns, and the crisis of culture and ecology, by valuing the cultural epistemologies of indigenous groups and the intergenerational knowledge stored with the cultural commons, questioning the role of science and technology in Western cultures, and building awareness of the role of classroom discourse in carrying forward socially and ecologically unjust patterns of thinking and acting. Bowers highlights the teacher's role as "mediator" (p. 184) between existing cultural patterns and the socialization of the next generation

Poet, essayist, and Kentucky farmer Wendell Berry (1997) shares Bowers' core concern,¹⁰ arguing that the ecological crisis runs deeply into the basic meanings and values undergirding the ideologies and practices of culture, including education. For Berry (1997), the crisis of culture is manifest in numerous ways related to technology and economy: a common disdain for rural values and traditions; rampant specialization in education and the workplace; obsessions with security and the future; and our core belief that technology will solve all of our problems, including those of agricultural production. Oft-cited (by greens) physicist Fritzof Capra (1982) places us in the midst of a cultural transition, claiming that a "phase of revaluation and cultural rebirth" is underway and that "current social problems are manifestations of a much broader, and inevitable, cultural transformation" (p. 33). For Capra, this inevitable transition leads towards an ecological paradigm, a view echoed by postmodern thinkers in sustainable education (e.g., Sterling, 2001).

This critical concern for culture is certainly ethnographic. After reading Morris Peckham's (1995) *Romanticism and Ideology*, I am also struck by the extent to which Bowers, Berry, and Capra express a desire for "cultural transcendence"¹¹ that inheres in Romanticism, particularly if we follow Mitcham (1990) and expand our definition of Romanticism¹² to include "a permanent tendency in human nature that manifests itself differently at different times" (p. 498). We might even consider this tendency central to all revitalization movements and not limited to specific cultures or time periods (Kehoe, 1989; Wallace, 1956). Rather, it emerges "whenever cultural directions for behavior have failed" (Peckham, 1995, p. 17) and when "the inadequacy of existing ways of acting…becomes more and more evident" to an increasing number of people (Wallace, 1956, p. 17). Perhaps Romantic thinkers of the late 18th and early 19th centuries are a particularly strong manifestation of a common impulse to transcend the ideological limitations of culture. Writes Peckham (1995):

I am not aware of any group in any culture that has questioned so severely the regnant ideologies as did the Romantics. They began...a process of undermining the ideological superstructure of Western culture...an undermining which, it may be, is the only human hope. (p. 14)

Peckham argues that the Romantics, in questioning the "regnant ideologies" of culture, opened the door for others to question the "adaptational validity" of language itself, recognizing language as a "severe human limitation on species survival" (p. 14). Philosophers of environmental education continue to address issues of language and meaning related to species survival (e.g., Bowers, 2001a, 2001b; Stables, 2001).

Romantics expressed ecological as well as cultural dissent. With the rise of Romanticism, a group of thinkers and writers began a "militant resurgence of the pagan outlook toward nature," (p. 81) turning towards natural history to counter the "ecological alienation" resulting from mechanistic science and industrial economy (Worster, 1994). Their view of nature placed human beings in a direct and dynamic relationship with the natural world. Worster (1994) writes:

at the very core of the Romantic view of nature was what later generations would come to call an ecological perspective: that is, a search for holistic of integrated perception, an emphasis on interdependence and relatedness in nature, and an intense desire to restore man to a place of intimate intercourse with the vast organism that constitutes the earth. (p. 82)

For Worster, an "ecological perspective" is a cultural manifestation of a particular view toward nature, a view which appears repeatedly throughout the 18th and 19th century writings of British and American nature essayists, finding full expression in the ecology movement of the late 20th century. Worster's work is important because it identifies a Western cultural and intellectual origin for the desire to heal our relationship with nature. His work adds the depth and weight of cultural and historical analysis to the green nostalgic urge.

Moving Beyond Denatured Ecologies

Green pedagogy wants to recover this particular ecological perspective, the ecological perspective of the Romantics, from amidst ecology's "immensely complex and tangled" (Vincent, 1993, p. 248) web of beliefs about the natural world and how we might relate to it. According to Worster (1994), ecology's current complexity and ambiguity can be traced to the 18th century, when two traditions in ecological thought began competing: the Romantic or arcadian tradition mentioned above, which views human beings in harmonious relation to nature, and an *imperial* tradition which serves to underwrite a managerial and instrumental approach to nature. This imperial tradition, very different from the arcadian tradition represented by someone like Thoreau, began with Swedish botanist Carl Linnaeus' urge to classify nature, gaining prominence in America after the Second World War when ecologists embraced mathematical models and positivist methodology (Sachs, 2004; Worster, 1994). This history explains why ecology continues to serve radically different ends-some arcadian, some imperial-leading Evernden (1992) to claim that ecology "cannot be presumed to be the ally of the environmental movement, for it provides information that can just as well be used to manipulate nature as to defend it" (p. 10). For Evernden (1978), if the knowledge of ecologists is as useful for the "chronic developer" as the activist, ecology turns out be "as subversive as the Chamber of Commerce" (p. 16).

Social and behavioral scientists have contributed to ecology's ambiguity by removing ecological concepts from their natural context and expanding these concepts to their metaphorical breaking point. No concept has been more productive or seductive than that of the *ecosystem*, the "conceptual switch that connected the biology circuit with that of society at large" (Sachs, 2004, p. 48). By the late 1970s, and concurring with the work of developmental psychologist Urie Bronfenbrenner (1979), educational researchers began adopting ecological perspectives on a wide variety of social and cultural systems. Ecology, and the concept of the ecosystem, became a fruitful way of understanding and expressing contextual, relational, and environmental factors

related to human development, behavior, and school reform (e.g., Comer & Haymes, 1991; Doyle, 1977; Goodlad, 1987; Steinberg, Dornbusch, & Brown, 1992). Ecological metaphors and concepts continue to inform educational research (e.g., Lee, 2010).

I want to argue that these are denatured ecologies that have inadvertently but effectively "backgrounded" (Plumwood, 1993, p. 22) nature in order to function as social science. In such ecologies, nature is withdrawn, silenced beyond the outermost ring of the nested system, becoming a scenic backdrop for the work and play of development and learning. As a result of such ecologies, what we now have in education are a curious set of discourses in which one can intelligibly speak of ecology without reference to the natural world. Perhaps *ecology*, too, has become implicated in the "grand project of boundary maintenance" (Evernden, 1992, p. 90) working to separate humanity from the natural world.

In opposition, green pedagogy insists upon foregrounding nature, working against ecological streams in the social and behavioral sciences that would sacrifice ecology's arcadian desire for the imperial power of its key concepts. In green pedagogy, an arcadian regard for how and why individuals relate to the natural world, and how we might reunite experience and nature in educational settings, does not surrender to the imperial urge—not to a quantitative or categorical ecology and not to an operational, ecosystemic analysis of contextual factors in development and learning. Green pedagogy wants a "people's science" (Prakash, 1995, p. 325) in tune with nature. Although other ecologies are retained as potentially useful tools, in the culture of green pedagogy, nature reclaims center stage, and along with it, the cultural and ecological perspective of the Romantics and the naturalist tradition in environmental education.¹³ When combined with a critical assessment of the role of culture in ecological crises, ecology's arcadian roots feed deep and dark green futures.

The Discursive Greening of American Education

A recent journal article (Miller & Nilsen, 2011) offers evidence that the term green represents for students "the perfect metonym for the sustainability movement"¹⁴ (p. 56). If this is the case, then how green is being constructed in educational discourses has significant implications for ecological sustainability. A review of educational literature demonstrates that the greening of educational discourses is working to fix the meaning of green towards the lighter end of the spectrum. Books such as Going Green: A Standards-Based Environmental Education Curriculum for Schools, Colleges, and Communities (Wiland & Bell, 2009) and Greening School Grounds: Creating Habitats for Learning (Grant & Littlejohn, 2001) suggest that going green in education is a relatively straightforward process with a clear destination. Going green involves embedding new curriculum and energy projects within existing educational structures (e.g., Haigh, 2005; Lowell, 2008) with a strong emphasis on science and technology (e.g., Farenga, Joyce, & Ness, 2010; Pokrandt, 2010). Complementary literature in environmental psychology and education justifies "green" spaces through an appeal to children's health (e.g., Abbott-Chapman, 2006; Bell & Dyment, 2008; Taylor, Kuo, & Sullivan, 2001; Wells, 2000). At times, literatures intersect, speaking together in the idiom of distress specific to the culture of mainstream green education: Attention-Deficit/Hyperactivity Disorder (e.g., Louv, 2005; Kuo & Taylor, 2004). Experience in educational sites suggests that *going green* is often reduced to the simplest of actions and decisions.

Despite fruitful disruptions in English and arts education (Bruce, 2011; Inwood, 2010), and with few exceptions (e.g., Whiteman, 2003), the green discursive field in general education fails to represent the darker positions of greens for whom education might involve "ideology critiquing" (Fien, 2004) and the restructuring of social and political life (e.g., Kahn, 2010). Without incorporating shades of this deeper critique, including care for how ecologically destructive beliefs and practices are transmitted through schooling,¹⁵ green education becomes cosmetic, easily rubbed away or covered over. Within this climate, even the most progressive and critical traditions in education can be rendered ineffective when mapped onto the dominant environmental ideology underlying mainstream culture and education, an ideology in which solutions to environmental problems are reduced to the scientific and technical management of resources (Fien, 2004). This ideology silences darker green voices and those who might explore the role of technology in constructing social and political life, making education about how to undertake participatory responses to complex socio-ecological problems unlikely.

Things are similar as we move up the discursive hierarchy. When President Obama and others green discourses combining energy, economy, and education futures, they green the variables of an *existing* equation, codified since at least 1983 and the *A Nation at Risk* report. This is a familiar equation: A curriculum deep in science and mathematics (add technology and engineering today) enables students, as individual innovators, to succeed academically and economically, securing our individual and collective security in the global, competitive, 21st century knowledge economy. This dominant discourse becomes green to the extent that the promise and power of innovation is directed towards the invention of green technologies and green jobs.¹⁶

A colonial myth of continuous progress and discovery is central to this discourse of green innovation, but a cultural view reveals innovation itself *to be nothing new*, with the most innovative of forms being constructed from "traditional and imported cultural material" (Wallace, 1956, p. 276). Innovation marks the innovative *reconstitution* of existing materials—a cultural recycling resembling the cycles of energy in nature. Peckham (1995) writes:

You can talk about the imagination all you wish, but initially the only materials you can use for innovation are the materials of your cultural situation. All you can do is to engage in a desperate and you hope innovative piecing together of available patterns. (p. 18)

Despite these significant cultural constraints, the discourse of green innovation insists that a sustainable future will involve the constant creation of new technical artifacts, systems, and processes, and that these innovations are most likely to occur in specific disciplines. Under the weight of this technocentric model, students and teachers risk becoming "condemned to innovation" (Peckham, 1995, p. 17), racing to fund and to find new technologies, forced to draw random inspirations from an unsustainable culture.

David Batchelor's (2000) proposition that color can be either trivial or dangerous is helpful in making sense of all of this. Viewed through Batchelor's lens, green is being discursively *trivialized* in education precisely because the darker end of the green spectrum represents a subversive, radical, and potentially *dangerous* threat to existing educational structures (in addition to political and economic ones). Environmental educators inadvertently participate in this process when rooting their transformative ideals in a nostalgic vision of an American childhood outdoors (see Louv, 2005), a vision which many middle class parents and teachers find attractive (Bowers, 2001b; Enzensberger, 1974). As simple nostalgia, green education becomes

trivialized, a process which facilitates its disciplining to conventional standards (Gruenewald, 2004). When educators rely exclusively on the reform language of Romanticism, writing "in reverential and sometimes even mystical terms about the nature of childhood" (Kliebard, 2004, p. 285), their projects are all the more easily trivialized and marginalized.

Because I tend towards Romanticism, I find myself caught somewhere in the middle—both personally and professionally. Years as an outdoor educator and classroom teacher have convinced me that work and play in the green world changes people by resetting dislocations, uncovering half-buried potentials, and altering worldviews. I agree with Snyder (1990) that the "pathless world of wild nature is a surpassing school and those who have lived through her can be tough and funny teachers" (p. 19). We certainly need more of those. Personally, I have enjoyed (endured?) a number of significant life experiences in nature that have shaped my values, dreams, and visions (see Chawla, 1998; Gough, 1999; Tanner, 1980). Pedagogically, I have experienced (and continue to court) moments "so far from explanation as to make awe the only appropriate response" (Evernden, 1992, p. 116), moments which my students and I have sometimes stumbled upon outdoors. About ten years ago, I was privileged to meet the grizzly bear—rather unexpectedly and far too closely—along a stream in the Southern Talkeetna Mountains of Alaska. She remains one of my most memorable teachers, and I will never forget her name: *Ursos arctos horribilis*.

Having had these experiences, I strongly support outdoor education and wilderness, and I am hopeful that the greening of American education will introduce an increasing number of students to nature and improve their health and well-being. What remains problematic is that green education, as currently constructed, seems incapable of offering green-leaning students and teachers the ideological and rhetorical tools needed to make good sense of *culture*, within which such returns to nature are embedded and through which they are mediated. When green projects and initiatives focus exclusively on environmental science curricula and outdoor learning spaces and experiences, green education comes to resemble Huckle's (1983) notions of "education *about* the environment" (e.g., formal instruction, scientific basis, instrumental view of nature) and "education *in* the environment" (e.g., field studies, outdoor education) rather than "education *for* the environment," which focuses on the social and political aspects of environmental problems and decision-making. Of the three types, only education *for* the environment supports what I am imagining green pedagogy to be—a form of education in which students are offered, in addition to ecological knowledge and outdoor experiences, the critical tools needed for cultural revitalization.

The Role of the Green Teacher in a Culture of Decay

We need a new vision of the green teacher—a deeper and darker vision. This work begins with a return to *pedagogy*. We need to dig again into pedagogy, uncovering old questions to which we can propose new answers. Anderson (2009) maintains that pedagogy is like an archae-ological *tell*: a hill where the remnants of past inhabitants and habitations are buried. To most people, a tell is nothing more than a raised mound of earth—they see no significance there: "It is only the teacher who takes on the metaphorical role of the archaeologist who can learn anything new from the mound…it is only those who have the ability and knowledge to dig who have the possibility to learn" (p. 36). Anderson's digging reveals a densely-layered culture of pedagogy: progressivism and scientism; child-centered and subject-centered teaching; conservative and

liberal variations of humanism. Each layer contains "an implicit notion of pedagogy" (p. 47), the result of people answering very old questions in different ways, questions regarding the nature of learning, the nature of knowledge, and the role of the teacher (p. 2–3). Below, I will *green* one of these questions, re-theorizing the role of the green teacher.

Ecocritic John Elder's work helps me to do this. In Elders' (1996) *Imagining the Earth: Poetry and the Visions of Nature*, Elder "pursues a path through poetry to the wilderness," (p. xi) a path which I believe leads to green teaching practice. Elder theorizes that through practice, a nature poet's "attentiveness to nature" becomes enacted as an "imaginative passage from estrangement to transformation and reintegration"—a "circuit of healing" in times of cultural decay (p. xi). Inspired by additional work linking the practices of poetry and teaching (Bonnett, 1994; Yinger, 1990), I suggest that enacting this same circuit of healing is the primary role of the green teacher. Much like poets and farmers, teachers make practical and creative use of formal constraints.

This work begins with a teacher's attentiveness to nature. Although this attentiveness will be expressed individually, I propose that a teacher becomes *green* when their attentiveness to nature leads to a critical and despairing insight—that American pedagogy and learning are being enacted in a dominant culture sharply dislocated from the natural world. Despair might at first seem a strange, even inappropriate, beginning for pedagogy (>L. *deperare*, to lose all hope), but hopelessness often precedes surrender, a sign that willingness is being born, and with it perhaps the type of embodied humility required to counter the human arrogance beneath our complex crises of culture, nature, and pedagogy (Ehrenfeld, 1981). Thankfully, this sense of loss is but the beginning of a circuit of healing and inclusion. As green teachers, what we see in our isolated despair becomes the foundation for a "counter-vision," preparing the way for "a new imagination of community in which the earth and mankind are equal participants" (Elder, 1996, p. 11).

Elder writes: "To start from the soil again is the task, when human culture has become impoverished" (p. 40). This is the practical task of green teachers as well-returning students and themselves to the soil. Elder theorizes the bioregional idea of "reinhabitation" as the means of re-establishing connections to the earth "within the discrete interchanges of a particular ecosystem" (p. 40), a theme echoed by place-based educator David Gruenewald (2003). Although opportunities for reinhabitation differ widely across schools and geographical areas (see Gruenewald & Smith, 2007), food is becoming a more important area of educational inquiry (Weaver-Hightower, 2011), and an increasing number of North American schools are incorporating farm-to-school programs (see Vallianatos, Gottlieb, & Haase, 2004) and programs combining culture, agriculture, and intergenerational work (e.g., Cutter-Mackenzie, 2009; Mayer-Smith, Bartosh, & Peterat, 2009). These types of programs offer vital opportunities for the green teacher who resists the temptation to view this work simply as a curricular add-on, or to justify it exclusively in terms of its health benefits to children, but recognizes it as the final and crucial arc in a circuit of pedagogical practice central to cultural revitalization. Dobson (2007) believes that "in the green society" agricultural practices "are charged with the essential task of providing the site where our rifts with the 'natural world' are...healed" (p. 93). For Dobson, agriculture "is where theory becomes practice: the praxis of green politics" (p. 94). As such, agricultural practice is central to green pedagogy, connecting the "sustainable generativities of the earth and the generativity represented by children and embraced by pedagogy" (Jardine, 2000, p. 88). Through work with the earth-digging, planting, harvesting-the green teacher models for students a deep surrender fit for the cycles of nature, culture, and schooling.

Central to Elder's (1996) vision is his suggestion that culture, like soil, is engaged in a process of continuous decay whereby traditions (like decaying leaves) are reconstituted, their energy stores released to present language through microbic activity. In this sense, culture becomes a "dynamic continuity," something one "does" rather than something one "receives or holds" and tradition becomes "a working, continually reforming mass," the basic material for counter-traditions (p. 28). Within this dynamic vision of culture, nature plays a central and stabilizing role, countering "the entropic drift of culture toward a rigid formulation of the past—through making available a dynamic present beyond the reach of merely *human* continuity" (p. 35). Elder borrows the idea of culture as decay from poet Gary Snyder, who says that nature poets are like mushrooms, liberating the energy of their own senses and the "symbol detritus" (as cited in Elder, 1996, p. 30) of culture and giving this energy back to the human community.

From this perspective, nostalgic retreats and impulses bear cultural fruit. These reflective leavings allow the green teacher to gather their own *sense detritus* and collect *pedagogical detritus*—decaying ideas from the past and the dead—all while remaining grounded in the dynamic present where relationships between student, teacher, and nature are cultivated. Like the farmer-poet Wendell Berry, the contemplative green teacher, working both figurative and literate soil, "assures his own fertility through continually composting the elements of his earlier seasons of life, and of the lives of his ancestors, into the cleared ground of fall" (p. 52). As such, the culture and traditions of pedagogy are far from fixed but shifting and changing, composted through the work of individual teachers who circle the pedagogical tradition back to earth. Deep and reflective work by green teachers liberates a rich storehouse of cultural, ecological, and pedagogical energy. Green teachers become our culture's *fruiting bodies of dissent*.

I offer this new metaphor to help us re-imagine the green teacher, a teacher whose pedagogy is inspired by the darker edge of the green movement, a teacher who combines their attentiveness to nature with a critical edge, cultural eye, and rhetorical playfulness. Mushrooms function as the "fruiting bodies" of a fungus, nature's recyclers. Their existence reminds us that old things must die for new things to be born. This is as true in culture as it is in nature. In a culture of decay, green teachers work as fruiting bodies, recycling and releasing cultural energies for future use. As such, they are our culture's revitalists, dissenting against the discursive fix. The green teacher roots her pedagogy in soil, where nature and culture participate in a process of regenerative decay. Darkly complex, culture grows.

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Notes

1. The author would like to thank Dr. Annette Hemmings, Dr. Jory Brass, Dr. Jacqueline Bach, and the editors of *JCT* for their kind and constructive comments to a previous draft.

2. This term is from Harold (2004). Harold describes the "art of rhetorical jujitsu" as an attempt to "redirect the resources of commercial media toward new ends" by "folding existing cultural forms in on themselves" (p. 191). I

am imagining these "new ends" to include pedagogical ends. An abundance of green cultural forms exists for student and teacher training in such arts.

3. Enzensberger's point is that once ecology was expanded to include human beings in its field of study, the mixing of ideas and methods across a wide variety of social and natural sciences diminished ecology's analytical and theoretical effectiveness.

4. By "denatured ecologies" I am referring to ecological discourses in education and culture that make no direct reference to the natural world.

5. It is not uncommon when writing about the green movement to represent the wide variety of positions along a spectrum of value. In this representation, light green positions are more *anthropocentric*, placing humans above nature on a hierarchy of value, and dark green positions are more *ecocentric*, arguing for the intrinsic value of natural species—leveling the hierarchy. Deep ecologists are dark green. Light greens are more likely to offer their reforms within existing economic and political structures, with dark greens calling for radical reforms of the structures themselves. Dark greens see industrialism as a "super-ideology" (Porritt, 1984), deeply destructive to natural systems, and are suspicious of science and technology, particularly the promise that science and technology will solve complex environmental problems. Light greens are more amenable to addressing environmental problems through innovations in technology. Dobson (2007) reserves the term *green* for deep greens, calling light greens *environmentalists*.

6. In most places, I prefer to use the term *green* rather than *ecology* because I think *green* does certain types of cultural work that *ecology* can not, all while retaining fundamentals of the ecology movement. This move from *ecology* to *green* is not unprecedented. In 1985, the British Ecology Party changed their name to the Green Party without significant changes to their platform (Dobson, 1991, p. 18) suggesting that *ecology* and *green* are two sides of the same coin. Green politics is "a politics born from a science" with the sibling carrying much of the ideological code of the parent (p. 18). Each term has its drawbacks. *Ecology* is perhaps "too scientific, too specialized to convey the full scope of the green movement" (Porritt, 1984, p. 3) while *green* is perhaps too distant from the appeal to scientific ecology, a critical appeal for greens defending themselves against claims of simple nostalgia (Dobson, 2007, p. 7–8). I think *green* has advantages for teachers and theorists looking to directly engage green culture and education.

7. In distinguishing the uses of biological energy from machine energy, Berry (1997) adds a third and italicized term—"*and return*"—to the mechanical pair of "production" and "consumption" (p. 85). The addition of "*and return*" allows Berry to argue that biological energy cycles imply the moral imperative of giving back. I am thinking that complex nostalgia, too, involves such an imperative. It, too, is cyclical. So is pedagogy.

8. Williams (1973) and Marx (1964/2000) offer comprehensive reviews of the pastoral tradition in literature and culture. Williams is as concerned for what the tradition conceals as for what it reveals.

9. Dobson (2007, p. 37) notes that environmental ethics is moving beyond "intrinsic value" arguments, which have been difficult to support. Regardless, students should be made aware of such a vigorous conversation.

10. Wendell Berry's work is referred to consistently and positively throughout Bowers' work.

11. The first chapter of Peckham's (1995) *Romanticism and Ideology* describes "cultural transcendence" as "the task of the Romantics" (p. 7). I have been inspired by this chapter.

12. Perhaps this expansion includes the move from *Romanticism*, a formal cultural/intellectual tradition, to *romanticism*, a generalized "structure of feeling" (Williams, 1973). I have retained the capitalized term to avoid confusion.

13.Sauvé (2005) reviews fifteen pedagogical forms and traditions in environmental education, one of which is the naturalist tradition.

14. The authors define *metonomy* as "the linguistic process through which the name of an attribute that is closely associated with something appears as a metaphorical name for the larger concept" (Miller & Nilsen, 2011, p. 55).

15. This idea that schools reproduce ecologically destructive beliefs and practices is central to the work of Chet Bowers.

16. This impression comes after reviewing a variety of policy documents on the White House Web site and President Obama's personal Web site. This discourse overwhelms.

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